

THE USE OF THE PEAR DECK IN IMPROVING VOCABULARY AMONG FORM 1 STUDENTS

Aplikasi Pear Deck Dalam Peningkatan Penguasaan Kosa Kata Dalam Kalangan Murid Tingkatan Satu

¹Doreen Primus & ²Ranvender Jit Kaur Banga Singh
^{1,2}SMK Kuala Kubu Bharu

Corresponding author: doreenprimus@gmail.com

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ABSTRACT

Pear Deck flips the traditional lecture by actively engaging students in real-time. The problem statement is that the standard of teaching has plenty of detractors because almost every time it did poorly, it can be an uninspired stream of facts delivered in a sit-and-get style that is almost forgotten quickly. This study aims to identify Pear Deck's effect in improving vocabulary among Form 1 students. With Pear Deck, it is hoped that we can turn the standard of teachings, primarily online. Pear features many valuable tools and can prepare and make up our presentation slides in a jiffy. Fifteen (15) students are involved in this study. A quantitative approach has been implemented to measure the students' level of motivation and vocabulary mastery level. Descriptive statistics are used to measure the student's motivation level before and after the intervention. Inferential statistics were also used to compare the students' level of mastering the vocabulary before and after the study. The result of this study shows that students' motivation levels increased, and their vocabulary also suggestively shows an improvement. This study hope to give encouragement among teachers to implement various ways of content delivery and boost academic excellence.

Keywords: *Pear Deck, vocabulary, English classroom*

ABSTRAK

Pear Deck meningkatkan kualiti kelas tradisional dengan melibatkan pelajar secara aktif. Pernyataan masalah dalam pemerhatian ini ialah standard pengajaran terkini terutamanya semasa sesi pembelajaran dari rumah mendapat banyak kritikan. Ini kerana kehadiran dan prestasi murid yang lemah. Faktor penyampaian konten pembelajaran menjadi penting kerana ia mempengaruhi prestasi dan kehadiran murid ke kelas atas talian.. Objektif projek ini ini ialah melihat keberkesanan penggunaan Pear Deck dalam meningkatkan penguasaan kosa kata dalam kalangan murid Tingkatan 1. Dengan penggunaan Pear Deck, diharapkan dapat meningkatkan kualiti pengajaran terutamanya pembelajaran diatas talian. Pear Deck mempunyai banyak aplikasi berguna dan boleh menyediakan dan membuat slaid pembentangan dalam sekelip mata. Lima belas (15) orang pelajar terlibat dalam projek ini. Pendekatan kuantitatif telah dilaksanakan untuk mengukur tahap motivasi dan tahap penguasaan kosa kata pelajar. Statistik deskriptif digunakan untuk mengukur tahap motivasi pelajar sebelum dan selepas intervensi. Statistik inferensi juga digunakan untuk membandingkan tahap penguasaan kosa kata pelajar sebelum dan selepas projek. Hasil projek ini menunjukkan tahap motivasi pelajar meningkat dan perbendaharaan kata mereka juga menunjukkan peningkatan. Projek ini berharap dapat memberi galakan kepada guru untuk mencuba pelbagai cara untuk menyampaikan kandungan subjek seterusnya meningkatkan kecemerlangan akademik.

Kata kunci: *Pear Deck, Kosa Kata, Kelas Bahasa Inggeris*

INTRODUCTION

According to Thirusanku and Yunus (2012), the country ought to start teaching and acquiring English as a second language from the preschool level and work its way up from there. In point of fact, vocabulary is one of the essential components of linguistic ability and is a good indicator of how well listeners listen, talk, read, and write. In Malaysia, an emphasis has been placed on the significance of teaching English as a second language, with the goal of producing students who are able to read and comprehend a variety of English texts for the purposes of gaining information and pursuing their own personal interests. According to Indriyani and Sugirin (2019), developing one's vocabulary is one of the most important aspects of language learning. Students are able to read and comprehend a reading passage from their textbook when they have access to the vocabulary terms listed below. However, it was impossible to deny that the students lacked motivation, and it was also obvious that they were unable to retain the correct spelling or meaning of the words that they had learnt. According to Tsai et al. (2012), the academic achievement of the students and the predominant usage of their mother tongue language had clearly reduced their experience in learning English, which in turn had an effect on the vocabulary exposure they received.

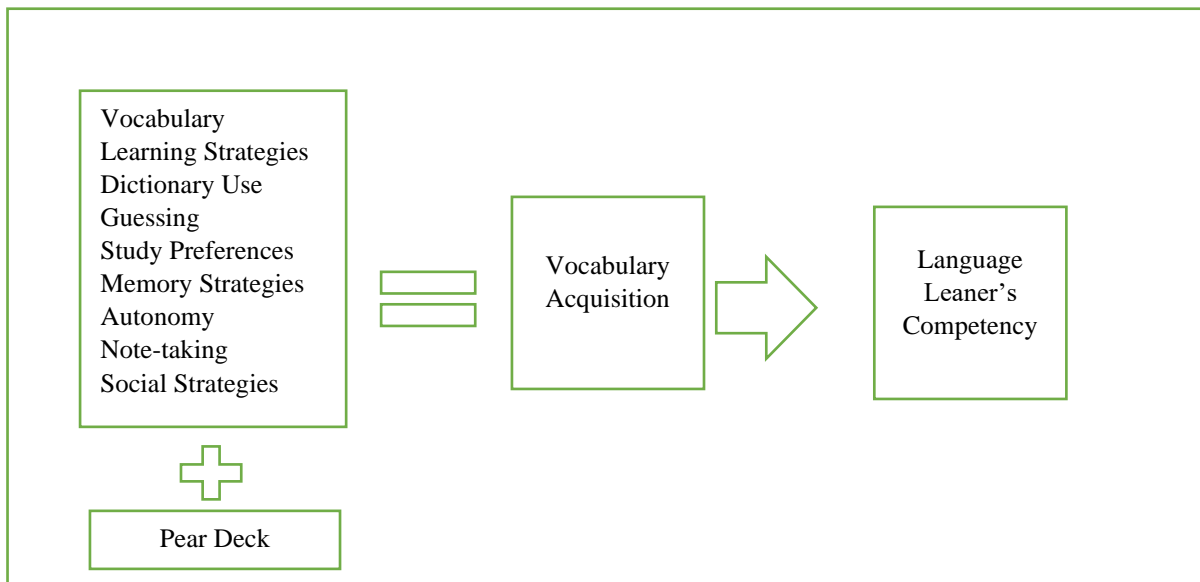


Figure 1: Conceptual Framework

Figure 1 illustrates the conceptual framework of the study. Pear Deck is applied alongside the existing learning strategies. Playing games are said to be an effective way of learning, so integrating interactive games and lesson may give the best learning experience for the students (Javed & Odhabi, 2018). Pear Deck is one way of improving teachers' lessons with the pupils. What exactly is this Pear Deck? It is a method for transforming the slides of your presentation into activities that the students may participate in. In addition to this, it works beautifully with teachers who are participating in professional development (Anggoro, 2020). Students engage in collaborative work with novel concepts in an environment that emphasises hands-on learning and prompt feedback. An add-on for Google Slides has been developed by Pear Deck. Because of this, it is very simple to add interactivity to your presentations from within Google Presentations. The presentation slides can be a drag to make them more interactive (Mache et al., 2017).

LITERATURE REVIEW

Vygotskian Vocabulary Development

When there is any learning method involved, Vygotsky's learning theory is never to be missed. Vygotsky introduced the earliest learning theory that is still relevant today. It is believed that students mostly construct new knowledge, especially vocabulary, by interacting with other members of their culture (Vygotsky, 1978). This social interaction makes the students acquire the symbols and form the foundation of their thought processes. Vygotsky used the term “sign” because it represents words, numbers, or images that one culture possessed. The importance of vocabulary is vital to Vygotsky because words and other signs are mediums that direct mental operations, control their course, and channel them toward the solution.

From this earlier learning theory, there is also a new language expert that comes to light. A popular vocabulary learning method is introduced by Norbert Schmitt (1997). According to Schmitt (1997), the discovery strategies are those that are connected to finding the meaning of a new word. Within this category, there are two sub-categories known as social strategies and determination strategies. Learners will use their understanding of the language's structure to make educated guesses about the meanings of words they do not know in order to fill in any gaps in their vocabulary throughout this category of learning techniques. They also can guess from various contexts, using reference materials, or relate their experience with other cultures.

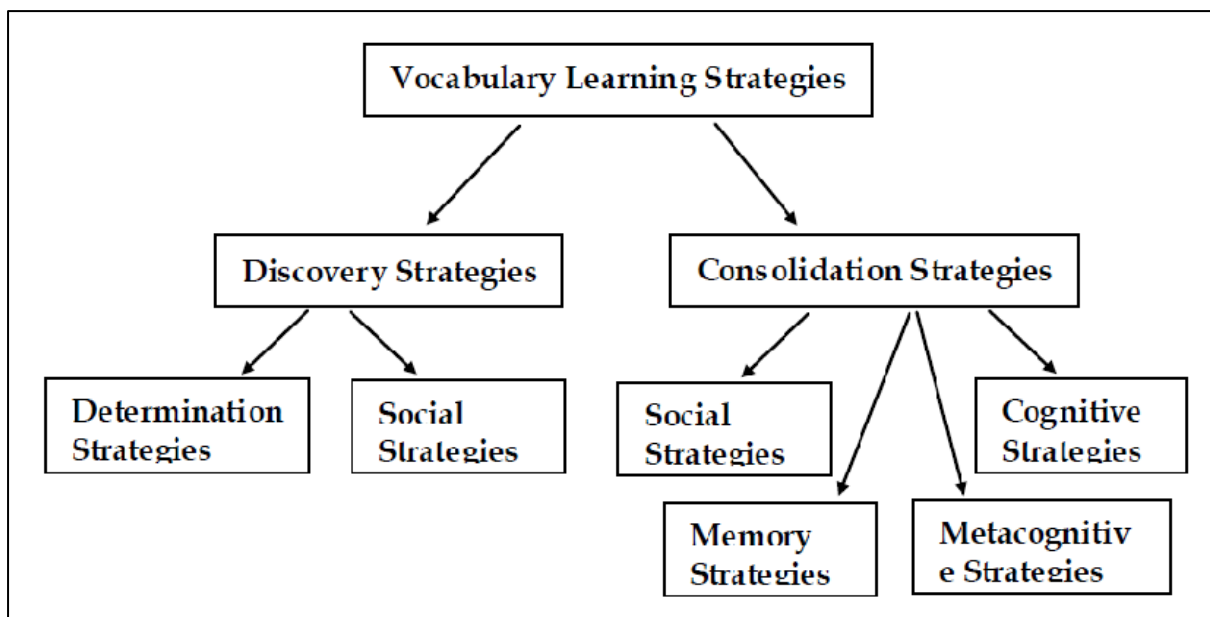


Figure 2: Schmitt's Taxonomy of Vocabulary Learning Strategies (1997)

In this study, the Pear Deck application happens in the determination strategies. In this stage, students can facilitate gaining knowledge of a new word. By working together with the other students, it is possible to utilise social methods in order to determine the meaning of a word. Consolidation techniques, on the other hand, are the ones that are utilised for memorising words once they have already been exposed to them. This category is further broken down into four sub-categories, including memory, cognitive, social, and metacognitive techniques. Memory strategies are ways that tie new information to previously acquired knowledge, whereas cognitive strategies are characterised as “manipulation or transformation of the target language by the learner” (Schmitt, 1997). Memory strategies are more effective than cognitive strategies when used together. Last but not least, metacognitive methods are described as “a conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the most effective way to study.”

PROBLEM STATEMENT

The problem with online learning is less support from the teachers. By using Pear Deck, it works quite well in the self-paced student mode of the Remote Learning platform. Students have the ability to move through interactive Pear Deck slides at their own leisure while using the student-paced option. Teacher need to guide students how to create slides. Usually, teacher will do the slides and hare them with students with a deadline to finish them. After that students work through the slides and interact with them. Teacher can watch their progress through Pear Deck. When they are finished, Pear Deck gives the students results and teacher can move forward to another lesson.

OBJECTIVES

1. To increase students' motivation in vocabulary learning.
2. To identify the level of mastery in vocabulary among students.

METHODOLOGY

The study strategy in question is one that uses a quasi-experimental technique. The pre-test and post-test designs were added to the study in order to determine whether or not an educational or therapeutic intervention was successful for the respondents. It was necessary to utilise purposeful sampling since the respondents could only range from having a low to an intermediate level of English ability. In order to carry out this research using a quasi-experimental design, 15 students from Form 1 were chosen via purposive sampling. It is possible to effectively monitor the Pear Deck implementation process using this small sample size.

Table 1

Number of Respondents

School	Male	Female	Total
SMK Kuala Kubu Bharu	7	8	15

Instrument

This research made use of three different types of research tools. They began with a pre-test, continued with a post-test, and ended with a survey questionnaire. Both the pre-test and the post-test comprised the same 50 spelling questions, as well as 50 terms that matched up with each other and their definitions (Appendix 1). After the Pear Deck was put into use, students were asked their opinions on the intervention (described in Appendix 2) using a survey form that was sent to them after the fact. The questionnaire for the poll consisted of two assertions, and each respondent was asked to indicate whether they “agree” or “disagree” with the claims based on their own individual experiences with Pear Deck. The purpose of the survey was to gauge the level of interest shown by the students in acquiring new terminology. It is based on the measurements that were established by Pintrich and DeGroot (1990), which likewise concentrate on measuring the learners' learning motivation. It was adapted from those measurements.

Pear Deck Activity Procedures

Firstly, students need to create the List. In this stage, students Make a vocabulary list by utilising the definitions and examples provided by the Merriam-Webster integration that is included in Pear Deck.

Secondly the Production Phase. StudentsPlay Flashcard Factory. Students work in teams to produce one-of-a-kind verbal and visual representations for each unit they cover.

Finally, students need to Study. Once the final set has been authorised, the cards should be saved. The class is able to print their cards so they may go over them. During the course of the game, each student is paired up with another participant so that they may work together to generate pictures and example sentences using the new vocabulary. If there are an unbalanced number of students, one student will work on the cards by themselves. Teams can be reshuffled by clicking the Shuffle Teams to redistribute pupils.

DATA COLLECTION AND ANALYSIS

The data collection process included the utilisation of all three research instruments, most notably the pre-test, the post-test, and the survey questionnaire. Tabulation and descriptive analysis were performed on all of the data that was obtained. A comparison was made between the scores that each of the 15 students received on their pre-test and the scores that they received on their post-test. The results were derived by using the algorithm for the percentage score for each question. The scores were then evaluated and compared with reference to the Referenced Assessment, which was utilised in the secondary schools of Malaysia to establish the degree of respondents' understanding based on the scores obtained during the pre-test and post-test. Students whose test scores were within the range of 80 to 100 were deemed to have successfully achieved the greatest level of vocabulary comprehension. Pupils whose test scores fell within the range of 65 to 79 were placed in the Good level, 50 to 64 were placed in the acceptable level, and students whose test scores fell within the range of 40 to 49 achieved the Minimum level. Last but not least, a failure to comprehend terminology at even the most basic level was indicated by scores ranging from 0 to 39. The Referenced Assessment that was utilised for both the pre-test and the post-test is presented in Table 2.

Table 2
Assessment Criteria

Score	Grade	Descriptor	
80-100	A	Excellent	Pass
65-79	B	Good	Pass
50-64	C	Satisfactory	Pass
40-49	D	Achieve Minimum Level	Pass
0-39	E	Below Minimum Level	Fail

The analysis of the survey questionnaires was of a descriptive nature. The survey questionnaire had two statements, and the students were asked to indicate whether they agreed with the assertions by marking "Agree" or "Disagree" on the form. A note was taken of the number of students who responded "Agree" or "Disagree" to each of the assertions, and the results were expressed as a percentage.

FINDINGS AND DISCUSSION

The data was gathered through the use of a survey questionnaire, as well as a pre-test and a post-test. Following the completion of the first step, which consisted of determining the scores of the students, the results were then examined and compared to the Referenced Assessment. The CRA was recognised all over the world, and for the purpose of this study, a Reference Assessment that was based on the Malaysian secondary School Achievement Test would be utilised to establish the vocabulary abilities of the students by comparing the scores they received on the pre-test with the scores they received on the post-test. The descriptive statistics of the data gathered from both the pre-test and the post-test are displayed in Table 3.

Table 3
Vocabularies Result of Pre and Post-Test

Score	Grade	No. of students	
		Pre-Test	Post-Test
80-100	A	-	-
65-79	B	-	7
50-64	C	6	7
40-49	D	9	1
0-39	E	-	-

There was a discernible rise in the students' overall performance on the post-test, as seen in Table 3. Regarding grades A and B, there was not a single respondent who was successful in obtaining a grade A; nevertheless, seven respondents were successful in obtaining grade B in the post-test. This demonstrated an increase of 7 students who received a grade of B. There were six respondents who achieved a grade of C on the pre-test; however, after the post-test, seven of the students achieved a grade of C. This suggested that the utilisation of Pear Deck was able to improve the vocabulary abilities of the students successfully. On their pre-tests, nine of the students earned a grade of D, but on their post-tests, only one of the students received this mark. There were no responders reported for either the pre-test or the post-test for grade E. The findings demonstrated that the Pear Deck was effective in expanding the learners' language knowledge and abilities. Every single respondent earned a passing mark, and their overall vocabulary knowledge clearly advanced as a result of their efforts. In addition, the descriptive statistics of the data obtained from the survey questionnaire are presented in Table 3, which measures the growth of the respondent's vocabulary as well as their ability to work together. The results of the various motivational factors following the deployment of Pear Deck are shown in Table 4.

Table 4
Motivation Level

NO.	STATEMENTS	AGREE	DISAGREE
		(%)	(%)
1	I have fun while learning using the Pear Deck.	95	5
2	I help my friends who cannot give the meaning of the vocabularies that they have formed.	90	10
3	I know how to spell the vocabularies that I have learned.	100	-
4	I can remember the meaning of the vocabularies learned.	100	-
5	I am interested to use Pear Deck in English lesson.	100	-

As can be seen in Table 4, Questions 1 and 5 inquired about the amount of motivation had by the students, whereas Question 2 inquired about the level of collaboration abilities possessed by the students during their use of Pear Deck. On the other hand, Question 2 placed emphasis on the enhancements made to one's vocabulary abilities following the application of the lesson plan utilising Pear Deck. 95% of the students agreed that "I have fun while playing Pear Deck," and 100% of the students agreed with the statement that "I am interested in using Pear Deck." These results are based on the motivating level that was achieved via the installation of Pear Deck. When compared to the conventional chalk-and-talk technique, the use of Pear Deck to teach vocabulary resulted in much higher levels of motivation and enthusiasm among the students. Both of these aspects were underlined by the two statements.

Concerning the topic of working together, ninety percent of the students gave an affirmative response to the following statement: “I help my friends who are unable to give the meaning of the vocabularies that they have formed.” This demonstrated that the students were willing to work together with their classmates on the task of acquiring the Pear Deck vocabulary. The students will be able to improve their ability to work together, communicate effectively, think creatively and critically, and cooperate via the process of learning in collaborative groups. According to the Malaysia Education Blueprint 2013 – 2025 (Ministry of Education, 2015), this is an extremely important aspect of the educational system that is being implemented in the 21st century.

Regarding the enhancement of vocabulary abilities, one hundred percent of the students gave positive responses to both of the following statements: “I am able to remember the meaning of the vocabulary” and “I am aware of how to spell the vocabulary that I have learned.” Therefore, the evidence presented here demonstrated that the students were able to recall both the spellings and the definitions of the vocabulary, thanks to Pear Deck. The results of the survey questionnaire showed, on the whole, that the students had pleasant and constructive experiences that helped them improve their vocabulary abilities and that they were encouraged to acquire additional vocabulary by using Pear Deck.

CONCLUSION

The use of Pear Deck is useful and gives positive implication to students as well as to the teachers. When it comes to teachers, it provides a platform for a student-centered learning environment in which students may carry out the tasks through hands-on activity at their own speed. This setting is also beneficial for teachers. This resulted in a decreased engagement of the teacher in the learning process and allowed for greater autonomy on the part of the students in the process of acquiring new and unusual vocabulary. Another implications is students might also be encouraged to become autonomous learners. The most effective method for students to learn is first to decipher and then adopt their very own vocabulary. Making use of the Pear Deck demonstrates the connection to the progress in the manner of teaching vocabulary in a way that is both enjoyable and engaging for the students. Together with open-ended written questions, observations, and open-ended interviews, it would be fascinating to see future studies incorporate other diverse technology-based apps such as Quizizz, Kahoot, and Quick Response (QR) codes. This would be an intriguing direction to go for future studies.

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Disclosure statement

No potential conflict of interest was reported by the authors.

REFERENCES

- Anggoro, K. J. (2020). Pear Deck. *RELC Journal*. <https://doi.org/10.1177/0033688220936735>.
- Indriyani, A. S. (2019). The impact of vocabulary learning strategies. 3rd *International Conference on Current Issues in Education (ICCIE 2018)* (pp. 113-117). Atlantis Press.
- Javed, Y., & Odhabi, H. (2019). Active learning in classrooms using online Tools: Evaluating Pear Deck for students' engagement.: *2018 Fifth HCT Information Technology Trends Conference (ITT)* (P126-131).

- Mache, J., Tan, N., Shoemaker, G., & Weiss, R. (2017). Pear Deck: An interactive classroom response system to encourage student engagement. *Journal of Computing Sciences in Colleges*, 33(1), 156-158.
- Malaysian Education Blueprint 2013-2025. (2013). Ministry Of Education Malaysia.
- Min, Y. K. (2013). Vocabulary acquisition: Practical strategies for ESL students. *Journal of International Students*, 3(1), 64-69.
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33-40.
- Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: description, acquisition, and pedagogy* (pp.199-228). Cambridge University Press.
- Tsai, F. H., Yu, K. C., & Hsiao, H. S. (2012). Exploring the factors influencing learning effectiveness in digital game-based learning. *Educational Technology & Society*, 15(3), 240-250.
- Thirusanku, J., & Yunus, M. M. (2012). Status of English in Malaysia. *Asian Social Science*, 10(14), 254-260.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Appendix 1: Spelling Test

1. _____

2. _____

3. _____

4. _____

5. _____

11. _____

12. _____

13. _____

14. _____

15. _____

6. _____

7. _____

8. _____

9. _____

10. _____

16. _____

17. _____

18. _____

19. _____

20. _____

(B) Write down the correct number in the bracket.

1	chef	()	A professional cook who works in a restaurant.
2	park	()	A person who travels and works in a spacecraft.
3	grass	()	A person who designs and builds engines, machines, roads and bridges.
4	pilot	()	A public place where people go to walk, play and relax.
5	budget	()	A person who designs buildings.
6	carrot	()	A wild plant with narrow green leaves.
7	laptop	()	The money that is available to a person and a plan of how it will be spent over a period of time.
8	cabbage	()	A long pointed orange root vegetable.
9	library	()	A round vegetable with large green, purplish-red or white leaves that can be eaten raw or cooked.
10	present	()	A small computer that can work with a battery and be easily carried.
11	racquet	()	A building where you can read or borrow books, newspaper and CDs.
12	village	()	A gift.
13	ambition	()	A piece of sport equipment used for hitting the ball.
14	birthday	()	A very small town located in a country area.
15	engineer	()	Something that you want to do or achieve.
16	dentist	()	The day when you are born.
17	architect	()	A person who takes care of others' teeth.
18	astronaut	()	A system for carrying people or goods from one place to another.
19	transport	()	Materials for writing or using in the office.
20	stationery	()	A person who flies an aeroplane.

Appendix 2: Survey Questionnaire Instruments

NO.	STATEMENTS	AGREE	DISAGREE
1	I have fun while learning using the Pear Deck.		
2	I help my friends who cannot give the meaning of the vocabularies that they have formed.		
3	I know how to spell the vocabularies that I have learned.		
4	I can remember the meaning of the vocabularies learned.		
5	I am interested to use Pear Deck in English lesson.		