

# The Impact of Dictionary.Com Application on Vocabulary Acquisition for Diploma Students

Safiyahbinti Abdul Aziz and Faizal Yamimi Mustaffa

**Abstract---** English language learning is very challenging to second language learner especially in vocabulary acquisition, with the increase in the use of smartphone, it is hope there are new pedagogical implication in teaching vocabulary. This study focusing on the impact of Dictionary.com android application for diploma students. To conduct this research 100 students of Culinary Programme from KPYPJ were divided equally into treatment and control group to undergo a pretest consisting of 40 objective question on Academic Word List (AWL). The treatment group had learn the Academic Word List using Dictionary.com android application using their own mobile phone while the control group will learn using the traditional method for seven week followed by the pre-test. Two interview sessions were conducted to get the feedback on Dictionary.com application from the lecturers and the students. The use of Dictionary.com application showed the positive impact based on the result of the pre and post-test, as it rejects the null hypothesis. Furthermore, the Treatment Group showed better results as compared to the Control Group in the Post-test. Dictionary.com application that used for the treatment group received good feedbacks from the lecturers as it aids in teaching vocabulary especially the pronunciation with provided correct spelling and interesting way of teaching vocabulary. In addition, the application is user friendly and able to motivate the student in learning new vocabulary. The main conclusion drawn from the research is Dictionary.com is effective in assisting vocabulary learning for KYPJ diploma students.

**Keywords---** Diploma Students, Impact of Dictionary.Com, Assisting Vocabulary.

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## I. INTRODUCTION

The main foundation of language learning is the words that student will use for the four skills. The way students are using the lexical items in performing the tasks in English will show the reflection of their proficiency level. Learners will use the vocabulary that they have in conducting meaningful communication. Besides, according to Francis & Simpson, 2013 vocabulary learning is vital as it is the foundation and block of a language.

Furthermore, the evolution of technology, especially mobile technology had provided new opportunities and methods of language learning for the adult learners. Nowadays, the use of technology has become vital for the students for their daily learning. In addition, the use of smartphones will leave a big impact to second language learners since it is a portable device that can be used anywhere and at anytime especially for the younger generation at college level. The younger generation will be able to have better options for learning through electronic means as mentioned by Kukulska-Hulme (2006), proving that mobile learning will assist in everyday communication. The adult learners in higher education also can use mobile learning because it is user friendly as mentioned by institutions

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Safiyahbinti Abdul Aziz, Faculty of Education, Universiti Teknologi Malaysia, Malaysia. E-mail: safiyah@kypj.edu.my  
Faizal Yamimi Mustaffa, Language Academy, Universiti Teknologi Malaysia, Malaysia. E-mail: faizalmustaffa@gmail.com

(Abdous, Camarena, & Facer, 2009; Oblinger & Oblinger, 2005; Kukulska-Hulme & Shield, 2008; Kukulska-Hulme, 2009; Shih, 2007; Nah, White & Sussex, 2008).

### ***Mobile learning***

Over the years, there have been many definitions of mobile learning. For example, mobile learning is a learning device that can be used by holding it in the palm of one's hand (Quinn, 2000; Soloway et al., 2001; Redd, 2011) while O'Malley (2003) said that any learning process that happened naturally at any place or where a learner chooses to use the learning opportunity provided by the mobile device can be called mobile learning. Zhang (2011) said that mobile learning is more effective compared to the use of traditional books. Suwantarathip & Orawatakul (2015) discussed the flexibility of the mobile phone since the learning process can happen at any place and at any time as mentioned by Lan and Sie (2010) and at the same time ubiquitous learning can happen easily. He also mentioned on the effectiveness of mobile phones as a search engine to get information from various sources. At the same time, it is also very helpful to improve the teaching process. The use of mobile phone in learning will encourage the transfer of indoor classroom to outdoor classroom (Redd, 2011). The development of mobile technologies has contributed to new learning environments.

### ***Mobile Learning in Higher Education***

The use of mobile phones in higher education has a lot of positive impact. Livingston (2009) highlighted that higher education institutions should encourage their students in using mobile phones for learning purposes that had not been used to their maximum level. Besides, Livingston also mentioned that the growth in communication technology and the revolution of the Internet in the last ten years had a great impact on the changes of higher educational institution model. A research conducted by Osman and Cronje (2010) analyzed that mobile learning has provided extra understanding to tertiary students. Based on their reviews of a few online journals, they concluded that the lecturer and the program designer are the ones who are responsible to spearhead the use of mobile devices among tertiary students. This is because, the mobile device itself is providing so many advantages to learning at the tertiary level in several ways. In a research conducted by Gupta and Koo (2010), they presented that there are many learning applications and tools which are provided and are available for higher educational institution students. They also discussed the advantages and disadvantages of mobile learning for higher education. Based on the research done by previous researchers it can be concluded that there are many impact of mobile learning specifically on higher education students using several applications that had been provided on the play store like Dictionary.com.

### ***Vocabulary Learning and teaching strategies***

Vocabulary Learning is a vital component of language acquisition especially for the communication purposes. According to Batty (2012) students are able to show their vocabulary knowledge if they are able to link the word with other necessary information. Wei (2013) in his research mentioned that there were two ways of vocabulary learning which are implicit and explicit. Implicit vocabulary learning is a natural process where students learn the new vocabulary naturally. Explicit vocabulary learning is intentional vocabulary learning process. Eeds and Cockrum (1985) said that the best way to teach vocabulary is by explaining the meaning of the word to the student. Wei (2013) also mentioned meta-cognitive learning strategies where the students will learn vocabulary by writing

and oral rehearsal, linking words, using synonyms and antonyms. Students also will learn new vocabulary in a limited time and will be tested; the aim is to make sure students remember a certain number of new vocabulary words (Mizumoto & Takeichi, 2009). Learning using synonyms and antonyms, scramble words, and crossword puzzles are other ways of intentional learning strategies (Ahmad, 2011). Rote rehearsal vocabulary learning is another way of learning new vocabulary. Student will memorise the words. According to Laufer (2010) memorization will encourage vocabulary retention. Note taking is another way to learn new vocabulary where the students will jot down the meaning of the word in the vocabulary book. In this research, the students have to write the meaning of new words that they get from the dictionary.com application in their vocabulary book.

### ***Vocabulary Application***

In second language acquisition, vocabulary skill is the most important skill as mentioned by Francis & Simpson (2009) and Nation (2001) where words are the concrete base for successful language acquisition. The emergence of the mobile phones especially smartphones has contributed to the thousands of free applications (apps) offered on the market. Apps can be defined as a computer program designed specifically for the use of mobile devices. These apps are able to help learners in acquiring second language vocabulary items where iPad apps help in developing students' speaking, reading, and writing skills (Harmon, 2012; Lys, 2013). Before explaining more on the qualities of the apps provided in the smartphone for language learning, it is important for both the lecturers and the students to understand and be familiar with the apps that are going to be used in the classroom to identify how it will be useful in assisting language learning. For example, in this research, I will be focusing on the Dictionary.com app. Learners must be familiar with the application and all of its functions like introducing a new word everyday which will expand their vocabulary knowledge. According to research conducted by Clark (2013), he encouraged to use iPad for language learning since the application is able to support vocabulary acquisition. Furthermore, in one of the researches conducted by Wang et al. (2015), it showed that students who were using the iPad apps in learning vocabulary have higher levels of motivation at the college level. Below is a sample of popular applications for vocabulary learning by Deng (2015)

## **II. OBJECTIVES**

1. To examine the impact of Dictionary.com android application on the vocabulary acquisition of KPYPJ diploma students.
2. To investigate the perceptions of the lecturers on the use of Dictionary.com android application as a vocabulary teaching and learning tool.
3. To investigate KPYPJ diploma students' perceptions on their use of Dictionary.com android application for vocabulary learning.

## **III. METHODOLOGY**

The students were divided equally to two groups which are the control group while the other group were the experimental group. The control group learn the vocabulary using the traditional 'chalk and talk' method, using a physical dictionary in their classroom sessions while the experimental group learn vocabulary using mobile device

to assist them. Before both groups start the treatment sessions, they will undergo a pre-test to place them equally based on the criteria of the vocabulary knowledge as shown in stage 1.

Next, the students had undergone 7 sessions of vocabulary lessons where the students go through one session each week. In each session, students learn vocabulary from the Academic Word List. Participants received twenty words in every session. The words were randomly selected from the sublist. During the treatment session, the participants will receive 20 words from each sublist. From the ten sublists available, the last seven sublists were selected because the first three seem to be easier for the students as mentioned by Alemi, Reza Anani and Sarah (2012). 140 words will be given to the students in total. At the same time, the control group also received the same words and they were taught by the lecturers.

The experimental group will download Dictionary.com application from the Google play store. The students will be given a brief explanation on using the Dictionary.com application before the lesson starts. The control group will learn the word list in the class using the manual dictionary. Some of the words received by both groups were included both in the pre-test and post-test.

After the seven weeks of the treatment sessions, both groups sat for the post-test. The students need to answer objective questions where fortyvocabulary questions were asked in order for them to recall the new words they had learned. The students were given one hour to answer the questions.

After that, an interview session were conducted with the English lecturers to answer the second research question on their perception on MALL and how it has benefited them followed by an interview session with the students to answer the third research question on students' perception on learning vocabulary using mobile devices. The interview session were audio recorded and followed by the transcription process to analyse the data.

#### IV. RESULT

The experimentation was conducted at KYPJ Kulai that involved 100 Semester 2 students. The word list was adapted from AverilCoxhead and 140 words were selected from the list where most of the words are new to the students. The pre-test consists of 40 objective questions where the respondents have to answer the questions in one hour time. Same questions were used for the pre-test and post-test session. Post-test sessions were conducted seven weeks after the experimentation session to see the Wilcoxon. The test is used to show the significance of the pre-test and post-test on the treatment group.

Table 4.1 Wilcoxon Descriptive Statistics								
	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
Pre	50	19.26	4.444	12	27	14.75	19.50	22.00
Post	50	23.44	4.473	16	32	20.00	23.00	27.00

Table 4.2: Wilcoxon Signed Ranks Test				
		N	Mean Rank	Sum of Ranks
Post - Pre	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	50 <sup>b</sup>	25.50	1275.00
	Ties	0 <sup>c</sup>		
	Total	50		
a. Post < Pre				
b. Post > Pre				
c. Post = Pre				
Table 4.3Test Statistics <sup>b</sup>				
	Post – Pre			
Z	-6.196 <sup>a</sup>			
Asymp. Sig. (2-tailed)	.000			
a. Based on negative ranks.				
b. Wilcoxon Signed Ranks Test				

The Wilcoxon Test is used to identify the statistical comparison between pre-test and post-test sessions. The study is to identify the impact of the mobile application known as 'Dictionary.com' with the analysis focusing on the treatment group only. Table 4.2 above shows the descriptive statistics of the analysis. The result from the inferential statistic will determine the significance of Dictionary.com to the treatment group in learning vocabulary. The significance level in this study is 0.05. the a Asymp. Sig. (2 tailed) score in table show 0.000 values. The null hypothesis is rejected if the value is below than 0.05. The result was 0.000, meaning the null hypothesis is rejected and there are significant impacts to the use of Dictionary.com in Vocabulary learning for KYPJ diploma students

The mean for the treatment group of the post-test has increased from 19.26 to 23.44, showing the improvement of 4.18 for the treatment group. In the Wilcoxon test, the hypothesis is  $H_0: \mu_{\text{Before}} = \mu_{\text{After}}$ , the significance is  $= 0.000 < 0.05$ . This means that the study rejects the null hypothesis. This means, the treatment group does show a significant result in both pre-test and post-test results.

The post-test for both the Control Group and Treatment Group were compared using Mann-Whiting. U test is done to identify the significant differences. The data of the analysis is shown below

Table 4.4: Mann-Whitney Descriptive Statistics								
	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25th	50th (Median)	75th
Controlled	50	19.4600	3.45354	13.00	29.00	17.0000	19.0000	22.0000
Treatment	50	23.44	4.473	16	32	20.00	23.00	27.00

<b>Table 4.5 Mann-Whitney Ranks</b>				
	Group	N	Mean Rank	Sum of Ranks
mark	Controlled	50	37.86	1893.00
	Experimental	50	63.14	3157.00
	Total	100		

<b>Table 4.6: Test Statistics<sup>a</sup></b>	
	Mark
Mann-Whitney U	618.000
Wilcoxon W	1.893E3
Z	-4.370
Asymp. Sig. (2-tailed)	.000
a. Grouping Variable: group	

The Mann-Whitney Test is used to test two independent samples that help in determining if the values of a particular variable differ between two groups. The inferential analysis can be seen on Table. 4.6

For this Mann-Whitney Test, the hypothesis is  $H_0 = \text{Median A} = \text{Median B}$ . The significance Level is  $+0.05$  and the Rejection Region rejects the null hypothesis if  $P\text{-value} \leq 0.05$ . The data above showed that the significance Level  $P\text{-value} = 0.001 < 0.5$  thus the study rejects the null hypothesis. Therefore, it does show a statistical significant difference for the treatment group and this result is in line with the treatment group result

Interview were conducted to answer research question two and three. First interview were conducted with the lecturers and they stated the Dictionary.com application motivate the students in the learning process and encourage the students to have a meaningful learning experience in interesting ways. Both lecturers also prefer to use online dictionaries compared to paperback dictionaries since online dictionaries are able to improve student vocabulary by providing all the meaning of the words with its synonym, antonyms and sample of sentences. Both researchers also agreed that Dictionary.com is a user friendly application where it is time saving and do not have any additional login requirement.

The second interview session were conducted to answer research question three and the students' feedbacks are positive for those who used Dictionary.com for the seven weeks of the treatment session. Both of the students feel motivated with the use of the Dictionary.com application in learning vocabulary. In addition, both of the students stated that the application help them in learning vocabulary. The students also stated that it is new ways of learning using the Dictionary.com application in improving their vocabulary One of the students also said that he will encourage and recommend the application to their friends. Both of the students also prefer to use a mobile dictionary as it is easier to use, time saving, and lighter in comparison to the paperback dictionary.

## V. CONCLUSION

The main objective of this study is to see the impact of Dictionary.com on vocabulary acquisition for Diploma students together with the lecturers' and students' perception on the Dictionary.com application.

The main conclusion drawn from the research is Dictionary.com is effective in assisting vocabulary learning for KYPJ diploma students. This is based on the result of the pre and post-test, as it rejects the null hypothesis. Furthermore, the Treatment Group showed better results as compared to the Control Group in the Post-test.

Besides, Dictionary.com application that used for the treatment group received good feedbacks from the lecturers as it aids in teaching vocabulary especially the pronunciation with provided correct spelling and interesting way of teaching vocabulary. In addition, the application is user friendly and able to motivate the student in learning new vocabulary.

In addition, impressive feedback from the studies shows the good impact of Dictionary.com application in learning vocabulary. The learning session become easier for the students and one of the students even recommended the application to his friends. Word of the day feature also assists the student to learn new word every day with the pronunciation. The synonym and antonym part help the student to understand the words in deeper meaning.

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