# The Effect of Using Moodle Reader as an Extensive Reading Tool on Learners' Awareness of Affective Dimensions of Deep Vocabulary Knowledge

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#### Abstract

This study aimed at investigating the effect of using MoodleReader to promote extensive reading (ER) in an Iranian EFL context, emphasizing its effect on learners' awareness of two affective dimensions namely evaluation and potency of deep vocabulary knowledge. Sixty intermediate EFL female adult learners participated in this study; they were chosen from among 90 students through Preliminary English Test and a general vocabulary knowledge test. They were thus randomly divided into two groups, experimental and control, each consisting of 30 students. As for the treatment, the experimental group used the MoodleReader for their extensive reading program, while the control group followed the conventional extensive reading curriculum, reading a small number of pre-assigned graded readers during the semester. At the end, students took a test of awareness of evaluation and potency dimensions of deep vocabulary knowledge. To see if using MoodleReader had statistically significant effects on awareness of evaluation and potency dimensions of deep vocabulary knowledge, independent T-test with 0.05 significant level was administered revealing that using MoodleReader as an extensive reading tool significantly improved learners' awareness of the two dimensions.

Keywords: Extensive reading program; Conventional extensive reading; MoodleReader; Deep vocabulary knowledge; Affective dimensions; Evaluation dimension; Potency dimension

#### 1. Introduction

#### 1.1 Overview

Vocabulary is an inseparable part of any language learning process. It would be impossible to learn a language without vocabulary. The important role that this component plays has been emphasized in all different methods of language teaching. River (1981) states, "vocabulary cannot be taught. It can be presented, explained, included in all kinds of activities, but it must be learnt by individuals" (p. 28). She further states that, "As language teachers, we must raise interest in words, a certain excitement in personal development in this area" (p. 29). She also suggests that language teachers must help their students by giving them ideas on how to learn vocabulary and some guidance on what to learn.

Vocabulary as a major component of language learning has been the object of numerous studies each of which has its own contribution to the field. Laufer (1997) considers vocabulary learning as the heart of language learning and language use. In fact, it is this vocabulary learning that makes the essence of any language. Without vocabulary, speakers cannot convey meaning and communicate with each other in any particular language.

As teachers, the researchers have encountered many students who have considerable vocabulary knowledge. They, however, fail to use them correctly in different domains. Learners, mainly, the upper intermediate and advanced ones, are often able to produce grammatically correct sentences. However, they produce very plain utterances which are unable to convey different emotional loads or to express shades of intensity of connotations.

It seems that this problem is due to the lack of depth vocabulary knowledge and that the students' criterion in choosing words in context is surface structure and they fail to address the depth of vocabulary knowledge. Iranian EFL learners' poor deep vocabulary knowledge is a matter of concern among those involved in education and their quest for finding suitable remedies is getting more and more intense. Thus, this study was conducted to see whether using

MoodleReader as an extensive reading tool is an effective technique in increasing the affective dimensions of learners' deep vocabulary knowledge, especially evaluation and potency dimensions.

#### 1. 2 Research Questions

There is no evidence to prove that Iranian EFL learners of English pay attention to affective dimensions of vocabulary knowledge in their vocabulary use. Therefore, the current study examined the effect of using MoodleReader on affective dimensions of EFL learners' vocabulary knowledge. According to Osgood, May and Miron (1975), deep vocabulary knowledge involves evaluation, potency, and activity of vocabularies. The effect of using MoodleReader on increasing awareness of evaluation and potency dimensions of deep vocabulary knowledge was the focus of this study with the following two research questions formulated:

- 1. Does the use of MoodleReader as an extensive reading tool have any statistically significant effect on Iranian EFL learners' awareness of evaluation dimension of vocabulary knowledge?
- 2. Does the use of MoodleReader as an extensive reading tool have any statistically significant effect on Iranian EFL learners' awareness of potency dimension of vocabulary knowledge?

#### 2. Review of the Related Literature

# 2.1 Extensive Reading Program

So far, several ER-promoting programs have been suggested and used, two of which having been more successful than others: the Accelerated Reader (Paul, VanderZee, Rue, & Swanson, 1996) and the MoodleReader (Robb, 2005).

#### 2.1.1 The Accelerated Reader

In the early 1990s, the computerized program known as the Accelerated Reader was influenced by Paul, VanderZee, Rue, and Swanson, (1996). Using the Accelerated Reader (henceforth AR), language learners go through three stages. First, they are required to read a book, fiction, non-fiction, subject matter textbook, or magazine. Having finished their books, the learners log in to the AR software and take quizzes on the material they have studied, which are available in the software database for each title. The information with regard to each learner is delivered to the teacher at the end of the program.

## 2.1.2 The MoodleReader

Although the AR was working well for several language teachers and ER practitioners, it was not without its problems. One of the shortcomings according to Robb (2010) was the inability to add quizzes for newly published graded readers. Another major problem was the fact that the quiz questions were not randomized, and all students got the same questions which in turn, caused the problems of quiz security and cheating. In response to these shortcomings, Robb (2005) created the MoodleReader.

The MoodleReader is a database of over 1600 online quizzes on global readers from different series and publications (Oxford Series, Cambridge, Macmillan, Cengage/Heinle and Penguin to name just a few), developed at Kyoto Sangyo University, Japan. The program carefully follows the ER approach by exposing ESL/EFL learners to a large number of reading materials. After reading a book at their own level and choice of genre and title, learners are able to take their quizzes by logging in to the system at anytime, from anywhere. Teachers can set a time limit for the completion of each quiz and control the book level suitable for each student. Moreover, the questions are randomized so that each student receives question sets which are different from those of other students. The positive and practical feature of the MoodleReader, as well as its ease of use and convenience makes it a useful tool to implement ER in any ESL context.

# 2.2 Evaluation and Potency Dimensions of Deep Vocabulary Knowledge

Deep vocabulary knowledge involves how well a person knows a word, in contrast to breadth of vocabulary knowledge which involves how many words are known (Brown, 2007).

Evaluation dimension of vocabulary knowledge refers to how good or bad something is, that is, whether the entity has people's approval or disapproval in terms such as good vs. bad (Hiese 2002, p. 37). People may evaluate something as positive such as adjective "good" and they may evaluate something as negative such as adjective "bad".

Potency dimension of deep vocabulary knowledge refers to an entity's impact in terms of being big versus little, powerful versus powerless, consequential versus immaterial (Heise 2002, p. 37). Potency shows the range of power or impact of an entity. "Powerful" is a potent adjective because it has the greatest impact, whereas "powerless" is non-potent because it has the least impact.

#### 3. Method

# 3.1 Participants

The participants of this study were 60 Iranian adult intermediate EFL learners selected from amongst 90 intermediate students based on their performance on Preliminary English Test (PET) and a general vocabulary test to assure their homogeneity. 90 students were randomly chosen from all students studying at the intermediate level of Tehran-Cambridge Language School in Tehran. Then, they were randomly divided into two groups of 30 students: one group as the control group and the other one as the experimental one. All the participants were female and had been studying English for about two years. The whole term took 3.5 months.

#### 3.2 Instruments

A sample PET was used to select 60 participants from 90 intermediate learners. The test had three sections including listening part (25 questions), reading part (35 questions), and five questions of fill-in-the-blanks for the writing part. Before the main administration, the test was piloted among 30 intermediate students who were not the main subjects of this study. Item facility and item discrimination indices were calculated.

Alongside the PET, a test of general vocabulary knowledge was constructed and used for homogenizing the participants. This test consisted of 40 multiple-choice items and the questions were made based on the vocabulary presented in the intermediate level books of "Interchange 3rd Edition" and "True to Life". The vocabulary test was made based on the topics such as jobs, people, human characteristics and feelings, disasters, expressions, prepositions, and animals. The test was piloted among 30 intermediate students who were not the main subjects of this study. All the items were checked with regard to their item facility and item discrimination. The average score of students on PET and vocabulary test were used for homogenizing the selected participants.

A MoodleReader course was set up for the students of the experimental group. As mentioned before, this website provides on-line quizzes on over 1600 graded readers and books for young and adult readers. Students read a graded reader according to their level, logged into the program and took an online quiz made consisting of 10 randomized questions.

Finally, a test was designed to assess the participants' awareness of evaluation and potency dimensions of vocabulary knowledge. In this test, the students were given 20 sentences and for each they had to choose adjectives from a list of 20 for the names of people in the given sentences by paying attention to the verb. This test was used at the end of the term as another posttest. For preparing this test, 20 adjectives that describe human characteristics and 20 verbs that are used for the interpersonal domain were taken from Carrigon tables of evaluatin and potency (2001) which has the classification for positive/negative and potent/non-potent adjectives and verbs. Five verbs and adjectives were potent and positive such as confident, five were potent and negative such as selfish, five were non-potent and positive such as polite, and five were non-potent and negative such as dishonest. All the verbs and adjectives were the ones which are normally used in interpersonal interaction. The names were paired with two proper names to form the sentence such as "John hit Ted". Students had to choose one of the adjectives that they thought would be the best descriptor for each of the nouns in the sentence. The test was scored twice, once to measure the evaluation dimension of students' vocabulary knowledge and once to measure the potency dimension of the vocabulary knowledge.

# 3.3 Procedure

Prior to the experiment, the general vocabulary knowledge test, the PET, and the test of awareness of affective dimensions of vocabulary knowledge were piloted on 30 intermediate students who were not the main subjects of this study.

For choosing and homogenizing 60 participants for this experiment, the PET and the test of general vocabulary knowledge were given to 90 intermediate Iranian EFL learners. Their average scores in these two tests were used for homogenizing them, and those who achieved scores between one standard deviation above and below the mean were chosen.

Subsequently, the 60 participants were randomly divided into two groups of 30 students. One group participated as the control group for whom conventional extensive reading of department was used. At the beginning of the term, four graded readers were selected by the instructor and assigned to students to read as their extensive reading material. The titles and the levels of these books were the same for all the students, and no choice whatsoever was allowed. For the experimental group, however, a MoodleReader course was created to promote extensive reading. Members of this group were required to enroll in and take at least 12 quizzes in a period of 3.5 months according to their language level. They had to complete a 12-book MoodleReader program.

At the end of the term, all students took a test as posttest namely a test for determining the students' awareness of evaluation and potency dimensions of vocabulary knowledge which was scored twice for the two dimensions. First, it was scored paying attention to whether students chose potent adjectives for nouns in the sentences in which verbs were potent. Second, whether students chose the non-potent adjectives for noun in the sentences in which non-potent verbs were used. In the case where there was congruence between the potency of the verb and the potency of the adjectives, students received one score and the total score out of 34 (the number of the sentences on the test) was calculated.

In the next stage, the same test was scored based on the evaluation of verbs and adjectives to see whether students had chosen positive adjectives for the nouns in the sentences in which verbs were positive and negative adjectives for the nouns in sentences in which verbs were negative. Any congruence between adjectives and verbs with regard to their evaluation received one mark and the total score was calculated out of 20.

Then, t-test method was used two times to compare the results of control and experimental groups. Once between the means of two groups in test of measuring awareness of evaluation dimension of deep vocabulary knowledge to see whether there was significant difference between two groups in awareness of evaluation dimension of deep vocabulary knowledge after treatment and once between the means of two groups in test of measuring potency dimension of deep vocabulary knowledge to see whether there was significant difference in two groups in awareness of potency dimension of deep vocabulary knowledge after treatment.

#### 3.4 Design

The design of this research is experimental. There were two groups, one group as an experimental one and one as a control group. The treatment was MoodleReader as an extensive reading tool for experimental group. At the end of the term, both groups participated in posttest. An independent t-test was used for comparing the experimental and control groups.

The independent variable in this study was "the use of MoodleReader". Dependent variables were "awareness of potency dimensions of deep vocabulary knowledge" and "awareness of evaluation dimensions of deep vocabulary knowledge". The controlled variable in this study was "gender".

# 4. Results

To initiate the experiment, 90 intermediate students took part in a PET and a general vocabulary test. Both were primarily piloted (as described earlier) with their reliability indices using the Cronbach Alpha index being 0.98 and 0.9, respectively. Hence, both tests were used to homogenize the participants required for this study and the average scores of students on the PET and the general vocabulary knowledge test were used as the criterion for selection.

Figure 1 depicts the normal curve for the mean of PET and general vocabulary knowledge test, and table 1 shows mean score and standard score of students in these tests.

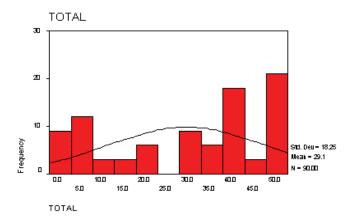


Figure 1. Normal Curve for the Mean of PET and General Vocabulary Test

Table 1. Mean Score and Standard Score for 90 Intermediate Students Participated in PET and General Vocabulary Knowledge Test

Student	Mean Score	Standard Score	Student	Mean Score	Standard Score	Student	Mean Score	Standard Score
1	52	1.25656	31	36	0.37989	61	32.5	0.18812
2	50.5	1.17437	32	13	-0.88032	62	31.5	0.13333
3	50	1.14697	33	32	0.16072	63	50.5	1.17437
4	50	1.14697	34	20	-0.49678	64	21.5	-0.41459
5	49.5	1.11958	35	30	0.05114	65	39.5	0.57166
6	50.5	1.17437	36	31.5	0.13333	66	2.5	-1.45563
7	48	1.03739	37	4	-1.37345	67	49.5	1.11958
8	42.5	0.73604	38	50.5	1.17437	68	32	0.16072
9	39.5	0.57166	39	38.5	0.51687	69	10	-1.0447
10	41	0.65385	40	49.5	1.11958	70	39.5	0.57166
11	32.5	0.18812	41	41	0.65385	71	5.5	-1.29126
12	39.5	0.57166	42	5.5	-1.29126	72	32	0.16072
13	39.5	0.57166	43	39.5	0.57166	73	50	1.14697
14	38.5	0.51687	44	52	1.26656	74	2.5	-1.45563
15	39.5	0.57166	45	32	0.16070	75	20	-0.49678
16	36	0.37989	46	48	1.03739	76	41	0.65385
17	32	0.16072	47	13	-0.88032	77	20	-0.49678
18	31.5	0.13333	48	2.5	-1.45563	78	38.5	0.51687
19	30	0.05114	49	50.5	1.17437	79	50.5	1.17437
20	21.5	-0.41459	50	48	1.03739	80	2.5	-1.45563
21	20	-0.49678	51	21.5	-0.41459	81	4	-1.37345
22	13	-0.88032	52	39.5	0.57166	82	48	1.03739
23	10	-1.0447	53	10	-1.0447	83	30	0.05114
24	4	-1.37345	54	50	1.14697	84	36	0.37989
25	5.5	-1.29126	55	39.5	0.57166	85	50	1.14697
26	2.5	-1.45563	56	42.5	0.73604	86	39.5	0.57166

27	2.5	-1.45563	57	2.5	-1.45563	87	42.5	0.73604
28	0.5	-1.56522	58	50	1.14697	88	39.5	0.57166
29	0	-1.59261	59	39.5	0.57166	89	13	-0.88032
30	0	-1.59261	60	32.5	0.18812	90	52	1.25656

Based on data, students who achieved between one standard score above and below the mean were chosen as the main subjects of this study.

Then students were randomly divided into two groups. One group was chosen as experimental group in which MoodleReader was used. Another group was chosen as control group in which conventional extensive readings of institutes were used.

At the end of the instruction period, the students in both groups took a test for measuring the awareness of evaluation and the potency dimensions of deep vocabulary knowledge. The next stage was to address the first and second research questions on the participants' dimensions of vocabulary knowledge through independent t-test.

# 4.1. Analysis 1

In order to investigate whether MoodleReader as an extensive reading tool has any statistically significant effect on Iranian EFL learners' awareness of evaluation dimension of vocabulary (i.e., the first research question), the mean and standard deviation of scores of two groups were obtained.

Table 2. The Mean and Standard Deviation of the Scores by Two Groups in the Test of Awareness of Evaluation Dimension of Vocabulary in the Posttest Stage of the Study

	N	Mean	Standard Deviation
Experimental Group	30	22	4.2
Control Group	30	13.06	7.2

Having obtained the scores of subjects in the two groups, an independent t-test was administered to answer the research question of the study i.e., "Does the use of MoodleReader as an extensive reading tool have any statistically significant effect on Iranian EFL learners' awareness of evaluation dimension of vocabulary?"

Table 3. T-test for Awareness of Evaluation Dimension of Vocabulary Group Statistics

	GROUP	N	Mean	Std. Deviation	Std. Error Mean
SUM	1	30	22.00	4.251	0.776
	2	30	13.07	7.192	1.313

Independent Samples Test

	Levene's Test for Equality of Variance				T-test for Equality of Mean							
	F	Sig.	t	df	Sig. (2tailed)	Mean Difference	Std. Error Difference	95% Confidence interval of the Difference				
								Lower	Upper			
Equal	5.607	.021	5.857	58	.000	8.93	1.525	5.880	11.9861			
Variance												
Assumed												

Equal		5.857	47.059	.000	8.93	1.525	5.865	12.002
Variance								
Not								
Assumed								

As the table indicates, the obtained t value (5.857) is highly significant. (i.e., the significance level is .000 which is well below 0.01 or even 0.05). This suggests that the difference between the means of the experimental and control group is not due to chance alone. The higher mean of the participants in the experimental group gives strong support to the conclusion that the treatment given to the experimental group has been more effective in their evaluation dimension of vocabulary knowledge than that of the control group. Therefore, one can conclude that using MoodleReader has been effective in increasing the learners' awareness of evaluation dimension of deep vocabulary knowledge.

# 4.2. Analysis 2

In order to examine the second research question, descriptive statistics along with independent t-test are given in tables 4 and 5.

Table 4. Mean and Standard Deviation of the Scores by the Two Groups in Test of Awareness of Potency Dimension of Vocabulary in the Posttest Stage of the Study

	N	Mean	Standard Deviation
Experimental Group	30	21.43	7.157
Control Group	30	7.37	4.958

Having obtained the scores of subjects in two groups, an independent t-test was run to answer the second research question of the study i.e., "Does the use of MoodleReader as an extensive reading tool have any statistically significant effect on Iranian EFL learners' awareness of potency dimension of vocabulary?".

Table 5. T-test for Potency Dimension of Vocabulary Knowledge Group Statistics

	GROUP	N	Mean	Std. Deviation	Std. Error Mean
SUM	1	30	21.43	7.157	1.307
	2	30	7.37	4.958	.905

Independent Samples Test

	Levene's Test for Equality of Variance				T-test for Equality of Mean							
	F	Sig.	t	df	Sig. (2tailed)	Mean Difference	Std. Error Difference	95% Confidence interval of the Difference				
					()			Lower	Upper			
Equal variance Assumed	7.535	.008	8.849	58	.000	14.07	1.590	10.885	17.249			
Equal variance			8.849	51.627	.000	14.07	1.590	10.876	17.257			
Not Assumed												

As the table depicts, the obtained t value (8.849) is highly significant. (i.e., the significance level is 0.000 which is well below 0.01 or even 0.05). This suggests that the difference between the means of the experimental and control group is

not due to chance alone. The higher mean of the participants in the experimental group gives strong support to the conclusion that the treatment given to the experimental group has been more effective than that of the control group in their potency dimension of vocabulary knowledge. Therefore, one can conclude that using MoodleReader has been effective in increasing the learners' awareness of potency dimension of deep vocabulary knowledge.

#### 5. Discussion

The outcome of the posttest data analysis revealed that the subjects in the experimental group significantly outperformed the subjects in the control group. Therefore, the obvious conclusion is that the devised treatment, i.e., the application of MoodleReader as an extensive reading tool has helped the participants to perform better than those being taught in routine manner in extensive reading. Hence, we can conclude that if students are exposed to MoodleReader as an extensive reading tool, they can improve deep vocabulary awareness in terms of the evaluation and potency dimensions of the skill.

The findings of this study may benefit EFL teachers and EFL teaching in general. Teachers can make use of MoodleReader tool not only as a tool for extensive reading, but also as a way for increasing students' awareness of affective dimensions of deep vocabulary knowledge. Using MoodleReader can be beneficial in teaching vocabularies because they can create new context for students and learning would be more interesting. When students receive vocabulary instruction incidentally and through such a course, they can increase deeper knowledge of vocabulary which would help them to use vocabularies in appropriate situations.

Teachers can utilize a proper type of input to improve the learners' deep vocabulary knowledge. Exposing students to MoodleReader will enhance learners' appropriate use of vocabularies. It can be pointed out that in this way, learning vocabularies can be more interesting and more authentic to learners. MoodleReader can create a more preparatory pretext to achieve deeper knowledge of vocabularies. They can increase the amount of understanding and reducing the amount of difficulties in understanding abstract vocabularies.

## References

Brown, H.D. (2007). Principles of language learning and teaching (2nd ed.). NJ: Englewood Cliffs, Prentice Hall.

Corrigan, R. (2001). Semantic influence on attributions of casualty in interpersonal events. In A. Cienka, B. Luka, & M. Smith (Eds.), Conceptual and discourse factors in linguistic structure (pp.77-89). Standford, CA: CSLL.

Heise, D. (2002). Understanding social interaction with affect control theory. In Berger, J. & Zelditch, M. (Eds.), New direction in contemporary sociological theory. Lanham, MD: Rowman & Littlefield.

Laufer, B. (1997). The lexical plight in second language reading. Cambridge: Cambridge University Press.

Osgood, C., May, C., & Miran, M. (1975). Cross-cultural universals of affective meaning. Urbana, IL: University of Illinois Press.

Paul, T. S., VanderZee, D., Rue, T., & Swanson, S. (1996). Impact of the accelerated reader technology-based literacy program on overall academic achievement and school attendance. Paper presented at the Literacy and Technology for the 21th Century conference of the National Reading Research Center, Atlanta, GA.

River, W. M. (1981). Foreign Language Skills. Chicago: University of Chicago Press.

Robb, T. N. (2005). Outline of MoodleReader features. Retrieved December 10, 2010, from <a href="http://moodlereader.org/moodle/mood/resource/view.php?inpopup=true&id=3521.">http://moodlereader.org/moodle/moodlereader.org/moodle/moodlereader.org/moodle/eader.org/moodle/moodlereader.org/moodle/e

Robb, T. N. (2010). Getting them to read outside of class: Let Moodle be the enforcer! MEXTESOL Journal, 34(2), 1-7.