# Increasing vocabulary retentionthrough using wordwal.net: a case study at tran van on high school

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**Abstract:** *The research is mainly focused on the use of web-based application – Wordwall.net which creates vocabulary assignments to find out how these kinds of assignments affect students' vocabulary retention and motivation in learning English. The results of the research showed that students were developed their vocabulary retention and motivation in learning English through web-based application. At the end of the study, the average post-test score was higher than the pre-test score (Ma 5.18 < Mb 6.10) in experimental group and students' motivation increased significantly in learning English.*

## 1. Introduction

Vocabulary is considered one of the most important linguistic competences, which is thought to be essential for successful second- or foreign-language learning (Schmitt, N, 2000). It shows that vocabulary plays an indispensable role in communication and learning English. In this case, teachers need to use various appropriate methods of teaching which could help learners to retain vocabulary effectively. Therefore, the authors find that one of the effective ways to help learners retain vocabulary is to take advantage of various exercises based on Wordwall.net web tool to create vocabulary assignments to enhance learners' abilities in acquiring vocabulary and increasing students' motivation.

## 2. Literature Review

### 2.1. Motivation and Vocabulary Learning

Motivation plays a vital role in driving individuals to achieve their goals with unwavering determination. according to Dogan (2015), should be teachers' ability to verbally motivate students to improve their academic performance and motivate students with an optimistic perspective, which could inspire children to succeed in the classroom.

### 2.2. Web-based learning and teaching

Web-based learning, as defined by Cook (2007) is the use of the internet for all educational purposes, including lectures, discussions, practice exercises, examinations, and access to works that are stored within the web, or internet's network. Web-based learning might be considered electronic learning, or e-learning since it more or less replaces the conditions of traditional learning processes. It uses the internet as the primary tool and a number of websites to combine various learning activities.

### 2.3. Wordwall.net

Wordwall.net is one of the popular gamification platforms which can create more joyful and helpful learning situations to promote students' interest, especially in enhancing vocabulary for other skills. It is accessible by an interactive whiteboard, computer, laptop, and smartphone. Educators employ it as a dynamic approach to enhance enjoyable learning experiences in the classroom.

### 2.4. Strategies of Applying Wordwall.net in Teaching Vocabulary

a. Creating interactive online games such as unscramble, gap-filling, synonyms, antonyms exercises on Wordwall.net to gives students chances to put vocabulary they have learned into practice immediately.

b. Creating exercises to assign homework to students which help learners review previous lessons or prepare for the next lessons as teachers require.

c. Using the results to give students regular assessments to see if they make any progress in learning.

## 3. Research methods

### 3.1. Design and Sample

The writer used an experimental study design with T-tests that included a pre-test and a post-test, and experiment data were gathered quantitatively. The researcher employed a qualitative method to gather data using questionnaires and interviews, and

a quantitative method to analyze the T-test data to compare the scores of students before and after they were applied Wordwall.net.

### 3.2. Participants

In order to address the hypothesis, the writer took 80 students from two classes of 10th grade at Tran Van On high school as the research sample. The participants were divided into two groups of 40 students coming from two classes 10A1 and 10C3. Students in the experimental group were in class 10A1 and the students in control group were in class 10C3.

### 3.3. Collection Data

The writer employed a qualitative method, a series of pre-tests, post-tests, questionnaires, and interviews were employed as data gathering tools in this investigation.

#### 3.3.1. Tests

A pre-test was given before undertaking teaching experiments to collect information on the students' knowledge before they were applied web-based interactive assignments through Wordwall.net and a post-test was given to students to evaluate their understanding of the material being studied.

#### 3.3.2. Questionnaires

The questionnaire was used to evaluate the ability of learners in the English language, their prior knowledge and comprehension, aspects of English vocabulary, and their thoughts on the advantages of using interactive online assignments in the classroom as well as vocabulary retention and motivation. The whole process consisted of eleven questions.

## 4. Result and Discussion

### 4.1. The students' feedback on questionnaires

Eighty students from two groups (control and experimental group), 49 female and 31 male participants were investigated.

#### 4.1.1. Pre-questionnaire on vocabulary retention on Wordwall.net

Table 1. Pre-questionnaire on vocabulary retention on Wordwall.net

| Descriptive Statistics | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Items | (1) | | (2) | | (3) | | (4) | | (5) | |
| | F | % | F | % | F | % | F | % | F | % |
| 1. The teacher has used Wordwall.net to teach you vocabulary. | 5 | 12.5 | 6 | 15 | 6 | 15 | 13 | 32.5 | 10 | 25 |
| 2. Your scores have been improved after practicing doing vocabulary assignments on Wordwall.net. | 7 | 17.5 | 8 | 20 | 13 | 32.5 | 8 | 20 | 4 | 10 |

| Items | (1) | | (2) | | (3) | | (4) | | (5) | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3. Learning environment on Wordwall.net helps you learn better. | 8 | 20 | 8 | 20 | 11 | 27.5 | 10 | 25 | 3 | 7.3 |
| 4. You are interested in colorful themes various types of exercise on Wordwall.net. | 9 | 22.5 | 8 | 20 | 8 | 20 | 9 | 22.5 | 6 | 15 |
| 5. You get involved in Wordwall.net's vocabulary games enthusiastically. | 7 | 17.5 | 11 | 27.5 | 9 | 22.5 | 8 | 20 | 5 | 12.5 |
| 6. Wordwall.net offers assignments so effective that you can get better at vocabulary. | 9 | 22.5 | 8 | 20 | 12 | 30 | 7 | 17.5 | 4 | 10 |

The number of students strongly agreed with items 3,4,5,6, was nearly the same arranging from 7 students (17.5%) to 9 students (22.5%), they thought that they like learning environments, various themes and effective assignments on Wordwall.net. However, there were many students who voted "Disagree" and "Strongly disagree" on items 3,4,5,6, the highest number were up to 15 students (37.5%).

### 4.2. Test results

#### 4.2.1. Comparison of pre- and post-test in the control group

The distribution of the total pre- and post-test scores is shown in the Table below. The pre-test mean was 5.15, with a 1.331 standard deviation. Conversely, the post-test mean was 5.05, with a 1.467 standard deviation. The two test scores did not differ in a way that was statistically significant. It can be concluded that the control group did not make progress at vocabulary through conventional approaches. The pre- and post-test results were equal.

Table 3. The statistics of pre- and post-test in control group

| | | Pre-test | Post-test |
|---|---|---|---|
| N | Valid | 40 | 40 |
| | Missing | 0 | 0 |
| Mean | | 5.15 | 5.05 |
| Median | | 5.00 | 5.00 |
| Mode | | 5 | 5 |
| Std. Deviation | | 1.331 | 1.467 |
| Minimum | | 2 | 2 |
| Maximum | | 7 | 8 |

The researcher collected the control group students' scores using the pre- and post-test. The pre- showed a range of values from 2 to 7, and post-test showed a range of values from 2 to 8 with 5 serving as the mode. The pre- and post-test statistics for the control group are displayed in the following table:

*Table 4. The frequency of pre- and post-test in control group*

| Valid | Pre-test | | Post-test | |
|---|---|---|---|---|
| | Frequency | Percent | Frequency | Percent |
| 2 | 1 | 2.5 | 2 | 5 |
| 3 | 3 | 7.5 | 3 | 7.5 |
| 4 | 9 | 22.5 | 9 | 22.5 |
| 5 | 11 | 27.5 | 12 | 30 |
| 6 | 8 | 20 | 7 | 17.5 |
| 7 | 8 | 20 | 5 | 12.5 |
| 8 | 0 | 0 | 2 | 5 |
| Total | 40 | 100.0 | 40 | 100.0 |

There was only one student (2.5%) got 2 in pre-test, but there were two students (5%) got 2 in the post-test. The number of students received 5 (12 students/30%) in post-test were higher than in the pre-test, and there were two 8 scores in the post-test, and the maximum score in the pre-test was 7. The values in the post-test increased slightly but it was insignificant.

*4.2.2. Comparison of pre- and post-test in the experiment group*

After using web-based application in class in the experimental group, the students had better results on the post-test. The mean for the pre-test total for the experimental group is 5.18±1.448 and for the post-test total is 6.10±1.355. And the results indicated that the average post-test score was greater than the pre-test score (Ma 5.18 < Mb 6.10), as evidenced by the mean score, which increased by 0.92 points.

*Table 5. The statistics of pre- and post-test in experimental group*

| | | | Pre-test |
|---|---|---|---|
| N | Valid | 40 | 40 |
| | Missing | 0 | 0 |
| Mean | | 5.18 | 6.1 |
| Median | | 5 | 6 |
| Mode | | 6 | 6 |
| Std. Deviation | | 1.448 | 1.355 |
| Minimum | | 2 | 3 |
| Maximum | | 8 | 9 |

*Table 6. The frequency of pre- and post-test in experimental group*

| Valid | Pre-test | | Post-test | |
|---|---|---|---|---|
| | Frequency | Percent | Frequency | Percent |
| 2 | 3 | 7.5 | 0 | 0 |
| 3 | 2 | 5 | 1 | 2.5 |
| 4 | 5 | 12.5 | 5 | 12.5 |
| 5 | 12 | 30 | 4 | 10 |
| 6 | 13 | 32.5 | 16 | 40 |
| 7 | 3 | 7.5 | 9 | 22.5 |
| 8 | 2 | 5 | 3 | 7.5 |
| 9 | 0 | 0 | 2 | 5 |
| Total | 40 | 100 | 40 | 100 |

The data of pre- and post-test for the experimental group are shown in table 5 and 6. The mode for both tests was 6. Between the two tests, there were statistically significant variations. The pre-test had a minimum of two and a maximum of eight. The post-test had a minimum of 3 and a maximum of 9. It cannot be denied that students' vocabulary level increased through applying web-based Wordwall.net in teaching and assigning vocabulary assignments.

*4.2.3. Post-test comparison of the experimental and control group*

The findings showed that the post-test mean values for the two groups were nearly similar, with the experimental group's post-test total being 6.10±1.355 and the control group's being 5.05±1.467. It can be seen that the experimental group's outcome is better than the control group's, and Wordwall.net proves to be a useful online resource for assisting students in retaining vocabulary.

*Table 7. Paired Samples Statistics*

| | | Mean | N | Std. Deviation |
|---|---|---|---|---|
| Pre-test | Control group | 5.15 | 00 | 1.331 | .21 |
| | Experimental group | 5.18 | 40 | 1.448 | .229 |
| Post-test | Control group | 5.05 | 40 | 1.467 | .232 |
| | Experimental group | 6.1 | 40 | 1.355 | .214 |

**5. Conclusion and Suggestion**

Wordwall.net can be seen as a useful resource for creating web-based vocabulary exercises that increase the desire of learners to study English and improve vocabulary retention and increase students' motivation in learning English. The researcher must emphasize that web-based application given here might not be the best way to replace all other approaches as the only effective teaching tool. It should, however, be considered one of the significant teaching approaches and an interesting way to assist teachers with classroom activities.

**References**

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