A Blended Learning Approach to Enhance College Students’ Vocabulary Learning

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Abstract

The paper reports a small-scale exploratory research on the effectiveness of blended learning on EFL learners’ mastery of vocabulary. It aims (1) to determine the effectiveness of blended learning in vocabulary lessons, and (2) to identify the respondents’ opinions about the blended learning experience. An intact class of 21 students was taught vocabulary lessons, which amounted to 100 minutes of class time every week. The lesson focused primarily on intentional learning, with receptive recall of words as the main objective. In addition to this regular intentional learning, they were instructed to read authentic materials and utilize a vocabulary profiler to obtain a vocabulary profile of the materials. They were taught how to interpret the results of the profiling. Next, they were asked to show their texts on a blog so as to allow their classmates to learn new words from the texts. Questionnaires were used to elicit their opinions on this teaching technique. At the end of the 16-week semester a post-test was administered to determine the gains in their vocabulary mastery. While there was an apparent gain in their command of 5000-level English words, they did not make a similarly encouraging achievement in the new words from the texts. An explanation that accounts for the finding was offered. Meanwhile, the answers from the questionnaires seemed to reflect their positive attitude toward the use of authentic materials in this fashion.

1 Introduction

Learning vocabulary is obviously essential in foreign language learning. While this is an obvious fact, it is equally obvious that most Indonesian students still have to struggle hard with their poor mastery of English vocabulary. The inadequacy in turn hinders their fluent use of the language for a wide range of communicative purposes in the academic or professional domain. A lot of studies that dated back as far as the 1970s have consistently pointed out the poor vocabulary knowledge of high school graduates. Nurweni and Read (1999) reported that Indonesian high school graduates mastered a mere average of 1200 words, far below the required level of 5000 words. Kweldju (1997) found that English department students only knew around 2800 word families. This seems to be true in other parts of the world. Zhang (2008), for example, found that the mastery of the 5,000-word level of Singaporean secondary students was still lower than their mastery of the 1,000 and the 2,000-word levels. Olmos (2009) found that the mastery of vocabulary of senior high school students in Murcia was lower than expected, with the majority of them scoring poorly on Nation’s Vocabulary Level Test for the 1000 and the 2000-word levels. Ma (2004) reported the level of vocabulary mastery by high school students in Mongolia; despite the requirement of knowing 1800 words at the beginning of college study and an additional 2400 words by the second year, most of the students practically fall far below these levels.
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With the advent of web-based information technology, language educators are invited to a vast world full of tools and resources that they can exploit to enhance their teaching. Learning is no longer confined to the four walls and whiteboard of a classroom. It is becoming easier now to extend learning outside the classroom so as to maximize the impact of learning tasks on the learners’ ability. Obstacles that in the past hampered the effectiveness and efficiency of classroom language learning can now be overcome. Information technology, particularly the Internet, provides teaching tools that help teachers and students run a simple analysis of the learning materials, identify the core of the materials that is worth learning, separate them from the less important items, and even evaluate their own successes, all of which were accomplished in a more or less independent manner. Moreover, the increasingly sophisticated web-based technology has made it possible to engage learners in a blended learning approach, which is a combination of traditional classroom teaching and online learning.

The findings described above point to the fact that most Asian students still struggle to understand even the first 5,000 most frequent English words. On the other hand, there is the option of blended learning, which teachers can exploit to the advantage of their students. Against the background described above, it was felt necessary to conduct an investigation about the advantages of blended learning in assisting learners to meet the demands of the 5,000 word level mastery.

The paper reports the results of a study that aimed to achieve these objectives: (1) to determine the effectiveness of blended learning in vocabulary lessons; and (2) to gather the respondents’ opinions about the blended learning experience.

Before putting in any effort to enrich vocabulary or, in the case of a teacher, to help students learn new vocabulary, students and teachers can benefit a lot from knowing some basic characteristics of English vocabulary. Knowledge of these characteristics may help them allocate the right amount of attention and effort to vocabulary learning. In addition, they will benefit from learning a few strategies for memorizing and recalling word meanings with greater ease. The paper highlights some basic characteristics of English vocabulary, and then suggests three techniques that are aimed to enhance the positive impact of vocabulary learning.

1.1 Characteristics of English vocabulary

A layperson studying English for the first time will be amazed by the massive size of English vocabulary, which according to Oxford Dictionary totals 171,476 words, (Oxford Dictionaries, 2013). Yet, one should not feel intimidated by that gargantuan amount of vocabulary items if he or she knows some basic facts about English words. Nation (2002) states that English words fall into four major categories: (1) 2,000 high frequency words, which account for 80% of the running words in a typical text, and thus are very important to learn because of their high coverage and relatively small number; (2) 570 academic words, which make up 10% of the running words in typical academic texts and are therefore vital for academics; (3) 1000 technical words which account for 5% of the running text of a particular discipline, and therefore are required for comprehensive knowledge about a specific field; and (4) 126,000 low-frequency words, which account for 5% of the running words in a typical text. This last type should not be prioritized in intentional learning because, despite its massive number, it comprises words that cover only a very small part of English texts.

Thus, if one knows the basic facts above, he or she would spend his or her time and energy more efficiently, paying more attention to frequent words which are more worth learning, and using them to deal with and master higher number of words that occur more rarely. In other words, at least during a receptive recall (Laufer & Goldstein, 2004), the person will spend time and energy memorizing only those vocabulary items with the highest frequencies, and use these words to help her figure out the meanings of the less frequent words. In active recall (producing a sentence with the correct words), which Laufer and Goldstein (2004, p. 405) state as “the most advanced state of world knowledge,” the person still has to make further effort, but such skill is beyond the scope of this paper.
In the realm of language teaching, vocabulary is commonly taught in context. New vocabulary items are usually presented prior to a reading passage or after the passage to enable the learners to see their actual uses in discourse. Then, a certain portion of a reading lesson is usually allocated for intentional vocabulary learning. In intentional learning, such niceties as described above fit very well. An ideal vocabulary learning approach should go beyond the prescribed textbook that is used in daily teaching sessions. The learners should also be exposed to, and made to notice, a massive number of vocabulary items that frequently come up in contemporary texts and which the textbook has not sufficiently covered. Also, they should be trained on how to employ strategies that make their learning more effective and efficient. These acts should then culminate in an intensive use of the newly learned items in sentences that they create themselves, something which has proved effective (Djiwandono, 2009).

This paper reports a small-scale exploratory study of blended learning that combines conventional classroom session and individual learning from a blog. It aims to determine the degree of effectiveness of such a technique in promoting intentional vocabulary learning.

The first important issue addresses synchronous and asynchronous types of interaction. A conventional or a face-to-face classroom session is usually executed in synchronous mode, while online teaching and learning sessions can be carried out asynchronously. The latter enables the learners to access the lesson materials at different times from different locations. Though seemingly in a complementary role, they also depend on certain factors that will be discussed later. It is necessary that a sensitive teacher is well informed of the factors that eventually contribute significantly to the success of the blended learning experience he or she is committed to.

Another issue of equal importance is the type of vocabulary learning that suits blended learning best. As has been widely known, vocabulary learning falls into two broad categories: intentional and incidental vocabulary learning. Typically, a vocabulary lesson in academic setting is integrated in reading comprehension. Vocabulary is thus embedded in reading passages, most of which are of academic types. Because the academic domain commonly sets a number of objectives to be attained in a given time period, it is understandable to expect that the type of vocabulary learning is intentional. This type of learning goes in harmony with deliberate arrangement of words to be taught, texts to be presented, exercises and other learning tasks to be done, and many others. This study was conducted in such an academic setting where the emphasis is on intentional learning. It specifically aims to see whether blended learning can be considered as one of the alternatives to enhance the results of intentional vocabulary learning.

Still another aspect of vocabulary mastery merits consideration at the outset. As Laufer and Goldstein (2004) maintain, the knowledge of vocabulary can exist as a continuum that starts from the easiest to the most difficult. They state passive or receptive recall as the least demanding task of memorizing. This study was conducted in a course that stressed the ability of receptive recall.

Learners’ opinion is an aspect that needs attention too. The paper reports a few opinions from the students concerning their degree of interest in being engaged in the blended learning experience. It highlights certain features on blogging that cater for five learning activity techniques, namely assimilative, adaptive, communicative, productive, and experiential activities. Finally, the paper addresses some implications of blended learning for further development.

1.2 Blended learning

Blended learning is simply defined as a combination of conventional face-to-face classroom learning and online learning. Simple as it may seem, it implicates some important issues that merit further empirical investigation. Garrison and Vaughan (2008), for instance, contend that each type of learning brings with it a distinct atmosphere and entails a unique learning experience. They maintain that face-to-face interaction promotes social presence, allowing learners to get a sense of belonging to a community, is important in building group identity, and serves to prepare the learners for a more individualistic style of online learning.
1.3 Blogs as a supporting means

Nepomuceno (2011) conducted a study on the use of blogs to enhance students’ writing. One supportive feature of a blog that he found is the accessibility of a blog. A blog can be read by everyone, and as such, it embodies a quality of being contributive whereby learners can gain some lessons from their peers as well as give them some new ideas to be learned. Ali, Mukundan, Baki and Ayub (2012) conducted a study on learners’ interest in three vocabulary learning methods, one of which is using CALL. They found that learners favored the method that used CALL for their vocabulary learning, and suggest that this is due to the match between their learning styles and the primary features of CALL. In essence, an approach that utilizes web-based technology will likely be met with enthusiastic responses from learners. Another piece of empirical evidence about the role of web-based technology is from Binkai (2012). He found that learners are enthusiastic about corpus-driven vocabulary learning aided by concordancing software.

1.4 Empirical evidence about vocabulary learning

A recent study that is most relevant to the topic of this paper was carried out by Webb and Chang (2012). They measured the vocabulary growth of 166 Taiwanese students who received different kinds of English instruction at their schools. They showed that one group could only learn as few as 18 words a year, while other groups could manage to gain as many as 430 words. The authors concluded that the type and the intensity of English instruction are instrumental in taking learners to an adequate rate of vocabulary learning. The present study reported in this paper tries to see if a blended learning experience will positively impact the students’ growth of vocabulary mastery over a period of one semester.

A less recent study relevant to the present study was conducted by Laufer and Shmueli (1997). They found that a glossary of new words written in students’ L1 words facilitate better retention than the words explained in English as the target language. They also found that words presented in a list and in sentences were memorized more easily than those in text.

A closer look at the analysis of the questionnaires combined with an informal interview sessions with the learners revealed that despite the merit of online learning, they still feel the need for attending a conventional classroom session where they can get a more direct and clearer explanation from the lecturer and their peers. This supports what Garrison and Vaughan (2008) state about the indispensable power of face-to-face interaction, where the sense of community is maintained by the physical presence of the teacher and classmates.

2 Method

The small-scale exploratory research was conducted in a pre-test post-test quasi-experimental design, whereby no randomization was done to select the subjects. An intact class consisting of 21 students who were taking a vocabulary class was taken as the group on which the experiment was performed. Because of the quasi-experimental design, it was admitted that the blended learning technique could hardly be strictly controlled, a limitation that somehow should be taken into account when generalizing the findings later. The dependent variable was the learners’ mastery of new words. A pre-test was given at the initial stage, and a post-test was administered at the end of the semester when the course was concluded.

The data collected were the pre-test scores from the 5000-word level test (Nation & Laufer, 1990), the middle-semester scores, and the two final tests. The 5000-word level test was used because the rigorous development by its writers could be taken as a proof of its validity. The two final tests comprised the 5000-word level test that was administered at the beginning of the semester, and another test measuring their recognition of the new words from the blog, with the words being determined by the researcher. The scores were analyzed using ANOVA to determine whether there were any differences between them.
To achieve the second objective, namely, to identify the learners’ opinions about the blended learning experience, they were asked to fill out questionnaires, which consist of a number of multiple-choice questions interspersed with a few open-ended questions.

2.1 The subjects’ initial vocabulary mastery

The initial measurement of the learners’ mastery of 5000-word level showed that the average score was 38.095, with a Standard Deviation of 16.785. Thus, it is apparent that the students had a relatively low mastery of vocabulary at the 5000-word level.

2.2 Treatment

The learners were instructed to find a text of their interest from the Internet or from the library. No specific limitation was imposed here as to the type of text; they could choose any English texts that they found interesting. Then they were told to feed the text into a vocabulary profiling website at http://www.lextutor.ca/vp/ to get the words in their texts broken down into several categories of vocabulary: blue colors for words of 1000-word level, green for words of 2000-word level, yellow for academic words, and red for words that do not belong to the categories previously mentioned. Once they got the result, they had to select only those red words, excluding proper names, translations and misspelled words, the rationale being that those words somehow frequently show up in contemporary texts, at least according to the writer’s observation, and were therefore worth learning. They were asked to provide the glossary for those red words, and then to post the text along with the glossary on a blog that had been prepared for this purpose at http://katamachungers.wordpress.com. Appendix A presents a sample of this text on the blog. It is to be noted that the glossary is written in the learners’ native language, following the results of a study by Laufer and Shmueli (1997) discussed above.

With the blog containing more and more texts that also provided the glossary for new words, the learners were then instructed to read texts that their classmates had displayed and to pay attention to the new words and their meanings. In this way, they began learning from each other’s work, creating a virtual learning exchange in the cyberspace. This was the online dimension of the blended learning which in a way also reflected the independent learning and collaboration by the students.

After the posting of texts and virtual learning continued for two months, a classroom session was conducted in order for the lecturer to confirm the meanings of the new words, elaborate on the semantic and syntactic aspects of the words, and answer questions from the students. In general, this session was held to consolidate the individual efforts by the students and to maintain the sense of being in a learning community. It also served to provide opportunities for the interactants to deal with issues they could not possibly handle in the online mode of learning. In this way, the posting on the blog, the profiling of words to be selectively learned, the independent learning of the new words from the blog, and the ensuing classroom session in which the lecturer answered questions and elaborated on the features of the new words comprised a blended learning experience.

The students started posting on the blog in the middle of March 2012, and a periodical assessment was held in mid April 2012 to measure their learning gains. The assessment was in the form of a test that required them to supply the meaning of some new words, and to complete clipped new words in sentences (see Appendix B). Because this test was part of a classroom formative assessment, it did not undergo a rigorous reliability and validity check, but an attempt was at least made to ensure that these tested words represented the entire vocabulary the students had been learning. It was found that on this test (abbreviated as “LF1” henceforth) the mean was 73.917, with a Standard Deviation of 15.731.

In the period from the middle-test to the end of the semester, the blended learning experience resumed. The class was engaged in posting new texts and learning more new words from them, both in the online mode and in the classroom under the lecturer’s guidance. Every classroom ses-
A Blended Learning Approach to Enhance College Students’ Vocabulary Learning

The discussion mostly focused on intentional learning of the new vocabulary, with the lecturer explaining the syntactic and collocational properties of the new words, and giving brief recognition tests to measure the students’ mastery of the words. This was the offline part of the blended learning with an emphasis on intentional vocabulary learning.

Finally, two tests were administered. The first was the 5000-word level test that had been given at the beginning of the semester, and the second was another test measuring their mastery of new vocabulary from the blog. This second test was aimed at identifying any learning gains during the blended learning experience.

Table 1 shows the results of all the tests:

<table>
<thead>
<tr>
<th>Table 1. Summary of all scores</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 (Mastery of 5000-word level at the beginning)</td>
<td>38.095</td>
<td>16.785</td>
</tr>
<tr>
<td>LF1 (Mastery of new words from the blog)</td>
<td>73.917</td>
<td>15.371</td>
</tr>
<tr>
<td>T2 (Mastery of 5000-word level by the end of semester)</td>
<td>48.00</td>
<td>10.870</td>
</tr>
<tr>
<td>LF2 (Mastery of new words from the blog by the end of semester)</td>
<td>64.00</td>
<td>16.478</td>
</tr>
</tbody>
</table>

The scores were then analyzed with ANOVA.

2.3 Findings

The calculation with ANOVA generated an F of 30.26 (P < 0.0001), indicating significant differences among the scores as shown in Table 2:

| Table 2. Descriptive statistics and differences among the scores |
|--------|--------|--------|--------|--------|--------|
|        | T1     | LF1    | LF2    | T2     | Total  |
| N      | 21     | 21     | 21     | 21     | 84     |
| Σ X    | 799.9  | 1549   | 1420   | 1066.68| 4835.58|
| Mean   | 38.095 | 73.7619| 67.619 | 50.7943| 57.5664|
| Σ X²   | 36104.0006| 118983| 101450 | 56544.6792| 313081.679|
| SD     | 16.786 | 15.3717| 16.4787| 10.8707| 20.4511|
| Std. Err | 3.663 | 3.3544 | 3.5959 | 2.3722 | 2.2314 |

Note:
T1 = Scores from the first test on 5000-word level
T2 = Scores from the second test of the 5000-word level
LF1 = Scores from the mid-semester test of the new words from the blog
LF2 = Scores from the end-of-semester test of the new words from the blog

To find the exact differences among the individual means, a Tukey HSD test was run after the main computation, resulting in Table 3:
Table 3. Results of comparison between individual means

<table>
<thead>
<tr>
<th>Differences between means</th>
<th>Level of significance</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 &lt; LF1</td>
<td>p&lt;.01</td>
<td>Significantly different</td>
</tr>
<tr>
<td>T1 &lt; LF2</td>
<td>p&lt;.01</td>
<td>Significantly different</td>
</tr>
<tr>
<td>T1 &lt; T2</td>
<td>p&lt;.05</td>
<td>Significantly different</td>
</tr>
<tr>
<td>LF1 &gt; LF2</td>
<td>Not significant</td>
<td>Not significantly different</td>
</tr>
<tr>
<td>LF1 &gt; T2</td>
<td>p&lt;.01</td>
<td>Significantly different</td>
</tr>
<tr>
<td>LF2 &gt; T2</td>
<td>p&lt;.01</td>
<td>Significantly different</td>
</tr>
</tbody>
</table>

2.3.1 The differences between scores

The results show that as the learners moved further into the semester, their mastery of words became better. This was evidenced by the LF1, LF2 and T2 being higher than T1. LF2 is higher than LF1. Although the difference is not significant, it could be taken as a little support for further efforts in blended learning using blogs. The change from T1 to T2 (scores for 5000-word level tests) also seems logical, with T2 being higher than T1. This could be interpreted as a positive impact of the blended learning experience. However, it is surprising to see that the LF2, the average score after the learners spent more time studying the new words from the blog, was slightly lower than LF1, which was taken after they learned the new words for the first time. If a delayed positive effect took place, they should have scored higher after they took the test for the second time. Although the difference was not significant as the ANOVA shows, it still warrants a discussion.

2.3.2 The learners’ opinions about the blended learning experience

The data gathered from questionnaires were tabulated, and the results are displayed in Table 4 (the figures indicate percentages of learners):

Table 4. Learners’ opinions on the effectiveness of blended learning experience

<table>
<thead>
<tr>
<th>The effectiveness of learning from the blog and the profiling website (lextutor)</th>
<th>Very effective</th>
<th>Moderately effective</th>
<th>Not effective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33.33%</td>
<td>61.90%</td>
<td>4.76%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Finding suitable text</th>
<th>Finding word meanings</th>
<th>Using the lextutor</th>
<th>Memorizing the meanings</th>
<th>All of the above</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biggest obstacle in learning from the blog in blended learning</td>
<td>23.81%</td>
<td>0%</td>
<td>4.76%</td>
<td>57.14%</td>
</tr>
</tbody>
</table>

Table 5 sums up the most frequent written comments from the learners:
<table>
<thead>
<tr>
<th>No.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Slow Internet connection often hampers the effectiveness of the approach.</td>
</tr>
<tr>
<td>2</td>
<td>This technique is not effective for students who do not have Internet access in their home.</td>
</tr>
<tr>
<td>3</td>
<td>Some students only read the blog when forced by tests; their motivation should be improved.</td>
</tr>
<tr>
<td>4</td>
<td>Online learning frees students from taking note of the materials, because they have been available online.</td>
</tr>
<tr>
<td>5</td>
<td>The blog should be given attractive decorations to make it more appealing.</td>
</tr>
<tr>
<td>6</td>
<td>This technique of learning from the blog is interesting and I like it. We can learn new words from one another.</td>
</tr>
</tbody>
</table>

The tables above show the students’ general inclination in the blended learning experience. Because the data came in the form of brief written responses from simple open-ended questionnaires and no triangulation was attempted, the analysis was admittedly not deep. Yet, this simple analysis has generated more or less typical opinions across learners of the same level of English proficiency. As shown by Table 4, most were of the opinion that the independent mode during the blended learning experience (learning from the blog posts and using the 1-based vocabulary profiler) was effective, at least in terms of sorting words to be learned. Yet, the majority of them admitted that memorizing new words from the blog proved challenging. This could be interpreted as a sign that the learners still needed their lecturer’s direct explanation in a classroom session. This seems to characterize the blended learning experience that applies to these learners: they feel greatly facilitated by the online learning aids, yet still needed to seek assurance, or at least confirm what knowledge they have acquired online, with the lecturer and other classmates in an offline classroom session.

Table 5 reveals yet other information from the learners’ vantage point that is worth considering by any educator intending to use blended learning. According to these students, despite the enthusiasm about blended learning, issues like reliable Internet connection, students’ learning motivation and unequal accessibility of the Internet have to be thoroughly dealt with before any effective and reliable blended learning can be done.

3 Discussion

It is apparent from the finding for the first research objective that the blended learning approach made a significant impact on the learners’ vocabulary mastery. Of all the differences shown in the ANOVA summary table, there are three figures that indicate a significant increase from their initial mastery. The finding corroborates a standpoint from Laufer and Shmueli (1997) and Gu (2003) who maintain that new L2 words glossed in L1 prove more effective than those new words glossed in L2. Also, the presentation of new words in a list proves helpful for the learners, as confirmed in this present study.

However, the finding warrants a cautious interpretation, especially with regard to the difference between LF1 and LF2. It is worth noting here that LF2 was slightly lower than LF1, indicating that the longer time period available for the learners did not seem to strengthen the learning of new words from the blog. Possible causes of this may include declining performance due to heavy course load during the final exam, unequal test difficulties, or a lack of repeated practice for the new words. Thus, once learned from the blog, the new words should have been practiced much more intensively in a lot of various exercises. Because the lecturer only discussed them once in a face-to-face session, the learners may not have been able to memorize the meanings and retrieve them well when the test items required them to do so. This conjecture was corroborated by the data from the questionnaires, which indicated that most learners experienced difficulty in memorizing the meanings of the new words from the blog. More importantly, this finding can be explained in light of two factors that influence the learning of new vocabulary: number of repetitions, and number of words to be memorized at one time (Gu, 2003). According to these principles, at least 6
repetitions are required for a learner to firmly memorize the meaning of new words, and that when words to be learned are increasingly difficult, the learners should limit their efforts to a fewer number of words. Such factors were not controlled strictly in this current study, and may have been responsible for the difference between LF1 and LF2.

Still, another factor that may have caused the unexpected difference was the demand of the test. As Appendix B shows, the test asked the learners to perform a cognitive operation that was similar to active recall, whereas the lesson had been stressing exercises on receptive recall. This may have explained why they failed to score well on a test of words they had regularly discussed in the class.

The second finding is a strong indication that blended learning is highly favored among the learners. Although the majority considered it as moderately effective, only a small number of them thought that it was ineffective. This supports earlier studies by Ali et al. (2012), and Binkai (2012), which also indicate high enthusiasm among students who were taught using CALL and concordance software. The finding is also in line with a more recent study by Precel, Eshet-Alkalai and Alberton (2009), who found that college students prefer blended learning because it promotes interactivity and constructivist tasks, and at the same time underscored the need for adjustment to the content and learning objectives. The finding of the current study may be a signal that our students are prepared to take on blended learning in their language lessons. With the right adjustment of the content and form of teacher’s guidance, blended learning can be one of many alternatives to be seriously considered in future learning experiences.

The data taken from the responses to the questionnaires also prove that as far as a vocabulary lesson is concerned, memorizing new meanings proves to be the most daunting challenge for learners. Knowing this finding can help a teacher design a variety of exercises aimed at enhancing the storage and retrieval of new words from the learners’ memory.

To summarize, the findings from the data analysis at best suggest that blended learning should still be complemented with intensive exercises that refine the storage and retrieval of the new words being learned. An approach where learners are left on their own to practice the recall of the target words themselves are probably less effective than the one which is facilitated by the teacher in either a face-to-face session or an online session specifically designed for that purpose. The learners’ opinions captured in this study have pointed to a more certain direction where such an effective combination of online and face-to-face session can promote a significantly improved mastery of new words. In addition, the cognitive load needed to do the formative and summative tests also has to be matched with that of the weekly exercises.

4 Conclusion

The paper set out to investigate the effectiveness of a blended learning technique in a vocabulary class, and to identify the learners’ opinions about the technique. Using a pre-test post-test quasi-experimental design, an experiment was carried out on a class of 21 students. After an initial data of their 5000-word level test, the class was engaged in a combination of learning vocabulary from a blog and face-to-face classroom teaching. A middle test that measured the mastery of the words learned from the blog was given in the middle of the semester, and the same 5000-word level test and another test of the new vocabulary from the blog were later administered to measure their mastery of new words after the treatment was completed. In addition, questionnaires were distributed to identify their opinions on the blended learning experience.

The ANOVA calculation showed that there was a large enough gain on the mastery of new words, despite an intervening factor that might have been responsible for a slight decline from the scores of the first and the subsequent vocabulary tests. Meanwhile, qualitative data from the questionnaires showed that most of the respondents favored the new approach. Principally, the paper concludes that regardless of the approach used, the teaching of new vocabulary should still put enough emphasis on the intensity of practice of newly learned words. For this to happen, face-to-face interaction arguably should always complement online learning.
A Blended Learning Approach to Enhance College Students’ Vocabulary Learning

References

Appendix A: A sample text from the blog

Friendship is a feeling of love and affection of one person for another. This feeling of love must be reciprocated. Otherwise friendship cannot be possible. Friendship does not exist where tastes, feelings and sentiments are not similar. It is said that a friend in need is a friend in deed. There may be many friends at the time of prosperity. But most of them desert at the time of adversity. We can examine the sincerity of a friend during our time of hardship and trouble. Only a sincere and faithful friend remains with us at the time of our trouble. All others leave us. It is very painful when our friends turn traitors. Money is an enemy of friendship. Everybody has an attraction for money. When lending or borrowing of money is done between two friends, there is great risk. Friendship may be affected. So it is wise for true friends to avoid monetary transaction. Vanity is another element which breaks friendship. Everybody has self-respect. When a person tries to criticize his friend, their friendship is affected. So friendship must be treated very delicately. Very often some hypocrites pretend to be friends. They are more dangerous than avowed enemies. By telling soft words they bring enormous ruin to us. A true friend never exploits. He rather surrenders. But at present, the meaning of friendship has changed. There are many fair-weathered friends. They terminate their friendly tie as soon as their interests are fulfilled. It is very difficult to find a true friend today. It is better to establish true friendship with either a dog or an elephant. Both these beasts will remain faithful to their human friends. Today, friendship between two persons is short-lived. Good friends exercise good influence. They always help their friends, in distress and inspire them to walk on the right path. But evil friends ruin us completely.
Appendix B: Mid-Semester Test on New Vocabulary

A. Translate the underlined words into Indonesian!

1. After his victory, he enjoyed his fame.
2. The scientist is renowned for his revolutionary idea in language learning.
3. The message that it conveys worried us.
4. The desk is cluttered.
5. The speaker is vigorous.
6. Their longevity is astonishing.
7. She sneaked into his room.
8. Inanimate objects are clearly visible.
9. The soldiers were enduring freezing temperature.
10. Our nation is becoming more prosperous.

B. Complete the missing words!

1. When the teacher gets angry, the atmosphere of the class becomes uncomfortable.
2. She is suffering from mental disorder; she gets depressed and often cries with no apparent reason.
3. One of the amazing traits of whales is the ability to hunt in groups. This is a feature that is really fantastic for an animal.
4. The delivery of the telephone conversation between the secret agent and the president shocked the country.
5. The rough weather compelled us to stay inside; we cant go anywhere because of the heavy rain and wind.
6. We have two choices and we opted for the first one.
7. You have to comply with the regulations; if you break the rules you will be sanctioned.
8. She has won the contest and now she is thrilled with her achievement in her Facebook.
9. The ocean is so vast, much larger than the land.
10. The object is so tiny that even a regular microscope cannot capture it.