A Comparison of Using Diglot Weave Technique and Student Team Achievement Division on Student’ Vocabulary Achievement

Caroline V Katemba & Nur Ayu Sitompul
Email: linakatemba@gmail.com / nurayu9272@yahoo.com

English Education Department Universitas Advent Indonesia

ABSTRACT

The first aim of this study is to find out the differences of student’s vocabulary achievement between student who were taught using Diglot Weave Technique and student who were taught using Student Team Achievement Division, and the second is to find which groups will gain higher score between female and male. This comparative study was done at SMP Negeri 1 Parongpong that involved two groups from grade 8B as DWT class and 8C as STAD class. Total participants were 74 students. DWT consisted of 26 females and 11 males and STAD, 23 females and 14 males. Based on SPSS 16.0 data analyzing, it depicted that \( \rho \) value is 0.035 < 0.05. Thus, there is significant difference between students who taught using DWT and students who were taught using STAD. Besides, the answer for the second question, it was found that either in DWT or STAD, female and male’ normalized gain score are only slightly different.

Keywords: Diglot Weave Technique (DWT), Student Team Achievement Division (STAD)

INTRODUCTION

Every person in all corners of the world is willing to learn English since it has important roles. Its part in life is inseparable for wherever a person goes, English will be found either in the advertisement or banner on the road. Further, English has been implemented as official subject in the classroom. Indonesian Education and Culture Ministry’s director general for secondary education, Muhammad (2012) interviewed by Jakarta Post stated that:

“"In Indonesia, English is deemed as a foreign language instead of a second language. However, as our local communities are becoming more global, coupled with our country’s booming economy, learning and mastering English has become a must.”

Since learning English is a must, Indonesian government implemented English, based on 2006 KTSP curriculum, as one of official subject to learn. English subject is taught from elementary level.
Problems in vocabulary learning are found in some countries, one of them is Malaysia. Subon (2015) in his recent research found that in Malaysia, many students are still unable to acquire the English language after spending many years in school. Students spend between 11-13 years learning English, for instance, 6 years in primary school and between 5-7 years in secondary school. Students’ lack of vocabulary is quoted as the main reason for their inability to acquire English. Further, Huyen and Nga (2003) conducted a research in Vietnam and noted that when students know the words and recognize how to use the words, it will bring success in communication.

In Indonesia, Ivone (2005) found that vocabulary is the essential part in English. She experienced that if students have lack of vocabulary, it will be a barrier to improve another skills in English, especially in reading. recent research in Palu that conducted by Windasari, Rita, Salehuddin (2016) stated “many students cannot read and understand a text which is written in English because they did not have a good mastery of vocabulary, or they doubt to express their idea in English because they have limited vocabulary in their mind” (p.2). Therefore, teaching vocabulary is a domain knowledge which is worth investigating. Further, Mukoroli (2011) noted that “without some knowledge of vocabulary, neither language production nor language comprehension would be possible.” (p, 8).

However, sometimes learning new language is boring which is stated by Thuy (2008) that “one of the reasons for students’ low vocabulary retention and retrieval can be addressed as their learning habits such as writing down words on a piece of paper, heavily depending on wordlists in textbook, passively waiting for teacher’s explanation for new words seem to be ineffective and make them bored with learning vocabulary.” (p, 268). Furthermore, Kashani and Shafiee (2016) noted that the key of teaching vocabulary to EFL is to let them make use of the words. Without practice and creativity in the learning process, students will simply memorize the words for a few days and then forget them by the end of the learning course.

To do so, the main focus is vocabulary building that they need to be considered. Thus, it is a big deal for the future teachers to find an effective and efficient strategy in teaching vocabulary so that they can help the students to memorize words better as well as to improve their vocabulary achievement. According to Jingxia (2008) cited in Nemati and Maleki (2013) as:

“A common phenomenon in foreign language classrooms, code-switching between the target language and the first language is widely adopted by teachers in the process of teaching to build a bridge from known (the first language) to unknown (the target language)”. (p. 1341).

Indeed, using target language in the classroom can assist students to gain the target language, as Novitasari (2013) stated in her research “It will be difficult for the students to catch the lesson of new language when they are learning new language without knowing the meaning of that new language. This problem becomes one of the obstacles in learning process. Sometimes it may decrease learners’ spirit to learn vocabulary.” (p.3).

Meanwhile, Student Team Achievement Division (STAD) is one of simplest cooperative learning. According to Slavin (1995), STAD method is able to motivate the students so that they can support and help each other. Further, STAD also can plant the
awareness, that learning is important, useful and fun. The students will be more aware in learning process, and students encourage having a positive thinking in learning the lesson that is given.” (p.40).

Considering the explanation above, the researcher has conducted an comparative study to improve the students’ English vocabulary in Junior High School level with entitled: A Comparison of Using Diglot Weave Technique and Student Team Achievement Division on Students’ Vocabulary Achievement.

Statement of the Problem

This study has several aims after teaching vocabulary through DWT and STAD on vocabulary learning on Indonesia Junior High School students and focus on the answer of these following questions:
1. Is there any significant difference in students’ vocabulary achievement between students who were taught using DWT and those who were taught STAD?
2. Which group will gain the higher score between male and female in vocabulary achievement after using DWT and STAD?

Hypothesis of the Study

The hypotheses in this research are:
Null Hypothesis ($H_0$): There is no significant difference in the students’ vocabulary achievement after using Diglot Weave Technique and Student Team Achievement Division.

Alternative Hypothesis ($H_a$): There is significant difference in the students’ vocabulary achievement after using Diglot Weave Technique and Student Team Achievement Division.

Scope and Limitation

The study was focused on SMP Negeri 01 Parongpong, Bandung, West Java, Indonesia. The students were the 8th grade students from two classes, 8B as DWT class and 8C as STAD class. In this study the researcher used the material that was adopted from School Based Curriculum in Junior High school. The vocabulary focused on open words such as nouns, verbs, adjectives and adverbs. Then, the researcher evaluated students’ vocabulary ability by using a test.

REVIEW OF RELATED LITERATURE

Learning Vocabulary

Vocabulary has impact in the four skills of English. In reading skill, role of vocabulary cannot be avoided. According to Braze et, all (2007) stated that “efforts directed at vocabulary development might be an especially helpful adjunct to reading instruction for
adult poor readers.” Further, Furqon (2013), in his study, concluded that vocabulary mastery has a contribution in helping the students to comprehend the texts. In addition, a finding suggests that morphological awareness can hold multiple important roles in second-language reading comprehension.

The essential step in language acquisition is vocabulary, yet teaching vocabulary is not easy to do. According to Brown (2000:7), “teaching” is guiding and facilitating learning, enabling the learner to learn, making up the situation for learning. Based on this definition, teaching vocabulary is to guide and facilitate students by using various strategy and methods and how to apply it in the real way. After teaching vocabulary, the next step is presenting the meaning. Based on Thornbury’s statement (2002), one of the ways to present the meaning is translation; translate the target language to the first language.

**Mixing the Codes**

Code-switching is the two languages used concurrently or alternately. According to Lightbown (2001), code-switching is "the systematic alternating use of two languages or language varieties within a single conversation or utterance" (p.598). Using code-switching in the classroom also has impact to students, Moodley (2007) observed that bilingual classrooms concerning of using codes-switching by English language students in getting specific learning objectives. Samani, and Narafshan (2016) concluded a positive result of using code switching, in their recent study said “that students held a positive attitude towards teachers' code-switching. In addition, majority of the students believed that teachers' code switching motivated and engaged students more. Also, a number of students believed that when the teacher code switches he can make a better relationship with the students.”

**Diglot Weave Technique**

The Diglot Weave, from the Greek ‘di’, meaning ‘two’, and ‘glot’, meaning ‘language’, is a breakthrough in language learning. Diglot weave is related to code-mixing and code-switching which are common and well-documented processes in the speech of multilingual individuals. According to Leon (2010) stated “the term 'diglot weave' was coined by Dr. Robert Blair.” It is actually a technique for teaching a second language or a foreign language. The Power-Glide Method employs the diglot weave as a main technique. It is based upon a comprehension-based approach to learning a second language. Further, Nemati and Maleki (2013) noted that this method smoothly weaves the new language into the learners’ own, taking them from the familiar to the unfamiliar. Gradually moving from their language to the target language quickly builds comprehension skills and increases confidence.

The diglot method addresses the low second language vocabulary threshold and beginner’s paradox by embedding new second language vocabulary within a familiar first language text. The first language strengths are used for allowing students to access context clue strategies and develop a schema while reading. More complete comprehension is achieved since the first language surrounds the new vocabulary.

**Student Teams Achievement Divisions (STAD)**
STAD is one of the simplest of cooperative learning methods and it is a goal model to begin with for teachers who are new to the cooperative approach. STAD, one of the most straightforward approaches to cooperative learning, was devised by Robert Slavin and his partner at Johns Hopkins University (Slavin, 1978) and four or five students from different performance, gender and ethnicity combined in a small group and they work together to accomplish the work. It consists of five major components: class presentations, teams, quizzes, individual improvement scores, and team recognition (Slavin, 1995).

In STAD, there are some preparations to be concerned:
(1) Material - STAD can be used with materials adapted from textbooks or other published sources or with teacher-made materials.
(2) Assigning students to Teams - STAD teams represent a cross-section of the class. A four person team in a class that is male and female combined, low-high level students and all different background.
(3) Determining initial base scores - Base scores represent students’ average scores on past quizzes. If teacher starting STAD after she have given three or more quizzes, use students’ average quiz scores as base score.
(4) Team building - Before starting any cooperative learning program, it is a good idea to start off with one or more team-building exercises just to give teams members a chance to do something fun to know one another.

**METHODOLOGY**

This research used quantitative research method with comparative design. This kind of design compares the students’ vocabulary achievement before and after the treatment through pre-test and post-test that was given in the both experimental groups.

<table>
<thead>
<tr>
<th>SAMPLING</th>
<th>PRETEST</th>
<th>TREATMENT</th>
<th>POSTTEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diglot Weave Technique</td>
<td>T1</td>
<td>X1</td>
<td>T2</td>
</tr>
<tr>
<td>Student Team Achievement Division</td>
<td>T1</td>
<td>X2</td>
<td>T2</td>
</tr>
</tbody>
</table>

Explanations:
X1: Treatment application by using DWT
X2: Treatment application by using STAD
T1: Score of the students in pre-test
T2: Score of the students in post-test

**Participants**

The participants in this study were from grade 8 at SMPN 1 Parongpong, Bandung Barat, West Java, Indonesia. And the sample of this study was two classes from grade VIII.
The two classes were experimental groups. The students’ age range was from about 13-15 years old. They were 74 students, 49 females and 25 males.

**Research Instrument**

The instruments were pre-test and post-test that was administered at the beginning and in the end of the program. For the pre-test the students were given vocabulary test in the form the total number of 45 multiple choice questions, to see student’ prior ability and vocabulary level. For the materials during treatment time, they were given the school textbooks and used DWT and STAD as the method. In the end of the programs, students were given post-test to find the result of student’ vocabulary achievement after using both methods. The post-test was same with pre-test.

**Procedures of Implementation DWT and STAD**

The researcher applied DWT to class 8B and STAD to class 8C. Both classes learned from the same materials from the text book. Students were given the narrative text and elaborated the procedures of the DWT and STAD method at first.

<table>
<thead>
<tr>
<th>Procedures of using DWT</th>
<th>Procedures of using STAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher presented the lesson. The text was read to the students to present the L2 equivalents. A text in which new words from L1 had been inserted was read to the students. For example: <em>Suatu hari, Polly bertanya the Young Man, ‘Tidakkah you lelah day dan night hanya tidur?? The sun sudah terbit beberapa jam yang lalu, and people telah menyelesaikan setengah pekerjaan mereka.</em></td>
<td>1. The teacher presented the lesson. The lesson was introduced by specifying the goals, presenting, explaining, and modeling the skills or applications of concepts, principles, generalizations, and rules, and providing for guided practice and dividing the students into groups from different academic levels, sexes, and background ethnics. Teachers should explain how cooperative learning works and the specific rules to be followed. When introducing students to cooperative learning, the initial directions needed to be very detailed.</td>
</tr>
<tr>
<td>2. Then, material sheet was distributed to the students. Students read a native language text with second language vocabulary and grammatical structures were increasingly embedded within text.</td>
<td>2. Students were divided into four or five in a group. Then they were given materials what they needed to learn and teacher explained what the outcome that they will achieve.</td>
</tr>
<tr>
<td>3. As the class moved ahead during the lesson in question, the teacher</td>
<td>3. Students were given an outline of what they will be learning and why (Get them...</td>
</tr>
</tbody>
</table>
weaves more and more English words into Indonesia sentences, until almost all the sentences are uttered in English.

focused on the outcomes that students were achieved.

4. The teacher might even ask comprehension questions to check the students’ grasp of the new words; for example the teacher addressed the students with questions. For example: Apakah yang dilakukan Young Man day and night?

4. Team work: Students were given the worksheet to help them master the academic materials. These worksheets should guide them through the materials and show them how they could help one another learn through tutoring, quizzing one another, or team discussion. Teacher gave the learners sufficient time or work together to understand the ideas teacher have presented- several periods if necessary.

5. The teacher could also encourage students to use the technique in answering such questions to promote student’s ability in producing the words in question.

5. Students have worksheet and answer sheet in their teams to practice the skill being taught and to assess themselves and their team mates.

6. Afterwards, students were asked to underline the word which was in open words classes; noun, adjectives, verbs, or adverbs.

6. Teacher gave an individual test, or called ‘quizzes’ to the students to see whether they have learned what the teacher wanted them to learn.

7. Test was given to the students according to the new vocabularies that they have found on the reading passage.

7. The quizzes’ score was shown and students were given a chance for an improvement score. This improvement score is based on the degree to which the quiz score exceeds the learner’s past average on similar quizzes. Teacher added the individual improvement score to give a team score.

8. The last step was the rewards which are given to group achievement.

<table>
<thead>
<tr>
<th>Criterion of Improvement Point</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quiz score</strong></td>
</tr>
<tr>
<td>More than 10 points below base score</td>
</tr>
<tr>
<td>10 points below to 1 point below base score</td>
</tr>
<tr>
<td>Base score to points above base score</td>
</tr>
</tbody>
</table>
RESULTS AND DISCUSSIONS

In analyzing the data, the researcher used Microsoft Excel and Statistical Program, SPSS 16.0

The Result of Pre & Post-Test, Mean, Standard Deviation and Gain

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Diglot Weave Technique (DWT)</th>
<th>Student Team Achievement Division (STAD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Pre-Test</td>
<td>64.7568</td>
<td>9.89221</td>
</tr>
<tr>
<td>Post-Test</td>
<td>93.8108</td>
<td>5.73894</td>
</tr>
<tr>
<td>Gain Score</td>
<td>0.8105</td>
<td>0.17101</td>
</tr>
</tbody>
</table>

Based on the data above, it can be seen that the gain score of DWT and STAD increased and the scores were in high. The high category is 0.70 - 1.00, where is for DWT class is 0.8105 and for STAD class is 0.7214. Thus, it can be concluded that the both methods significantly increased student’ vocabulary achievement.

Normality Test of Normalized Gain

<table>
<thead>
<tr>
<th>Group</th>
<th>Kolmogorov-Smirnova</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
</tr>
<tr>
<td>Gain</td>
<td>DWT</td>
</tr>
<tr>
<td></td>
<td>STAD</td>
</tr>
</tbody>
</table>

The normality test’ table shows that the data from both groups are normally distributed, where Diglot Weave Technique Class is 0.092 > 0.05 and STAD Class 0.200 > 0.05.
**Independent Sample T-Test**

From the table below, it can be seen that the data was homogeneous because \(0.637 > 0.05\). Since the result of normality test was normally distributed and the result of homogeneity test was homogeneous, then independent sample t-test was done to answer the question of number one about the significant different between the two methods, DWT and STAD.

**Table 4.5**

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>F</th>
<th>Sig.</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>.225</td>
<td>.637</td>
<td>2.145</td>
<td>72</td>
<td>.035</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
<td>2.145</td>
<td>71.476</td>
<td>.035</td>
</tr>
</tbody>
</table>

Based on the result, it shows that the sig. (2-tailed) is \(0.035 < 0.05\) which means that \(H_0\) is rejected and \(H_a\) is accepted. Thus, there is significant difference between student who taught by using Diglot Weave Technique group and student who taught by using Student Team Achievement Division group on student’s vocabulary achievement.

**Female and Male Gain Score**

The table below interprets the result of gain score of normalized gain

<table>
<thead>
<tr>
<th>Female and Male’s Gain Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Female’ Gain Score</td>
</tr>
<tr>
<td>Male’ Gain Score</td>
</tr>
</tbody>
</table>

Based on the table above, teaching English vocabulary through DWT and STAD are slightly different increasing female and male’ vocabulary. In DWT class, differences of the mean between female and male were almost equal, female is 0.8223 and male is 0.8107. It means, Both female and male achieved high score after using DWT.

However, in STAD class, the differences of the mean between female and male were slightly different, for female is 0.7161 and for male is 0.7171. Both genders achieved high category in normalized gain.
Discussion of the Research Finding

From the data analyses, the normalized gain in DWT class was higher than STAD class. It also showed that pre-test’ and post-test’ score in DWT class were higher than STAD class. Although, the score in DWT class is better but actually the score in STAD class also increased. Even, both the normalized gain of both groups is in high category. However, the obstacle in STAD class when teaching process is ongoing there was a team who discussed earlier and did not listen to the instruction, the problem in team where one of the members did not give attention to the other members. And when the individual quizzes is given, they did not understand.

Meanwhile, DWT class got better gain score. As Yuhua (1999) cited from Nemati and Maleki (2014) believed that using DWT to tell stories “provide children with interesting and comprehensible input, intake occurs easily and in large quantities. As children acquire more and more words and their sentences change from sandwich to monolingual, from short to long, their ability to express themselves and to communicate in the large language increases.” (p. 1345)

Regarding the gender differences, the result presented in DWT class brought positive impact to both gender even though female’ score got higher than male. However, in the STAD class, female’s and male’s score are almost equal.

In brief, the result of this study is that there is significant difference between student’s vocabulary achievement that were taught by using DWT and STAD, even though the achievement of both groups were high. It can be summed that the two methods are good to be applied in learning English vocabulary, especially DWT where the result is better than STAD. Also, for the genders’ result of this study concluded that, since the normalized gain of female and male, either in DWT or STAD class, are only slightly different, it can be summed up that DWT and STAD method bring effective influence in increasing vocabulary achievement either for female or male.

CONCLUSION

It can be concluded that the alternative hypothesis is accepted. Thus, the answer of this first question research is that there is significant difference between students who were taught by using DWT and students who were taught by using STAD. Students who were taught using DWT got higher vocabulary achievement than students who were taught using STAD. Regarding of different score in male and female, the result presented that either in DWT or STAD, female and male’ normalized gain score are only slightly and in high category. It is therefore concluded that DWT is higher than STAD in improving student’ vocabulary achievement in learning English. As well, both genders got slightly different score. In other hand, it can be said that DWT and STAD are good applicable methods for female and male.

Recommendation
Either DWT or STAD is effective methods in learning English vocabulary for female and male’ students. Future researchers may use this result as resource or reference in research in student’s vocabulary. They also can consider seeking the result in different level, perhaps in tertiary level and it can be conducted in both quantitative and qualitative design.

REFERENCES


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