The Effect of WebQuest on the Students Reading Comprehension

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ABSTRACT

This research is conducted to find out the use of WebQuest enhance the reading comprehension of the second grade students of SMKN 1 Tapalang and the students' interest in learning reading comprehension using WebQuest

This research employed a quasi-experimental. The population of this research was 100 students of the second grade of SMKN 1 Tapalang. This research employed cluster random sampling technique. The sample consisted of 50 students which belong to two classes; 25 students in experimental class and 25 students in control class. Research instruments were used to collect the data in this research namely reading comprehension test and questionnaire. The data were analyzed by using Independent Samples Test and inferential statistics on SPSS version 20.0.

The research showed that there was an improvement of the students' achievement in pretest and posttest of the two groups, the experimental class was more significantly improved than the students' result of posttest of the control by the mean score 80.23 > 76.40. The difference of both scores was statistically significant based on the t-test value of significant level 0.05 in which the probability value is lower than the significant level (0.000<0.05). The mean score of the students' interest in experimental class was 65.14 with standard deviation is 9.078 and it was categorized as interested. Thus, it can be concluded that the use of WebQuest enhanced the students' achievement in reading comprehension and interested the students in learning reading comprehension.

Key words: WebQuest, Reading Comprehension, Interest.

INTRODUCTION

Reading is often characterized as a receptive skill in which one looks at and attempts to understand what has been written in a wide variety of printed and online materials. According to Grellet (1987), understanding a written text means extracting the required information from it as accurately and efficiently as possible. People usually read because they want to obtain information about a specific subject. People read variety of texts such as signs, timetables, directories, maps, letters, tables, application forms, stories, textbooks, instructional, leaflets and the like in order to get facts, exchange ideas, enjoy their leisure time, express feelings, etc. From a technical perspective, reading comprehension is a dynamic mental activity in which the reader interacts with the text to extract meaning (Farhadi, 2005).

Reading comprehension is one of the most important ways for learning English and it has a close relationship with an effective writing style. Belets in Kirmizi

(2009) argues that reading comprehension enables students to become lifelong literates. Besides, Allen, *et.al* in Kirmizi (2009) state that effective reading process is based on using reading comprehension strategies effectively. Furthermore, reading is a vital aptitude that assists students in teaching and learning process, national examination, even in proficiencies test (TOEFL and IELTS). Pintrich *et.al*. (1999) state that reading is a crucial skill for professional successful and academic learning. In some academic subject areas, school success is dependent on knowing how to read, understand what has been read, and apply the content to future learning.

From the researcher's informal observation, the materials used by the English teachers of SMKN 1 Tapalang did not relate to the learners' fields. For example, the teacher gave a song entitled telephone for the telephone conversation but the song does not have any conversation through telephone. The teachers use general topics and content which are not appropriate enough for the learners. The materials are mismatched. When the researcher came in to the class, the materials used for Business and Management class was not about their field. The learners were taught grammar through materials given to senior high school students. The materials should support the learners' needs because they are vocational schools students who are directly prepared for the real world of work.

The use of internet in language learning is closely related to Computer Assisted Language Learning (CALL) which becomes more popular in teaching and learning process. One example of CALL is the use of WebQuest which has been popularized by Bernie Dogde and Tom March in Ruddel (2005: 267). Reading comprehension can be increased by the use of WebQuest. She argues that WebQuest can require learners to analyze a body of knowledge deeply, transform it in some way, and demonstrate an understanding of the materials by creating something that others can respond to on-line or off- (Ruddle, 2005: 267). It is suggested that WebQuest is appropriate for improving the students' reading comprehension. Conducting this study is urgently needed on the grounds that presenting English materials in more interesting ways by making use of internet facilities to be actively involved for using WebQuest. It encourages learners in the teaching English focusing on reading.

LITERATURE REVIEW

Previous Related Studies

Abbit & Ophus (2008) had an experiment about the impacts of this medium on the teaching and learning. The research was aimed to get the answers on three general categories, attitudes and perceptions of students, impacts on learning content and skills, and investigations of the cognitive requirements of WebQuests.
Tsai (2006) received facts that there are positive correlation between motivation and perceived learning vocabulary and reading skills in an EFL course. He also found that this activity serves as an advanced organizing mechanism for students

of EFL to complete reading. It is believed that the use of WebQuest could achieve a higher grade on the assignment which closely related to achievement.

Alshumaimeri (2012) reported on the effects of using WebQuest on Saudi male EFL students reading comprehension performanceThe results indicate WebQuests have potential for use in promoting reading comprehension. Teachers and students do, however, need to be trained in order to use WebQuests more effectively.

It is also proved that WebQuest can develop collaboration among students as a research result of Milson (2002). The students perceive the value of inquiry-oriented investigations differently which may be beneficial to students for working collaboratively with higher ability.

Some Pertinent Ideas

WEBQUEST

According to Coffman (2009: 34), WebQuests are perfect examples of constructivist learning. The teacher presents a "big idea" question, and provides appropriate resources and instructional strategies so the students can explore and discover the information to answer important questions.

Dodge (1997) in Ruddle (2005: 267-8) states that the use of WebQuest may give critical attributes which are an introduction, task, information, process, guidance, and conclusion. Introduction means sets the stage and provides some background information. The task chosen by the teacher should be doable and interesting. Then, a set of information sources which are mostly web-based is needed to complete the task. The elaboration of process is that the students are able to go through to accomplish the task. On the other hand, guidance is dedicated on the organization of the information required. The last is the conclusion which brings closure to the quest, reminds the students of the materials they learn, and encourages them to reach their learning.

An inquiry-oriented activity is wrapped around big idea questions as well as learning standards and objectives and it should provide authentic tasks to engage students in exploring and creating their own understanding about a topic (Coffman, 2009: 36).

WebQuest design section (Coffman, 2009: 37)

No.	Section	Description
I.	Introduction	- It introduces the students to the activity. - It emphatically captures the student's attention. - It is written from a student perspective. - It consists of options to use an advanced organizer or overview to prepare the student for what is to come. - Should be short in length.

II.	Task	- Task must be doable and interesting. - Task allows students to learn so they will enhance their current knowledge and gather new understanding with others. - The big idea question is presented here. - Possible tasks include: • Solving a problem • Preparing and participating in a debate • Designing a product or procedure • Multimedia presentation • Article to be written
III.	Process	- It provides specific steps students should take to accomplish and complete the intended task. - Specific details on groups, roles, resources, and strategies are given. - Specific handouts students will use to complete each process are made available here - It provides this section in an ordered list, identifying the procedures that must be followed to ensure success in the WebQuest activity.
		- It should be very specific and detailed.
IV.	Evaluation	- A check sheet and/or rubric for students to review allow them to determine what is important to accomplish and understand in the WebQuest. - It indentifies whether the grade will be individual, group, or both.
V.	Conclusion	- It provides closure to the WebQuest by providing a summary of what students accomplished and its relevancy to their overall learning. - Questions could also be posed for students to investigate further if they are interested. - This identifies learning is as a continuous process.
VI.	Resources	- It provides a list of resources that students can use to find necessary information. - It organizes the information in categories so students can find appropriate information at a glance.

	Teacher's page	- This is the only section that is not written for the student. - It provides as much detail as possible about standards, objectives, and the WebQuest itself so another teacher can adopt your WebQuest or adapt it to his or her students.
	Credits	- It provides a list of references and credits that were used in the WebQuest. - It remembers to reference all images, music, recordings, and text.

Reading Comprehension

Souvignier, *et.al* (2006) define reading comprehension as the reader's ability "to read and remember, reproduce, learn from, and find deeper meaning in text for later use." Moreover, in the process of reading the reader not only needs to comprehend the direct meaning of what he/she is reading, but, he/she also needs to understand the implied meaning of the text. According to Tierney *et.al* (2005), "Learning to read is not only learning to recognize words; it is [also] learning to make sense of texts". (Karbalaei, 2010, p.166). Pressley (2002) states that reading involves a lot of cognitive capacity which is available for understanding the reading materials.

Some researchers believe that readers are required to employ a posteriori knowledge in examining the text and form new ideas while reading for comprehension. According to Guterman (2003), "the more knowledge a person brings to his or her reading, the more he or she will understand the text." Some other researchers (e.g., Lau, *et.al*, 2003) maintain that for a successful reading comprehension exercise the reader needs to be active, evaluate the text, can foresee the events in the text, be able to reread for better understanding and finding inconsistencies, assess his/her comprehension; he/she also need to be able to use his/her prior knowledge and monitor his comprehension.

Block, *et.al* (2002) state that reading comprehension is usually considered as a process in which several elements are integrated. These elements are the ability to decode written materials, reader's prior knowledge of the text, his/her vocabulary knowledge, and the reading strategies to comprehend the text. According to them, "comprehension involves more than 30 cognitive and metacognitive processes including clarifying meaning, summarizing, drawing inferences, predicting, and so on" (Block, *et.al*, 2002). Moreover, Trabasso, *et.al* (2002, p. 177) assert that, "Comprehension strategies are specific, learned procedures that foster active, competent, self-regulated, and intentional reading"

Learning to read refers to reading for meaning or comprehension. Reading for meaning is essentially an attempt to comprehend texts. Tabatabaei, *et.al* (2014) states that reading comprehension is basically an interactive process of meaning

making between the reader and the author through the text which involves mental activities and background knowledge. On the other hand, reading comprehension means understanding and gaining meaning from the words read. It is a process when a reader interacts with the text and makes meaning from the text they read (Chegeni, *et.al*, 2014).

Rice (2009, p. 2) suggests that comprehension is not an outcome in itself. It is rather a process through which a reader interacts with a text to construct meaning. Comprehension is defined as reading text with understanding. It is the process of making sense of words, sentences and connected speech. Grabe, *et.al* (2002) assert that reading comprehension is remarkably complex, involving many lower and higher-level processing skills that are coordinated in very efficient combinations. This is the very point at which ESL and EFL learners confront tremendous problems in the act of reading, because they do not adopt an interactive orientation towards the entire written text (Carrell, *et.al, 1988*). For example, foreign language learners can read in small text units such as clauses and sentences; nonetheless, they need more experience to be able to form the correct global meaning of the written text.

Interest

When people talk about interest, they will think about our positive response or attitude to something we like, enjoy and appreciate which make us having a desire to do. To clearly what actually interest means some theorist will define it. According to Good (1959), interest is a subject-object attitude, concerned with condition involving a perception or idea in attention and a combination of intellectual and feeling curiosity condition by experience. Interest is feeling of desire to know or to learn about something has a positive attitude towards something he/she really likes and enjoys. When talking about interest, we will think about positive response or attitude to something we like, enjoy, and appreciate which make us having desire to do. Therefore, Hornby (2002) defines interest as : 1) Condition or wanting to know or learn about something or somebody; (2) Quality that arouses concern or curiosity, that holds one's attention; and (3) Something with which one concern oneself.

METHOD

Design and Samples

This research applied experimental method. In this experimental design, it required at least two classes, namely experimental class and control class. The sample of experimental class consisted of 25 students and control class consisted of 25 students. They were the second grade students of SMKN 1 Tapalang. Both of two groups were given the same pretest and posttest. They were also received the same reading material text. The difference here, the experimental class was

taught using WebQuest while the control class was taught using Three Phase Technique.

Instrument and Procedure

Two kinds of instruments- reading test and questionnaire were applied in this research. The reading test administered in pretest and posttest. Pretest was conducted before the treatment to know the prior knowledge of students to assess their competence in reading comprehension while post-test was held at the end of the treatment to know the improvement of the students' reading comprehension after giving the treatment. Both of experimental group and control group were given the same topic of the test. The tests consisted of multiple choice as much as 30 items.

The treatment was conducted for six meetings in both of group. In experimental group was taught using WebQuest and control group was taught using Three Phase Technique. There are six texts used in the treatment. In the first until six meetings, the students' activities was same but the different is the title of the text that used in learning process. The questionnaire was administered to find out the students' interest in learning English by using WebQuest. The questionnaire consist of 20 items.

Data Analysis

To examine the effectiveness of WebQuest on students' reading comprehension toward the method, two major statistical procedures were applied: (1) descriptive statistics, including the frequency, descriptive static which calculated the mean and standard deviation; (2) Inferential analysis, including independent test. Meanwhile, to analyze the students' interest toward WebQuest, Likert Scale was used.

RESULT AND DISUSSION

The Students' Improvement in Reading Comprehension by Using WebQuest

The students' score of pre-test and post-test in reading comprehension for Exprimental and Control Class

The table 1 is the statistically summary of the students' pretest and post-test in reading comprehension for experimental and control class. The statistical summary depicted in table 1 below shows that the total number of subjects is 36 students. The score achieved by the students tend to get increased from pretest to post-test.

Table 1
The statistical summary of the students' Pretest and Post-test in Reading Comprehension for Experimental Class and Control Class

	Pretest		Posttest	
	E	C	E	C
N	25	25	25	25
Mean	70.09	72.00	80.23	76.40
Std. Deviation	5.495	5.573	3.896	6.246

The data in table 1 shows that the comparison of pretest and posttest in reading comprehension achievement on experimental class shows that there was a significant difference. It was proved by the statistical summary that the mean score of pretest was categorized as 'fairly good' while the mean score of posttest was categorized as 'very good'. It means that overall it indicated that there was a significant difference on experimental class test result in pretest and post-test.

The control class shows the difference but it is not so significant. By the statistical summary, the mean score of pretest was categorized as 'fairly good' while the mean score of post-test was categorized as 'good'. Overall, the students reading comprehension in control class on posttest were higher than post-test although they were not really significant.

The percentage of the students' performance of pretest and posttest in Experimental Class and Control Class

Table 2
The Rate Percentage and Frequency of the Students' Scores of Pretest and Post-test in Experimental class and Control Class

Classification	Score	Experimental Class				Control Class			
		Pretest		Posttest		Pretest		Posttest	
		F	P (%)	F	P (%)	F	P (%)	F	P (%)
Excellent	96-100	0	0	0	0	0	0	0	0
Very Good	86-95	0	0	5	14	0	0	0	0
Good	76-85	5	20	17	68	10	40	12	48
Fairly Good	66-75	5	20	3	12	10	40	11	44
Fair	56-65	15	60	0	0	5	20	3	12
Poor	36-55	0	0	0	0	0	0	0	0
Very Poor	0-36	0	0	0	0	0	0	0	0
Total		25	100	25	100	25	100	35	100

The comparison between experimental class and control class in the pretest result showed that there was no significant difference of both groups in reading comprehension. It was proved by the result pre-test in both groups that most of students (15 or 60%) in experimental class achieve 'fair' category almost same in control class where it was attained by 10 or 40 % students.

The post-test score in experimental class and control class, however showed that there was significant difference in the post-test result of both groups. Most of students of experimental one class namely 5 students or 14% achieved very good category; while in the control group, most of the students (12 or 48%) were categorized as 'good'.

Test of Significance (T-Test)

The hypotheses were tested by using inferential statistic. In this case, the researcher used t-test (testing of significance) for independent sample test. It was intended to know the significance difference between thr result of the students' mean scores in the pretest and the posttest in the experimental class and control class. The result of t-test was calculated by using SPSS version 20.00. After using the statistics, the researcher found the probability value of t-test as presented in the following table.

Table 3
Test of Significance (t-test) for Experimental Class and Control Class in Pretest and Posttest

	Levene's Test of Equality of Variances		t-test for Equality of Means						
	F	Sig	t	df	Sig.2 (tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Pretest Equal variances assumed	,321	,573	1,447	48	,152	1,914	1,323	4,554	,726
Posttets Equal variances not assumed	10,723	,002	3,077	48	,000	3,829	1,244	1,346	6,312

Based on the result of data analysis as summarized in table 3 in the pretest of the experimental class and control class, the researcher found that the probability value or *P-value* (0,152) was higher than the level of significance α (0.05) or 0.152 > 0.05. It means that H_0 was accepted and H_1 was rejected in pretest. In other word, the students' ability or level are same before giving the treatment. Whereas, the data in posttest of the experimental class and control class shows

that probability value (*P value)* was smaller than α (0.000 < 0.05). It means that H_1 was accepted and H_0 was rejected in posttest. In other words, there was a significant difference of the students' score between experimental group and control grop after receiving treatment.

The Analysis Data of the Students' Interest

The questionnaire was distributed to the students of experimental clas and after giving treatment in the aim to find out whether the students are interested in learning narrative text by using WebQuest.

Based on the data analysis of the questionnaire items which referred to the data of the interest of the students on the percentage analysis, the researchers found that none of the students who states negative statement to the use of WebQuest. The frequency and percentage of the students' questionnaire are shown in table 8 as follows:

Table 4
The Rate of Frequency and Percentage of Students' Interest

No.	Interval	Categories	Frequency	Percentage (%)
1	67-80	Very interested	4	16
2	54-66	Interested	19	76
3	42-53	Moderate	3	12
4	30-41	Uninterested	0	0
5	16-29	Very Uninterested	0	0
Total			25	100

Referred to the analysis of questionnaire in table 4 that the most of students in experimental class , in this case, 19 or 76% were in positive statements on interval 54-66 which indicated as 'interested'. Whereas the rest of them or 3 or 12% categorized as "moderated". Thus, it can be concluded that the use of WebQuest interest the students in learning reading comprehension text.

Based on the findings above, the comparison of the students' improvement in experimental class and control class can be proven by analysing the post-test result. The result shows that the mean score of the students' post-test in both of the groups is increased after giving the treatment. It can be seen through the mean score of the students' pre-test which was 70.09 (fairly good classification) becomes 80.23 (good classification) in the post-test for the experimental class, while the students' pre-test for control class was 72.00 (fairly good classification) becomes 76.04 (good classification) in the post-test.

CONCLUSION AND SUGGESTIONS

Finally, the researcher concluded that WebQuest can enhance students' reading comprehension achievement of the first grade students of SMKN 1 Tapalang. It's proved by the mean score of the students in experimental group was 80.23 higher than the mean score of the students in control class was 76.40. In another side, the questioners consist of 20 items which is whether the method are not interesting and helpful for the students got higher scores compared to the others. The researcher found that all of the students' activities from all of the indicators of interest were reached which could be seen on the students' involvement, feeling pleasure, attraction, and attention in using WebQuest.

Based on the conclusion above the researchers gives suggestions as follows; (1) since WebQuest technique enables the learners to comprehend reading text in interesting way, the researcher suggests this technique to be used by the English teacher of SMKN 1 Tapalang, and (2) further research might explore more about the usefulness of WebQuest technique to enhance students' engagement, motivation, and achievement in learning English. The researcher also recommends for future research to investigate the appropriateness of the technique for learner style of learning English.

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