THE USE OF ONLINE ENCYCLOPEDIA TO DEVELOP STUDENTS' READING COMPREHENSION ON DESCRIPTIVE TEXT

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Abstract: The purpose of this research is to investigate the effectiveness of the use of online encyclopedia on factmonster.com to develop students' reading comprehension on descriptive text. This research was conducted as pre experimental design. The researcher took XI IPA class of SMAN 2 Sungai Ambawang in academic year 2012/2013 as the sample. The data were derived from multiple choice tests that were taken from a student's book. The result showed that the mean score of pretest was 49.00 while the posttest was 65.31. The different score between pretest and posttest was 16.31. The students' development in using online encyclopedia especially on factmonster.com during the research showed a good change. It was found from the result of t-test that t-value is higher than t-table (5.22 > 2.048). In conclusion, the use of online encyclopedia on factmonster.com is effective to develop the students' reading comprehension achievement on the descriptive text.

Keywords : Descriptive Text, Reading Comprehension, Online Encyclopedia

Abstrak : Penelitian ini bertujuan untuk menyelidiki keefektifan penggunaan media enslikopedia online pada situs factmonster.com dalam mengembangkan kemampuan komprehensi membaca siswa pada teks deskriptif. Metode yang digunakan untuk mengumpulkan data adalah Pre-Experimental. Peneliti mengambil kelas XI IPA dari SMAN 2 Sungai Ambawang tahun ajaran 2012/2013 sebagai sampel. Soal pilihan ganda diambil dari buku pegangan siswa. Berdasarkan penelitian, hasil nilai rata-rata pre test siswa adalah 49, sementara nilai rata-rata post test menunjukan 65.31. Dengan demikian dapat dilihat bahwa jarak interval nilai pre test dan post test adalah 16.31. Pengembangan komprehensi membaca siswa dalam penggunaan media enslikopedia online pada situs factmonster.com selama penelitian menunjukan perubahan yg baik. Hal itu dapat dilihat darin hasil penghitungan t-test yg menunjukan bahwa hasil t-test lebih tinggi dari t-table (5.22 > 2.048). Jadi, dapat disimpulkan bahwa penggunaan media enslikopedia online pada situs factmonster.com efektif dalam mengembangkan kemampuan komprehensi membaca siswa pada teks deskriptif.

Kata Kunci : Teks Deskriptif, Komprehensi Membaca, Enslikopedia Online

As we know, whatever the purposes of reading, comprehension is the goal, because comprehension is considered as a primary and important aspects of reading. Alyousef (2005:144) explained, reading can be seen as an "interactive" process between a reader and a text. For both children and adults, this ability is very important to open up new worlds and opportunities. It enables them to gain new knowledge, enjoy literature, and do everyday things that are parts of modern life, such as, reading the newspapers, job listings, instruction manuals, maps and so on.

Biancarossa and Snow (2004:10) stated, educators have to teach the sudents new literacy skills : how to read purposefully, select materials that are of interest, learn from those materials, figure out the meanings of unfamiliar words, integrate new information with information previously known, and recognize the perspective of the writer – in short, they must be taught how to comprehend.

However, reading comprehension has become the essential activity for students, most of them have problem to comprehend the reading text. In fact, reading comprehension may be difficult for students whose primary language is not English. Beside, the interest to read is also still low among students, reading is not always identical with books, because the other reading material is available on the other visual media, such as from the internet. Where as Ybarra and Green (2003) stated, that there are numerous software packages for improving spelling, phonics skills, grammar and sight word vocabulary, when English Language Learners are learning their second language, any and all language experiences are valuable to assist in reading ability.

As shown, descriptive text is one type of text that the senior high school have to learn about. It is one of the material in reading skills which to be learnt by the students at Senior High School level especially on the eleventh grade. As stated by Kistono et al (2007:9), it is a text which lists the characteristics of something. So, the students have to understand the appearance of a person or thing and or the detail of a location that according to the topic.

According to the teacher of the eleventh grade students' of SMAN 2 Sungai Ambawang, his students got many difficuties in comprehending the reading text. They had any difficulties at some aspects of reading, its are identifying the main idea, supporting idea, interpreting the meaning of the words or phrases (vocabulary) and interpreting references, especially on descriptive text. In the other hand, Pang et al (2003:6) stated that comprehension is the process of making sense of words, sentences and connected text.

Comprehension is an active process in the construction of meaning. As Pang et al (2003:14) stated that it is the process of deriving meaning from connected text. It involves word knowledge (vocabulary) as well as thinking and reasoning. Therefore, comprehension is not a passive process, but an active one. The reader actively engages with the text to construct meaning. This active engagement includes making use of prior knowledge. It involves drawing inferences from the words and expressions that a writer uses to communicate information, ideas and viewpoints. (Pang et al, 2003:14)

Futhermore, Blachowicz and Ogle (2008:33) also stated that good comprehends have to actively construct learning as they read, and they also direct

their own comprehending by using basic strategies and by monitoring their own understanding. It is generally understood that reading comprehension is an interactive mental process between a reader's linguistic knowledge, knowledge of the world, and knowledge about a given topic (Rahmani & Sadeghi, 2011 : 116). During the reading activity, a reader has to construct various representations of the text, because it are important for comprehending the text.

That's why, the writer interested to investigate the students' reading ability on descriptive texts, especially on the aspects of reading comprehension mastery such as identifying the main idea, supporting idea, interpreting the meaning of the words or phrases (vocabulary) and references on the text that are not well mastered by the students.

As the media, the researcher was utilizing the *factmonster.com,* an online encyclopedia to develop the students' reading comprehension on descriptive text. Technology plays an increasingly central role in our society. Technology can help teachers provided needed support for strugling readers. For example, there are computer programs that help students improve decoding, spelling, fluency and vovabulary and more programs are quickly being developed to address comprehension and writing. (Biancarossa and Snow, 2004:19)

Moreover, the encyclopedia of *factmonster.com* also gives the students access to open their window of knowledge wider. It contains more than 57000 articles from the Columbia Encyclopedia, Sixth Edition. It also offers millions of free articles along with information about some topics which is appropriate to the students interest. It is an ideal reference source for students to develop their reading comprehension by choosing some appropriate topics. They can play games and using the dictionary to find any unfamiliar word to them. There are also some pictures, facts and biographies to make them easier understand the description about some topics given by finding more information from those features.

In the relation to the explanation above, the writer has conducted a research concerning the use of online encyclopedia especially *factmonster.com* to develop the students' reading comprehension on descriptive text. The form of this research is pre experimental, which the treatment processed by using online encyclopedia especially *factmonster.com* and implemented in the classroom activity, particularly in the reading skill for comprehension of descriptive text. The researcher conducted the research to the eleventh grade students at SMAN 2 Sungai Ambawang in academic year 2012/2013.

Before doing the research, the researcher has observed the school. It took place at SMAN 2 Sungai Ambawang, 36 km from Pontianak which the students have recently acquainted and use internet in their daily life. They started learning English at their Junior High School, that is why their English is not as good as the students who lived at the region that has any supporting facilities to develop their English skill. Since 2010, SMAN 2 Sungai Ambawang has provided an internet network to their computer laboratory to develop their middle term (2009-2013) and their long term (2009-2017) aim program, that stated they will help their students mastering English, computer and internet in the future. Beside providing the internet network, SMAN 2 Sungai Ambawang also increase the time

allocation on their English subject, where there was 2 meetings become 3 meetings in a week.

The researcher hopes that this research will be useful to support the teacher of SMAN 2 Sungai Ambawang's effort in order to develop the students' reading comprehension and utilizing the internet network that has been facilitated at their school. In this research, the writer used pre experimental study, to come closer to the students, giving another option to solve their problem in learning reading comprehension directly by utilizing the online encyclopedia especially *factmonster.com* and gave them some motivation to be more interested on English by using it as the media on their lesson in the future.

METHOD

In accordance with the problem, the appropriate method to be used in this research is pre experimental. The pre experimental design is the simplest form of the experiment research. In a pre-experiment either a single group or multiple groups are observed subsequent to some agent or treatment presumed to cause change (Ary et al, 2010:203). This methods was chosen because the purpose of this study is to see how effective is the treatment, that is appropriate with the researcher's problem.

Meanwhile, since the aim of this research is to see the effectiveness of a variable, it is necessary to use one of the part or pre-experimentaal study, namely *one group pretest-posttest design.* As Ary et al (2010:303) state that the one-group pretest–posttest design usually involves three steps: (1) administering a pretest (X_1) measuring the dependent variable; (2) applying the experimental treatment (Y) to the subjects; and (3) administering a posttest (X_2), again measuring the dependent variable, the ressearcher gave the students the same questions of pretest on the first day and posttest at the end of the day.

$$\textit{Pretest} \qquad \textit{Treatment} \qquad \textit{Posttest}$$
$$X_1 \quad \longrightarrow \quad Y \quad \longrightarrow \quad X_2$$
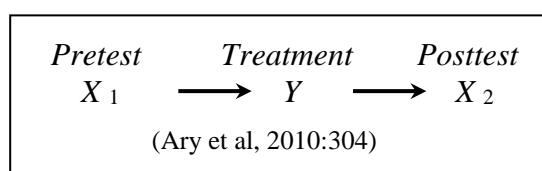
(Ary et al, 2010:304)

Schema 1
One-Group Pretest – Posttest Design

According to Ary et al (2010:148), a population is defined as all members of any well-defined class of people, events, or objects. The population in this research is the class of the eleventh grade students at SMAN 2 Sungai Ambawang in academic year 2012/ 2013, which consist of about 64 students. The whole number of the eleventh year class as the population of this research in SMAN 2 Sungai Ambawang is listed below :

Table 1
Total of Students

Class	Number of Students
XI IPA	16
XI IPS$_1$	24
XI IPS$_2$	24
Total	64

Furthermore, according to Ary et al (2010:148), sample is a portion of a population. In this research the sample consist of some class, they are XI IPA, XI IPS$_1$ and XI IPS$_2$. According to Arikunto (2002:149), there are three types of model selection : lottery system, ordinal and use a table of random number. The type of model selection of this research is lottery system, where the writer wrote each of the classes in a piece of paper, fold them and took them into a small glass then shook it. After that the researcher picked one of the piece of paper and that is the sample of the class.

After applying the lottery sampling technique procedure, XI IPA was selected as the sample of this research. By having this way, the writer has applied the lottery sampling technique.

FINDING AND DISCUSSION

Finding

To find out the effectiveness of the treatment procedure by using online encyclopedia, procedurally the writer has conducted the pretest and posttest. Both tests have been computed by using individual score formula of pretest and posttest and different (interval) score of pretest to posttest.

The Result of Students Score in Pre-test

Pre-test was the first test that the students have been done before the treatment. The table below shows that most of their score is low.

Table 2
The Students' Score in Pre-test

No.	Students' code	Pretest	
		Total Right Answer	Score (X_1)
1	AK	6	30
2	AR	9	45
3	AP	10	50
4	FV	9	45
5	GI	14	70
6	HP	10	50
7	IS	7	35

8	LA	12	60
9	LN	8	40
10	MK	10	50
11	PN	13	65
12	RK	5	25
13	TN	16	80
14	TM	13	65
15	TA	11	55
16	VR	4	20
Total		157	$\sum X_1 = 785$
Mean Score		9.81	$\overline{X_1} = 49$
Max Score			80
Min score			20

The Result of Students Score in Post-test

Post-test was the last test that the students have been done after the treatment. The table below shows that students' score is higher.

Table 3
The Students' Score in Post-test

No.	Students' code	Total Right Answer	Score (X_2)
1	AK	11	55
2	AR	12	60
3	AP	13	65
4	FV	13	65
5	GI	15	75
6	HP	13	65
7	IS	12	60
8	LA	14	70
9	LN	13	65
10	MK	14	70
11	PN	15	75
12	RK	9	45
13	TN	17	85
14	TM	15	75
15	TA	14	70
16	VR	9	45
Total		209	$\sum X_2 = 1045$

Mean Score		13.06	$\overline{X_2}$ = 65.31	
Max Score			85	
Min score			45	

The Analysis of Students' Score in Pre-test and Post-test

After calculating students' score in pre-test and post-test, it is important to analyze the result of students' score in pre-test and post-test. The table below shows the interval of students' score in pre-test and post-test.

Table 4
The Analysis of Students' Score in Pre-test and Post-test

No.	Students' code	X_1	X_2	D	D^2
1	AK	30	55	25	625
2	AR	45	60	15	225
3	AP	50	65	15	225
4	FV	45	65	20	400
5	GI	70	75	5	25
6	HP	50	65	15	225
7	IS	35	60	25	625
8	LA	60	70	10	100
9	LN	40	65	25	625
10	MK	50	70	20	400
11	PN	65	75	10	100
12	RK	25	45	20	400
13	TN	80	85	5	25
14	TM	65	75	10	100
15	TA	55	70	15	225
16	VR	20	45	25	625
	n=16	$\sum X_1$ = 785	$\sum X_2$ = 1045	$\sum \overline{D}$ = 360	$\sum \overline{D^2}$ = 10450

The Students Mean Score of Pre-test and Post-test

1. The students mean score of pre-test

The pretest given is recommended as the 1st test before the treatments. The result of pretest shows the result of the students' score before the treatment is conducted. Thus, the students' mean score is 49 which is categorized as poor to average.

The computation of this finding can be described as follows :

$$\overline{X_1} \quad = \sum X_1 / N$$
$$= 785 / 16$$
$$= 49$$

2. The students mean score of post-test

The posttest was administered after giving treatments. The posttest was also considered as the final evaluation of the students' achievement on the use of online encyclopedia to develop the students' reading comprehension on descriptive text. From the result of posttest, the students' achievement score was categorized as average to good, with the mean score is 65,31.

The computation of this finding can be described as follows :

$$\overline{X_2} \quad = \sum X_2 / N$$
$$= 1045 / 16$$
$$= 65.31$$

The Student's Different Score of Pre-test and Post-test

After having the score for both pretest and posttest, the researcher calculated the students' interval score between the students' pretest and posttest results.

The computation of the interval achievement score finding can be described as follows :

$$\overline{D} = \overline{X}_2 - \overline{X}_1$$
$$= 65.31 - 49.06$$
$$= 16.31$$

Table 5
The Students' Qualification Score of Pre-test and Post-test

Test	Mean score	Qualification
Pre test	49	Poor to Average
Post test	65.31	Average to Good
Interval score	16.31	

The Significant of The Interval Score of Pre-test and Post-test

The significant of the different score of pre-test and post-test was calculated to see the students' significant difference of pre-test and post-test by t-test

$$t = \frac{\overline{D}}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{n}}{n(n-1)}}}$$

$$= \frac{16{,}35}{\sqrt{\dfrac{10450 - \dfrac{(360)^2}{16}}{16\,(16\text{-}1)}}}$$

$$= 5.22$$

Based on the computation result, the t-test score was higher that t-table (see t-table in appendix). In fact, the calculation of t-test indicated 5.22 which was higher than t-table at 5% the degree of freedom n-1 (16-1 = 15) that is "2.131". In conclusion, there was a significant difference between the mean score of pretest and posttest. This research finding also gave the answer for the hypothesis testing.

The Analysis of The Effect of Treatment

After having process of describing the t-test score, the researcher described the findings of significant effect of the treatment in order to see how effective is the use of online encyclopedia in developing the students' reading comprehension on descriptive text, the researcher took the formula of 'effect size', as follows :

$$Es = t\sqrt{1/n}$$

$$= 5.22\sqrt{\frac{1}{16}}$$

$$= 1.30$$

From the result, the significant score of effect size is 1.30, categorized as high with Es > 0,8 where 1.30 > 0,8. In other words, the use of online encyclopedia proved by the measurement technique of data collecting as a good activity especially for developing the students' reading comprehension on descriptive text.

Discussion

In this research the writer was using online encyclopedia to develop the students' reading comprehension on descriptive text to the eleventh grade students at SMA Negeri 2 Sungai Ambawang in academic year 2012-2013. The role of encyclopedia here is as the media in developing the students' reading comprehension especially on descriptive text.

The researcher was take part directly on this research as the teacher. In teaching and learning process, teacher explained the material about descriptive text first. Then the teacher gave the students chance to utilize and explore the online encyclopedia in order to experience the students to the media that connected to internet meanwhile, answer the question based on the text that given as the part of the treatment activity.

The teaching and learning process through online encyclopedia was very interesting. By using this media, the researcher could see how the students enthusiast during the lesson and most of them enjoy the material given by the teacher. Because, through this media, beside the students learned to find the main idea and supporting detail instead of analyzing words or phrases and referents, they experienced to utilized and explore the internet especially online encyclopedia which is never used by their English teacher before.

Based on the data analysis, the students' achievement on developing the students reading comprehension was influenced by the process of teaching and learning.

In this research, there are three main steps in this research. The first step is called pretest. The pre-test was done before giving the treatment to the students where they have to answer some questions that had been conducted by the researcher. Based on the pretest result, the mean score which administered was 49. It was categorized as poor to average.

After conducting the pretest, the researcher conducted three times treatment. In the treatment, the researcher was utilizing online encyclopedia to develop the students' reading comprehension on descriptive text. The treatment took place at the computer laboratory of SMA Negeri 2 Sungai Ambawang.

In the first meeting, most of the students found difficulties in identifying the main idea, supporting detail and analyzing word or phrases and referents in doing practice and the tasks. But in the second meeting, that condition changed. The students' mistakes in doing their practice and tasks decreased. Their motivation was also increased because they can observed and utilize the internet especially, online encyclopedia. This progress continued until the last meeting.

The next step was conducting the posttest. Based on the posttest result the mean score is 65.31. It was categorized as average to good. Thus, a different result indicated the students' interval score of pretest and posttest as 16.31. This point showed that the treatment through online encyclopedia improved the students' achievement on descriptive text.

Then, the writer analyzed the significance of students' interval score of pretest and posttest by using t-test formula. Based on the computation, the result showed that t-test score (5.22) was higher than t-table (2.131) at 5% with the degree of freedom (df) = n - 1, so it is 16 - 1=15. It means that teaching descriptive text through online encyclopedia had different significant result between pretest and posttest which categorized as highly effective.

The used of online encyclopedia were effective in teaching descriptive text. It helps students to identifying main idea, supporting details, analyzing words or phrases and referents. Moreover, the writer hopes the students are accustomed later to use online encyclopedia to train and experience themselves in comprehending descriptive text. Then, the students can use it in their daily life as the source on their lesson later.

Although, the use of online encyclopedia had been proved as the successful activity to improve the students achievement on descriptive text. There were also some obstacles in the process of teaching and learning. But it can be a challenge for the teacher to manage the time and situation in teaching and learning process

become enjoyable and fun for the students. So the students' can be interested and motivated to learn the lesson.

CONCLUSION AND SUGGESTION

Conclusion

The aim of doing this research was to know the effectiveness of the use of online encyclopedia in developing the students reading comprehension on descriptive text at SMA Negeri 2 Sungai Ambawang. In other words, it was done to know whether or not online encyclopedia gives any improvement to students reading comprehension especially on descriptive text ; thus, a pre experimental research design was done. This pre experimental research was designed in the form of one group pre-test post-test in which there was no comparison group. Online encyclopedia as one of cooperative learning helped the students to improve their reading comprehension on descriptive text especially on identifying main idea, supporting detail and analyzing word or phrases and referents. XI IPA students of SMA Negeri 2 Sungai Ambawang, who had lower level of competence in descriptive text, were helped by online encyclopedia when doing identifying main idea, supporting detail and analyzing word or phrases and referents descriptive text. It helped the students in solving problems that they usually faced when they tried to comprehend the text. Therefore, with online encyclopedia they could get more knowledge and solution for their problems in reading comprehension especially descriptive text. From the result of the research, there was a significant difference between pro-test and post-test scores. The mean of score increased significantly. It could be concluded that the online encyclopedia is effective in developing the students reading comprehension especially on descriptive text. When the XI IPA students of SMA Negeri 2 Sungai Ambawang were given a pre-test, the mean of their scores was 49. Then, when the students were given a post-test after they used online encyclopedia as the treatment for three times, the mean of their scores was 65,31. Hence, it could be concluded that there was an improvement in the students` achievement on identifying main idea and supporting detail and analyzing word or phrases and referents after using online encyclopedia as media was done. Therefore, it could be said that using online encyclopedia is one effective way to improve students` ability in comprehending descriptive text for the XI IPA students of SMAN 2 Sungai Ambawang in academic year 2012-2013.

Suggestion

In this study, researcher would like to give some suggestions related to the improvement of students ability in reading comprehension especially on descriptive text to get better result. It is necessary for the students of SMA Negeri 2 Sungai Ambawang to improve their reading comprehension skill, especially on descriptive text by using online encyclopedia. They can improve their reading comprehension meanwhile experienced themselves with computer and internet, because, English and internet would be very important to support their future in daily life later. It is recommended to the English teachers of SMA Negeri 2

Sungai Ambawang to use various media like online encyclopedia in developing reading comprehension to the students so that the teaching and learning process can be more fun. Teachers do not have to always use a thick book in teaching and learning. They have to be more update by utilizing internet and improving their ability on it. They can observe and search any literature there so in the future they can support their students to increase the students' interest to read and 'improving the students' English skill by suggesting any interesting and appropriate topics to them.

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