

The Effectiveness of Using Cornell Note-Taking Strategy to Improve Students' Listening Comprehension

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Abstract: The research is aimed to know and explain the effectiveness of using cornell note-taking strategy to improve students' listening comprehension. The population of this research was the first-grade students of SMAN Cahaya Madani Banten Boarding School. There were two classes named experiment class and control class, each of which has 30 students. This research used quantitative method with the quasi-experimental as the research design. The instruments used for collecting data were test in the form of multiple choice. The tests were given as the pre-test and post-test of the classes. Both tests were conducted to measure the students' listening comprehension before and after giving the treatment. The data which was collected was calculated by using T-test in the form of Fisher formula to see how is the effectiveness of using cornell note-taking strategy on students' listening comprehension. Based on the research analysis, the effectiveness of using cornell note-taking strategy was found in the result of t_0 was 2,9. The value was higher than the value of t_t in the significance of 5% in which $2,9 > 2,00$. In addition, the value of t_0 that was 2,9 was also higher than the value of t_t in significance of 1% in which $2,9 > 2,66$. Hence, the alternative hypothesis (h_a) was accepted and null hypothesis (h_0) was rejected. In conclusion, there is an effectiveness of using cornell note-taking strategy on students' listening comprehension at the first-grade students of SMAN Cahaya Madani Banten Boarding School.

INTRODUCTION

People nowadays named *Millenial People*, who can get a lot of informations in the world just by *one click*. It is caused by technological developments that are increasingly sophisticated. People can get anything, know everything, and communicate with everyone easily by using the internet. For communication, people use a language as a tool to communicate with each other, share information, and so on.

Language fills every part of our lives, it gives words to our thought, voice to our ideas, and expression to our

feelings (Cipollone et al, 1998). Language is used by humans to communicate in many aspects such as social, economic, olitical, and science. Science is applied in education that has been done by people since they were born. Children start learning a language from their mothers as a mother tongue or first language to understand and communicate with other people. After they grow up, they will learn and use the other language in daily which is called second language. The new second language vocabulary or structures should only be introduced after a child has learned the corresponding concepts in

their first language so that they can link meaning across to the new language easily (Pinnock, 2009). Then, they will find other languages used by strangers that are called foreign languages.

According to Broughton, English is a language widely used in the world. In 2003, the 300 million native speakers of English are to be found in every continent, and an equally widely distributed body of second language speakers, who use English for their day-to-day needs, totals over 250 million. It caused English is used as a foreign language in Indonesia that has been taught in schools. Four abilities are developed in teaching English; listening, speaking, reading, and writing.

Listening is the natural precursor to speaking; the early stages of language development in a person's first language (and in the naturalistic acquisition of other languages) are dependent on listening (Nation and Newton, 2009). Richard (2008) defined listening as comprehension is the traditional way of thinking about the nature of listening. Several medias can be used to develop our listening comprehension such as television, video, DVD, radio, etc.

In the way to develop listening comprehension, sometimes, students get difficulties such as unknown words (knowing the written form of a word is no guarantee that students will recognise the spoken form), lexical density (short spaces of time between content words, forcing the listener to concentrate harder), grammatical structures (listening text containing many new lexical items and high-level grammatical structures will be difficult), the familiarity of the topic (the topic of listening may be not familiar for the students), text type (some types of the text are difficult to listen), and cultural accessibility (certain concepts simply do not exist in some cultures, so the situations and contexts of some

recordings may be incomprehensible) (Wilson, 2008).

To overcome that difficulties, the teacher can use several strategies. According to Wilson (2008), there are several strategies to improve students' listening comprehension, such as use world knowledge to predict what will be said, pick out only salient points; listening selectively and ignoring irrelevant details, take notes; writing down relevant information in shorthand, listen for keywords for topic identification and so on.

Note-taking is a multi-stage process, where each stage may impose cognitive load, which can subsequently affect the availability of cognitive resources required for processing and memory encoding of the target material (Jansen et al, 2017). In terms of improving listening skill, note-taking promotes a higher level of attention. It forces students to pick out the important points in a talk or lecture because they cannot write down everything they hear (Wilson, 2008).

One of note-taking types is Cornell Note-Taking, which defined as a strategy designed to condense and organize notes into our sentences that is same in the meaning (Davoudi et al, 2015). It involves separating paper into note-taking column, cue column, and summary column. This strategy was developed by Walter Pauk in 1940 at Cornell University (Pauk, 2001).

The researcher uses the Cornell Note-Taking Strategy to solve the problem above by conduct an Experimental Research with the title "The Effectiveness of Using Cornell Note-Taking Strategy to Improve Students' Listening Comprehension".

METHOD

This research is used quantitative research which uses an experimental research as a part of quantitative research.

According to Nunan (1992), experiments are carried out to explore the strength of the relationship between variable, a variable as the term itself suggest, is anything which does not remain constant.

The researcher has used the quasi-experimental research as a particular research method. Ary, Jacobs, Sorensen, and Razavieh (2010) are stated that quasi-experimental designs are considered worthwhile because they permit researchers to reach reasonable conclusions even though full control is not possible. This research is used pre-test and post-test design. The researcher took two classes as experiment class and control class. Both classes are given pre-test, the treatment used the Cornell Note-Taking strategy and post-test. This research has been conducted in SMAN Cahaya Madani Banten Boarding School. The population of the research is 401 students of SMAN Cahaya Madani Banten Boarding School. The sample of this research is the first-grade students which consist of 30 students from experiment class and 30 students from control class.

This research uses the test as the instrument for treatment that is written questions that researcher has given to the students in the pre-test, treatment, and post-test. For collecting the data in this research, the researcher gave the written test. The written test has been used to find out the result of students' listening comprehension. To analyze the data collected from the instrument of research that is pre-test and post-test, the researcher determined the mean of pre-test and post-test score, made a table of the frequency distribution of post-test result, and measured last calculation with t-test formula by Anas (2014).

RESULT AND DISCUSSION

Figure 1. Pre-Test and Post-Test Score in Experiment Class

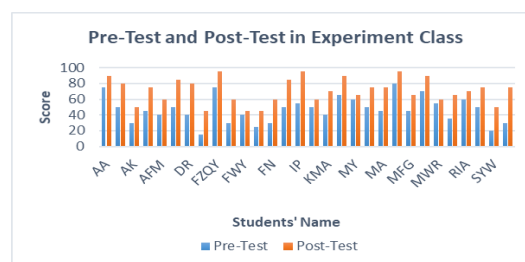
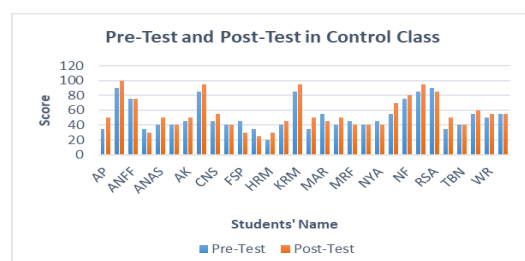


Figure 2. Pre-Test and Post-Test Score in Control Class



Based on the graphics above, it shows the evidence of students' scores before and after giving the treatment. There are improvement scores for students in experiment class while in control class only several students got the improvement. From those evidence, it can be concluded that using the Cornell Note-Taking strategy in experiment class is better than control class that is taught without using the Cornell Note-Taking strategy.

Table 1. The Score of Frequency Distribution

No	x_1	x_2	X_1	X_2	X_1^2	X_2^2
1	90	50	19	-5,5	361	30,25
2	80	100	9	44,5	81	1980,25
3	50	75	-21	19,5	441	380,25
4	55	30	-16	-25,5	256	650,25
5	45	50	-26	-5,5	676	30,25
6	70	40	-1	-15,5	1	240,25
7	60	50	-11	-5,5	121	30,25
8	20	95	-51	39,5	2601	1560,25

9	95	55	24	-0,5	576	0,25
10	40	40	-31	-15,5	961	240,25
11	45	30	-26	-25,5	676	650,25
12	45	25	-26	-30,5	676	930,25
13	40	30	-31	-25,5	961	650,25
14	85	45	14	-10,5	196	110,25
15	95	95	24	39,5	576	1560,25
16	60	50	-11	-5,5	121	30,25
17	70	45	-1	-10,5	1	110,25
18	90	50	19	-5,5	361	30,25
19	65	40	-6	-15,5	36	240,25
20	75	40	4	-15,5	16	240,25
21	75	40	4	-15,5	16	240,25
22	95	70	24	14,5	576	210,25
23	65	80	-6	24,5	36	600,25
24	90	95	19	39,5	361	1560,25
25	60	85	-11	29,5	121	870,25
26	45	50	-26	-5,5	676	30,25
27	70	40	-1	-15,5	1	240,25
28	55	60	-16	4,5	256	20,25
29	30	55	-41	-0,5	1681	0,25
30	45	55	-26	-0,5	676	0,25
Σ	1905	1665	-225	0	14095	13467,5

The formula to determine T-table with significance 5% and 1% as follow:

$$Df = N_1 + N_2 - 2$$

$$= 30 + 30 - 2$$

$$= 58 \text{ (consult to T-table score)}$$

Based on T-table that is 58, with df as number 58 is got T-table as follow:

a. At significance level 5%, $t_t = 2,00$

b. At significance level 1%, $t_t = 2,66$

Based on the score of frequency distribution, T-observation can be found with formula:

$$\begin{aligned}
 t_o &= \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}} \\
 &= \frac{71 - 55,5}{\sqrt{\left(\frac{14095 + 13467,5}{30 + 30 - 2}\right) \left(\frac{30 + 30}{30 \cdot 30}\right)}} \\
 &= \frac{15,5}{\sqrt{\left(\frac{27562,5}{58}\right) \left(\frac{60}{900}\right)}} \\
 &= \frac{15,5}{\sqrt{(475,21)(0,06)}} \\
 &= \frac{15,5}{\sqrt{28,51}} \\
 &= \frac{15,5}{5,33} \\
 &= 2,9
 \end{aligned}$$

According to the result of statistic calculation, it is obtained that the score of t_o is 2,9. On the other hand, the degree of freedom (df) is 5%. The value of 58 is mentioned in the table about 2,00 as the degree of significance.

To prove the hypothesis, the data obtained from the experiment class is calculated by using t-test formula with assumption as follow:

- If $t_{\text{observation}} > t_{\text{table}}$, the alternative hypothesis (H_a) is accepted. It means there is an effectiveness of using Cornell note-taking strategy on students' listening comprehension.
- If $t_{\text{observation}} < t_{\text{table}}$, the alternative hypothesis (H_a) is rejected. It means there is no effectiveness of using Cornell note-taking strategy on students' listening comprehension.

Because t_o is higher than t_t , it means there is an effectiveness of using Cornell note-taking strategy on students' listening comprehension, so the alternative hypothesis is accepted.

CONCLUSION

The researcher gives the conclusions about this research with title "The Effectiveness of Using Cornell Note-Taking Strategy to Improve Students' Listening Comprehension" as follow:

- Teaching students' listening comprehension using Cornell note-taking strategy gives a positive

influence on students listening comprehension at the first grade students of SMAN Cahaya Madani Banten Boarding School. The application of Cornell note-taking strategy is more effective in improving students' listening comprehension than the students who were taught without using Cornell note-taking strategy. From this research, it can be concluded that the students who were taught using Cornell note-taking strategy have higher scores than without using Cornell note-taking strategy.

2. In general, the students' listening comprehension at the first grade of SMAN Cahaya Madani Banten Boarding School (both experiment and control class) before treatment is less. In experiment class, it can be seen from the scores of pre-test, the highest score is 80 while the lowest score is 15. So, the highest score of students' listening comprehension is good while the lowest score is very less. Meanwhile, students' score of post-test is good, the highest score is 95 while the lowest is 45. In contrast, in control class, it can be seen from the scores of pre-test, the highest score is 90 while the lowest score is 20. The highest score of students' listening comprehension is very good while the lowest is very less. Meanwhile, the students' scores of post-test after giving the treatment, the highest score is 100 while the lowest is 25. The researcher knows that the students' listening comprehension using Cornell note-taking strategy got better scores and improved than the students who taught without using Cornell note-taking strategy.

Based on the analysis of the data, it can be known that the average score of $t_o = 2,90$ is bigger than $t_t = 2,00$ and $2,66$, with a level significant of 5% and 1%. Since the t_o is bigger than t_t , so there is an improvement of using Cornell Note-Taking strategy on students' listening comprehension. So, H_o is rejected and H_a is accepted.

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