

Effects of Phonolglcal Input as Pre-listening Activity on L2 Listening Comprehension Test: A Quasi-experimental Study at Students of English Education Department at Faculty Tarbiyah and Educational Sciences UIN Syarif Hidayatullah Jakarta

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Abstract: Effects of Phonolglcal Input as Pre-Listening Activity on L2 Listening Comprehension Test. The purpose of this study is to find out the empirical evidence concerning whether phonological input as pre-listening activity affects the English Listening comprehension test . The Pre-listening activity is used to make the students easier in comprehending the spoken ideas. because it helps them to give a clear picture about the ideas that related to the topic. The writer is interested in conducting this research by applying the phonological input as pre-listening activity to facilitate them in understanding the idea, so it is easy for them to do the English listening comprehension test. The method used in this research is a quantitative method and the research design is a quasi-experiment. The sample of this research is the first semester of students of Department of English Education of Faculty Tarbiyah and Educational Sciences UIN Syarif Hidayatullah Jakarta 2016 . They are class I B as the experimental class, and I A as the controlled class. Each class consisted of 20 students. For sampling technique, the writer uses purposive sampling. The instrument used in this research was listening test from Cambridge Preliminary English Test and the PET table and rubric to get the scores of the student's listening comprehension test on the pre and post-test. The result of calculation shows that in the significance degree of 5% and 1%, the value of t-test (t_0) > t-table (t_t), ($2.02 < 2.92 > 2.71$). Based on the result, it is concluded that there is a significant difference between students' achievement in listening comprehension test which is taught with pre-listening activity and without it. It means that phonological input as pre-listening activity is effective for the first semester students to understand the spoken idea.

1 INTRODUCTION

The presence of pre-listening activities in the classroom will be the subject of an increase in the number of studies to help students do better on the L2 listening comprehension test. so far researchers have examined four types of pre-listening activities: repeated input, question preview, topic preparation, and vocabulary pre-teaching. Repeated input and question previewing seems to be a very common practice in class. However, in tests such as the English Language Test for International Communication (TOEIC), the Test of English as a Foreign Language (TOEFL), and the International English Language Testing System (IELTS), it is not possible to listen to the text twice, so students must be accustomed to listening to oral texts only once to

prepare for the testing situation. As for preview questions, it is not always considered a pre-listening activity. Topic preparation seems to be an effective technique when listening to lectures whose content is difficult to understand for those who have no knowledge of the topic.

Knowledge of previous topics has helped students understand the content of lectures (Chiang & Dunkel, 1992). However, the approach is not very significant in the case of TOEIC, because tests measure communicative abilities in everyday life and in the workplace and thus require little or no knowledge of special academic background. Being able to handle spoken language is still important for success at TOEIC.

As students of English Education Department, they must formally learn the subject *Listenings* since

they are at the first year up to the second year which is distributed on *Listening I – IV*. It is stated on the syllabus that Listening I has an objective to make the students understand the main TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear. Considering the students come from different background of senior high schools, *Listening I* starts from the basic level. It still remains that not all of them get understanding the basic spoken discourses.

In the classroom, some of the students still find the difficulty in comprehending the spoken language from the audio, either in getting the main idea or the supporting details. To get the main idea, the students are given some questions asking for the topic i.e. predicting what the conversation will talk about, the ending of the conversation, their opinions to the topic and discussing or sharing with others in the classroom. To get the details, they are given the detail question by scanning the information starting from the spelling, the unfamiliar words, identifying the places/things/persons, and detail information about the topic. They sometimes do not feel familiar with the topic, so they find some unfamiliar vocabularies. In this study we will study vocabulary pre-teaching to find out if there are differences between the two different types of vocabulary pre-teaching: vocabulary activities with phonological input and one without phonological input. In particular, this study investigates whether phonological input facilitates student vocabulary learning and test results. Then examine how the two different types of lexical support affect the second language of the students (L2) listening to the comprehension test performance. Post interviews with several students were also conducted to obtain additional information, and the results were investigated in depth to reveal the implications of the observed effects of pre-listening activities.

2 METHOD OF THE RESEARCH

This study used quantitative method with a quasi-experimental study as the research design to identify the effectiveness of phonological Input as pre-listening on L2 listening comprehension test at Department of English Education Faculty of Tarbiyah and Educational Science UIN Syarif Hidayatullah Jakarta. Pre-test and post-test are taken in two classes; experimental and controlled class. There was a different treatment between experimental and controlled class. In experimental class, the writer gave a treatment with phonological

input as pre-listening activity whereas the students in controlled class were taught without the phonological input as the pre-listening activity.

This study was conducted in the first year of the first semester students of the Department of English Education at UIN Syarif Hidayatullah Jakarta. This research has been carried out for about three months from September to October 2016. This research was held in six meetings each class; pre-test, treatment in four times, and post-test.

The population of the study consisted of the first semester students of the first year in the Department of English Education at Faculty Tarbiyah and Educational science UIN Syarif Hidayatullah Jakarta. There are three classes, IA, IB and IC. The total of the first grade students was about 95 students. The samples of this research were; class IB as the experimental class and IB as the controlled class. In this study, the writer used *Purposive Sampling*.

The instrument was Cambridge Preliminary English Test 2 (PET); pre-test and post-test. The pre-test was given before the treatment and the post-test was given after the treatment. Here, the writer gave the instruction of the tests based on the syllabus of listening I which is taken from Common European Framework of Reference (CEFR) assessment, level B1.

Table 2: Common Reference Levels: self-assessment grid

UNDERSTANDING	LISTENING	B1 LEVEL
		I can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear

To collect the data, the wrier used a preliminary English Test (PET) 2 as the primary instrument. There are two types of tests; pretest and posttest. The pre-test was given in experimental and control class to know how far the students' listening comprehension before receiving treatment. The post-

test was given to know their listening comprehension after the treatment. The pre-test and post-test included in these processes:

The study conducted on September 9th 2016. The students were observed in the classroom to know the circumstances of English learning and teaching of Listening.

The pre-test was given in control class on August 15th and in experiment class on September 16th 2016. On September 22nd until October 7th 2016, the certain treatment was conducted in the experimental class by giving the phonological pre-listening activity in teaching listening.

The post-test was given to control class On October 13rd, 2016, and in experimental class on October 14th, 2016.

After getting the whole data, the result of the students' score in pre-test and post-test were calculated by using the some formulations.

So, at the end of the study, it could be seen how far the students' ability and confidence were increased in listening comprehension with the phonological input as the pre-listening activity.

In analyzing the data, the t_{test} formula was used through SPSS (Special Package of the Social Sciences) version 22 software. The t-test is one of a number of hypothesis tests. The normality and homogeneity tests were conducted before calculating the t-test. The normality test is performed using Kolmogorov Smirnov and Shapiro-Wilk. Homogeneity test is performed to show whether the data from the two groups, experimental and controlled class, have the same variant in order that the hypothesis can be tested by t-test or not.

After getting the data from pre-test and post-test from experimental and control class, it needed to find out the differences score after using the pre-listening activity. Here, the two classes are compared to the independent variable, the experimental class is X variable and the controlled class is Y variable. The writer used statistical calculation of the t-test with significant degree 5% and 1%. The formula of t_{test} is expressed as follows (Sudjono:2008):

$$t_o = \frac{M_x - M_y}{SE_{Mx - My}}$$

3 DISCUSSION

Based on the result of pre-test in experimental class, the highest score and the lowest score in the

experimental class those consist of 20 students. In pre-test, the highest score was 73 obtained only by one student and the lowest score in pre-test was 35 obtained by one student. The mean score of the pretest was 49.75. From that data, it could be seen that most of the experimental students' listening comprehension test was still very low.

In post-test, the mean score of post-test was improved and it was 66. Moreover, the mean of gained score was 16.25. The highest score of post-test was 80 obtained by two students and the lowest score in post-test was 43 obtained only by one student.

Based on the result of pre-test in controlled class, it can be showed that the highest score and the lowest score in the controlled class which consisted of 20 students. In pre-test score, the highest score was 65 obtained by two students and the lowest score was 38 obtained by three students. The mean score of pre-test was 49.95. From that data, it could be seen that most of the controlled students' writing ability in writing recount text was also still very low.

In post-test, the mean score of post-test was improved and it was 58.35 and the mean of gained score was 8.4. The highest score of post-test was 79 obtained only by one student and the lowest score in post-test was 38 obtained by three students. Moreover, there were two students whom the pre-test score is higher than post-test score. From the data description above, it could be concluded that there was still positive effect towards the students' achievement in listening comprehension test although was not taught using the phonological input as the pre-listening activity.

Table 3: Table of Data Description of Pre-test Result of Experimental Class

Statistics		
Experimental		
N	Valid	20
	Missing	20
Mean		49.75
Median		48.50
Mode		40
Range		38
Minimum		35
Maximum		73
Sum		995

The table above shows that the total students of experimental class, X.2, consisted of 20 students. Mean score (49.75) of pretest in experimental class was gained from the total or sum score (995) divided with the number of the students (20). Median score was 48.50. Mode score from the table was 40. The

mode is defined as the element that appears most frequently in a given set of elements. Range score was 38. The highest score of the pre-test in experimental class was 73 and the lowest was 35.

The results of pre-test score in controlled class of this research are presented in the table 4:

Table 4: Table of Data Description of Pre-test Result of Controlled Class

Statistics		
Controlled		
N	Valid	20
	Missing	20
Mean		49.95
Median		51.00
Mode		38
Range		27
Minimum		38
Maximum		65
Sum		999

The table above shows the pre-test data of class IB as the controlled class was 20 with sum 999. Mean score was 49.5. Median and mode scores from the data were 51.00 and 38. The highest score was 65 and the lowest score was 38.

Table 5: Table of Data Description of Post-test Result of Experimental Class

Statistics		
Control		
N	Valid	20
	Missing	20
Mean		58.35
Median		62.00
Mode		38
Range		41
Minimum		38
Maximum		79
Sum		1167

The table above shows that the data of class IA as the experimental class was 20 students. The total score of this class was 1320. The mean score of the data was 66.00, and then the median data was 65.50. After the treatment, the highest score in post-test of experimental class was 80 and the lowest score was 43. The results of post-test score in controlled class of this research are presented in the table 6:

Table 6: Table of Data Description of Post-test Result of Controlled Class

Statistics		
Experiment		
N	Valid	20
	Missing	20
Mean		66.00
Median		65.50
Mode		78 ^a
Range		37
Minimum		43
Maximum		80
Sum		1320

a. Multiple modes exist. The smallest value is shown

From the table above, the data of class IB as the controlled class was 20 students. The total score of this class was 1167 where it was lower than the experimental class. The mean score was 58.35 and the median score was 62. The highest score in post-test of controlled class was 79 and the lowest score was 38.

The result of normality test on both experimental and controlled class' pre-test and post-test was gained from *Lilliefors* test using SPSS 22. The test is determined if the distribution of the data from the sample is normal. If the normality is more than the level of significance $\alpha(0.05)$, scores will be normally distributed.

After doing the normality test, the homogeneity test is used to test whether the data from the two groups have the same variant in order the hypotheses can be tested using t-test. The following tables contained the result of homogeneity from pre-test score between experimental and controlled class.

Table 7: Homogeneity Pre-test Results between Experimental and Controlled Class
Test of Homogeneity of Variances

Pretest			
Levene Statistic	df1	df2	Sig.
.140	1	38	.711

Table 8: Homogeneity Post-test Results between Experimental and Controlled class Test of Homogeneity of variances

Posttest			
Levene Statistic	df1	df2	Sig.
.313	1	38	.579

From the result of the *Levene* Statistic Test above, it could be seen that the significance of the data from experimental and control's pre-test score was 0.711 and the post-test was 0.579. It means the significance of the data was higher than the significance degree ($\alpha = 0.05$). The result of homogeneity test shows that pre-test and post-test between experimental and controlled class had homogeneity distribution and can be tested using t-test.

Table 9: The Comparison Score between Students in Experimental Class and Students in Controlled Class

No	X	Y	x = X - Mx	y = Y - My	x ²	y ²
1	10	4	-6.25	-4.4	39.06	19.36
2	19	5	2.75	-3.4	7.56	11.56
3	14	8	-2.25	-0.4	5.06	0.16
4	38	16	21.75	7.6	473.06	57.76
5	8	7	-8.25	-1.4	68.06	1.96
6	29	10	12.75	1.6	162.56	2.56
7	15	7	-1.25	-1.4	1.56	1.96
8	5	8	-11.25	-0.4	126.56	0.16
9	17	-3	0.75	-11.4	0.56	129.96
10	20	-2	3.75	-10.4	14.06	108.16
11	19	0	2.75	-8.4	7.56	70.56
12	27	12	10.75	3.6	115.56	12.96
13	30	16	13.75	7.6	189.06	57.76
14	12	12	-4.25	3.6	18.06	12.96
15	13	7	-3.25	-1.4	10.56	1.96
16	7	7	-9.25	-1.4	85.56	1.96
17	9	5	-7.25	-3.4	52.56	11.56
18	14	14	-2.25	5.6	5.06	31.36
19	10	14	-6.25	5.6	39.06	31.36
20	9	21	-7.25	12.6	52.56	158.76
n=20	325	168	0	0	1473.75	724.8
Mean	16.25	8.4				

After doing the normality and homogeneity test, the researcher continued to do hypothesis testing. Here, the researcher used comparative technique or independent sample t-test to test the hypothesis. This was the crucial calculation to answer the problem formulation of this research. The independent t-test was used to see the significant difference in the post-

test score of the experimental and the controlled class after the given treatment.

After getting the data which are the result of students' listening comprehension score both of two classes, the writer analyzes them by using statistic calculation of the t-test formula on table 9.

Notes:

X = the difference of the experimental class' post and pre-test

Y = the difference of the controlled class' post and pre-test

X² = the degree of the difference of the experimental class' post and pre-test

Y² = the degree of the difference of the controlled class' post and pre-test

After that, the researcher calculated the gained score by using t-test formula. The formulation as followed:

- Determining mean of Variable X:

$$Mx = \frac{\sum X}{N_x} = \frac{325}{20} = 16.25$$

- Determining Mean of Variable Y:

$$My = \frac{\sum Y}{N_y} = \frac{168}{20} = 8.4$$

- Determining Standard of Deviation Score of Variable X:

$$SDx = \sqrt{\frac{\sum X^2}{N_x}} = \sqrt{\frac{1473.75}{20}} = \sqrt{73.69} = 8.58$$

- Determining Standard of Deviation Score of Variable Y:

$$SDy = \sqrt{\frac{\sum Y^2}{N_y}} = \sqrt{\frac{724.8}{20}} = \sqrt{36.24} = 6.02$$

- Determining Standard Error of Mean of Variable X:

$$SEmx = \frac{SDx}{\sqrt{N_x - 1}} = \frac{8.58}{\sqrt{19}} = \frac{8.58}{4.36} = 1.97$$

- Determining Standard Error of Mean of Variable Y:

$$SEmy = \frac{SDy}{\sqrt{N_y - 1}} = \frac{6.02}{\sqrt{19}} = \frac{6.02}{4.36} = 1.38$$

7. Determining Standard Error of Difference of Mean of Variable X and Y:

$$\begin{aligned}
 SE_{Mx-My} &= \sqrt{SE_{mx}^2 + SE_{my}^2} \\
 &= \sqrt{(1.97)^2 + (1.38)^2} \\
 &= \sqrt{3.88 + 3.35} \\
 &= \sqrt{7.23} \\
 &= 2.69
 \end{aligned}$$

8. Determining t_o with the formula:

$$\begin{aligned}
 t_o &= \frac{M_x - M_y}{SE_{Mx-My}} \\
 t_o &= \frac{16.25 - 8.4}{2.69} = \frac{7.85}{2.69} = 2.92
 \end{aligned}$$

Based on the calculation above, it showed that the result of the t-test from the experimental and controlled class is 2.92.

After that, the writer should find the degree of freedom. It is used to find out the value of the t-test score in the t-table. To get the value of the t-test from the t-table, the researcher used the value of the significant of 5% and 1%. The procedure to get the degree of freedom is as follow:

$$\begin{aligned}
 df &= (N_x + N_y) - 2 \\
 &= (20 + 20) - 2 = 38
 \end{aligned}$$

Based on the calculation above, the degree of freedom (df) is 38 and the critical value of the df 38 by using the degree of significance 5% is 2.02. Moreover, the critical value of the df 38 by using the degree of significance 1% is 2.71 and the t_o is 2.92. It can be said that the result of the comparison between t_o and t_{table} were $2.02 < 2.92 > 2.71$. It means that there is a significant difference between the score of pre-test and post-test.

The statistical hypothesis of this research could be seen as follows:

H_o : there is no significant difference between students' listening comprehension test using the phonological input as the pre-listening activity and without the pre-listening activity. It means that the phonological input as the pre-listening activity is not effective.

H_1 : there is significant difference between students' listening comprehension test using the phonological input as the pre-listening activity and without the pre-listening activity. It means that the phonological input as the pre-listening activity is effective.

The assumption of this hypothesis is as follows:

1. If t-test (t_o) > t-table (t_t) in significant degree of 0.05, H_o (null hypothesis) is rejected, it means that there is significant difference between students' achievement in listening comprehension test after using the phonological input as pre-listening activity and without using the phonological input. The use of the phonological input as pre-listening activity is effective on students' listening comprehension test.
2. If t-test (t_o) < t-table (t_t) in significant degree of 0.05, H_o (null hypothesis) is accepted. It means that there is no significant difference between students' achievement in listening comprehension test after using the phonological input as pre-listening activity and without using the phonological input. The use of the phonological input as pre-listening activity is not effective on students' listening comprehension test.

Based on the description of the calculation above, it can be inferred that:

- a) The value of t_{table} in the significance 1% is 2.71 and 5% is 2.02
- b) The value of t_o is 2.92
- c) So the result is $2.02 < 2.92 > 2.71$. It means that t_o (t observation) is higher than t_t (t table).

Thus, it can be summarized that $t_o \geq t_t$ ($2.02 < 2.92 > 2.71$) it means that the null hypothesis (H_o) is rejected and the alternative hypothesis is accepted. The research found empirical evidence that using the phonological input as pre listening activity is effective for the students to learn listening comprehension because there is a significant difference students' listening comprehension score after implementing the pre-listening activity.

The discussion of this research is based on the research question, which was to know the empirical evidence on the effects of phonological input as pre-listening activity on listening comprehension test on the first year' students of Department of English Education at Faculty of Tarbiyah and educational sciences UIN Syarif Hidayatullah Jakarta. Based on the post-test result was known that the students'

listening comprehension test showed the differences in both experimental and controlled class. The mean of pre-test score in experimental class is 49.75. The mean of pre-test score in controlled class is 49.95. Then, comparing with the mean of post-test in experimental class is 66 and in controlled class is 58.35.

There were 20 students in each class (experimental and controlled class). Therefore, degree of freedom (df) is $(20+20) - 2 = 38$. The critical value with $df=38$ of significance 5% is 2.02 and significance 1% is 2.71. The t_o is 2.92, it means that $t_o = 2.92$ is higher than the degree of significance 1% and 5%, $2.02 < 2.92 > 2.71$. Therefore, t_o is higher than t_t which the null hypothesis (H_o) is rejected and alternative hypothesis (H_1) is accepted.

From those results, it can be interpreted that post-test score of the experimental class and controlled class increased better than the pre-test. Although the mean of post-test score from both class increased, the experimental class has more increasing than controlled class. Thus, it can be concluded that the phonological input as pre-listening activity is an effective way to use in learning listening comprehension for the first year students of DEE Faculty Tarbiyah and Educational sciences.

4 CONCLUSION

Based on the result of the data analysis, It can be concluded that the result of t-test formula to test the hypothesis of the research is supported the effects of phonological input as pre – listening activity on listening comprehension test. The writer finds mean score at post-test in the experimental class (66.00) is higher than post-test in controlled class (58.35). Students' post-test score in experimental class is $\sum X = 1320$ higher than in controlled class $\sum X = 1167$. After calculated the whole formula, the researcher got the result that $t_o = 2.92$ and t_{table} from the significance 5% and 1% are 2.02 and 2.71. It means that is $2.02 < 2.92 > 2.71$. The researcher can concluded that Null Hypothesis is rejected because $t_o > t_{table}$. It means that the answer of research problem was proven. There was a significant difference in students' achievement in listening comprehension test using the phonological input as pre-listening activity.

From the previous description finally it is concluded that using phonological input as pre-listening activity is effective for the first year students of Department of English Education at

Tarbiyah and Educational Sciences UIN Syarif Hidayatullah Jakarta. It can be seen from the research findings that Faculty the students show their improvement significantly in listening comprehension test.

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APPENDIX 1

Table of the students' scores in Experimental class (X)

Students	Posttest	Pretest	Gained
1	62	52	10
2	65	46	19
3	78	64	14
4	80	42	38
5	43	35	8
6	70	41	29
7	65	50	15
8	43	38	5
9	69	52	17
10	60	40	20
11	61	42	19
12	78	51	27
13	70	40	30
14	61	49	12
15	78	65	13
16	80	73	7
17	80	71	9
18	54	40	14
19	66	56	10
20	57	48	9
Σ	1320	995	325
Mean	66	49.75	16.25

In pre-test, the highest score was 73 obtained only by one student and the lowest score in pre-test was 35 obtained by one student. The mean score of the pretest was 49.75.

In post-test, the mean score of post-test was improved and it was 66. Moreover, the mean gained score was 16.25. The highest score of post-test was 80 obtained by two students and the lowest score in post-test was 43 obtained only by one student.

APPENDIX 2

Table of the students' scores in controlled class (Y)

Students	Post-test	Pre-test	Gained
1	60	56	4
2	55	50	5
3	62	54	8
4	68	52	16
5	50	43	7
6	68	58	10
7	64	57	7
8	62	54	8
9	38	41	-3
10	38	40	-2
11	38	38	0
12	52	40	12
13	76	60	16
14	50	38	12
15	45	38	7
16	72	65	7
17	63	58	5
18	79	65	14
19	64	50	14
20	63	42	21
?	1167	999	168
Mean	58.35	49.95	8.4

In pre-test score, the highest score was 65 obtained by two students and the lowest score was 38 obtained by three students. The mean score of pre-test was 49.95.

In post-test, the mean score of post-test was improved and it was 58.35 and the mean gained score was 8.4. The highest score of post-test was 79 obtained only by one student and the lowest score in post-test was 38 obtained by three students.