



The Effect of using Problem Based Learning (PBL) on Students' Listening Ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin

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Abstrak

This paper aims at finding out whether or not Problem Based Learning (PBL) can improve students' listening ability. This research was experimental research, which aims to find out the effect of using Problem Based Learning (PBL) model for improving students' listening ability. The population of this research were the sixth semester students of Indonesian Academy of Secretary and Management Indonesia (ASMI) Citra Nusantara Banjarmasin. Sample are students mayoring Financial management 1 as experimental group and students mayoring Financial Management 2 as control group. It is obtained by using purposive sampling. Experimental group was taught by using Problem Based Learning (PBL) Model consist of 22 students. While control group was taught by using conventional model consist of 23 students. The instrument of this research was TOEIC Listening Comprehension Test. Problem Based Learning (PBL) model was more effective to improve students' listening ability at Indonesian Academy of Secretary and Management Indonesia (ASMI) Citra Nusantara Banjarmasin than conventional model. It was indicated by the result of independent sample t-test, it was found the sig. (2 tailed) value was $0.000 < 0.05$. It meant that, H_0 was rejected, and H_a was accepted. Furthermore, it can be interpreted that there was significance difference on students' listening ability between experimental group and the control group. In group statistics table said that the mean of experimental group was 275.91. It was higher than the mean of control group 194.57. It could be stated that Problem Based Learning (PBL) model in teaching listening could improve the students' listening ability better than the conventional model.

Kata Kunci: PBL, Listening ability, TOEIC Test.

Introduction

Nowadays it is important to master English because it will affect many things. Not only does it provide convenience, by mastering English, it will be easier for us to overcome certain conditions and terms or conditions given. With globalization, the need for learning and gaining proficiency in the English language has seen a spike in the number of people wishing to study or work in countries where English is the main mode of communication.

English is used by many companies with international markets as their working language. They want to ensure that their future collaborators have a high level of English, thus they verify their level with tests. TOEIC test is used as their recruitment tool. It assesses candidates on their oral and written linguistic abilities, and it is becoming a

reference tool for recruitment, given that it is used in every country in the world. It also happened in Academy of Secretary and Management ASMI Citra Nusantara Banjarmasin, that uses TOEIC test as a requirement for their students before graduating from their college. The College has that rule because after graduating students will be placed in the companies. Thus TOEIC Certificate is needed.

The Test of English for International Communication (TOEIC) was developed in the 1970s in Japan and implemented by the Educational Testing Service (ETS). The TOEIC test is a test that can be taken to obtain the results of the English communication skills needed in the workplace or taking part in the globalization. It measures the ability of non-native English-

speaking people to use English in everyday work activities.

English in Indonesia is a foreign language where English is not the main language, but the students still can learn it, and most schools and colleges oblige students to learn it. English as a Foreign Language (EFL) students still faced some challenges in learning English. As mentioned by Abdulrahman (2013), every student has challenges in learning English. The challenges is in mastering 4 types of skill of English, one of them is listening.

Listening is a part of language skills that the students have to master. Listening competency can be interpreted as a person's ability to understand what he or she is listening to in order to respond appropriately and it contributes to the development of communicative competence (Yildiz & Albay, 2015). Listening is the oral skill that is important to study in order to make effective communication or to make them easier to understand other and lecturer in learning process in the college and daily life and to prepare them for their career after graduating from the college.

However, students often encounter a problem in listening comprehension. It can be proved based on the data collected when researcher did interview with the lecturer and the researcher got students TOEIC score from their lecturer, on June 2022 at Indonesian Academy and Secretary ASMI Citra Nusantara Banjarmasin. The result is their TOEIC listening score is low. They have trouble in catching the actual sounds of the foreign language. They have to understand the meaning of every key word. They can understand if the speakers speak slowly, they can't understand fast natural native-sounding speech. They need to hear things more than once in order to understand. If the listening goes on a long time, they get tired and find it more difficult to concentrate.

In fact, it is difficult to teach listening skill. Even students feel challenging to acquire listening skills (M. Putri & Sinaga, 2020). Teachers need an innovative teaching technique or strategy to be better at listening comprehension. There are many good methods or approaches can be used by teacher to teach listening for students. One of them is Problem Based Learning (PBL). In this study, researchers will use the abbreviation PBL to abbreviate Problem Based Learning model.

PBL is a learning model using authentic problems as a context for students in solving problem and thinking critically in order to get the knowledge and to learn making decisions. The authentic problems become a starting point on PBL learning, so they will encourage the students to collect information and data to solve problems. The researcher therefore intends to conduct a research under the focus on the effect of Using Problem-Based Learning (PBL) on Students' Listening Ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin." The researcher want to know whether there is any effect of using PBL on students' listening ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara.

Based on the background above, problem statement of this research are :

1. Is there the significant effect of using PBL on students' listening ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin?
2. Is there the significance difference of using PBL on students' listening ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin for the experimental group and control group to improve their listening ability?
3. Is the mean value in experimental group higher than control group ?

Method

This research was quasi experimental design, which aimed to find out the effect of using Problem Based Learning (PBL) on students' listening ability. It described the effect of treatment of two distinction, PBL method and listening skill, the research design pre-test and post-test. Therefore, the design was called a pre-test and post-test control group design.

Researcher conducted this research on 2-16 August 2022 at Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin. The population on this research was the sixth semester students of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara

Banjarmasin in the academic year 2019/2020 majoring Management Business (MB) now Business Administration (AB). The number of population was 66 students.

In selecting sample, researcher used purposive sampling technique. By using this technique researcher can choose the sample those that representative and get represent of population. The researcher took two classes that is Financial Business Management 1 and Financial Business Management 2. In this research, Financial Business Management 1 Class was taught by using PBL method and it consisted of 22 students, while Financial Business Management 2 was taught by using conventional teaching and it consisted of 23 students.

The instrument in this research was TOEIC Listening Comprehension questions. There were two instruments used in this research, they were pre-test and pos-test. In experimental group, pre-test conducted before treatment given and post-test was done after giving treatment. While in control group, pre-test conducted before they was taught by using conventional teaching and post-test was done after 3 times meeting of learning English listening.

Result and Discussion

Data Description of Experimental Group

Before experimental group given treatment, researcher gave pre-test. Data obtained was processed by using SPSS 25. The number of students in this group was 22 students.

Table 1. The Pre-test and Post-test Result in Experimental Group Statistics

		Pre Experiment	Post Experiment
N	Valid	22	22
	Missing	1	1
Mean		181,36	296,36
Std. Error of Mean		11,794	11,345
Median		195,00	320,00
Mode		225	325 ^a

Std. Deviation	55,317	53,211
Variance	3059,957	2831,385
Range	235	185
Minimum	40	160
Maximum	275	345
Sum	3990	6520

Based on the table above, the data obtained from the pre-test of the experiment group showed that the minimum score was 40 and the maximum score was 275. Furthermore, the mean of pre-test 181.36. The median was 195.00, the mode 225, and the standard deviation was 55.317. In addition, the data from post-test showed that the minimum score was 160 and the maximum score was 345. Furthermore, the mean of post-test 296.36. The median was 320.00, the mode 325, and the standard deviation was 53.211.

Data Description of Control Group

This group was taught by using conventional teaching model. There were 23 students list, and all of students were active to attend the class and receive the treatment. The result of the pre-test and post-test of this group shown in table below:

Table 2. The Pre-test and Post-test Result in Control Group

		Pre Control	Post Control
N	Valid	23	23
	Missing	0	0
Mean		151,96	194,57
Std. Error of Mean		9,641	9,028
Median		150,00	205,00
Mode		175	205 ^a
Std. Deviation		46,239	43,299
Variance		2138,043	1874,802
Range		175	175
Minimum		60	100
Maximum		235	275
Sum		3495	4475

Based on the table above, the data obtained from the pre-test of the control group showed that the minimum score was 60 and the maximum score was 235. Furthermore, the mean of pre-test 151.96. The median was 150.00, the mode 175, and the standard deviation was 46.239. In addition, the data from post-test showed that the minimum score was 100 and the maximum score was 275. Furthermore, the mean of post-test 194.57. The median was

205.00, the mode 205, and the standard deviation was 43.299.

Test of Normality

Before analyzing the statistical result, the normality test was conducted to confirm whether or not the data of the dependent variable were normally distributed. The normality test in this research was carried out through Kolmogorov-Smirnov (K-S) test in SPSS 25.0 program. Based on the significance level, the conclusion can be drawn : (1) If the significance probability is greater than the level of significance (0.05), the data have a normal distribution, (2) if the significance probability is lower than the level significance (0.05), the data are not in normal distribution.

➤ Experimental Group

Table 3. The Result of Normality Test for Experimental Group Tests of Normality

Result	Group	Kolmogorov-Smirnov ^a		
		Statistic	df	Sig.
	Pre_Exp	,146	22	,200*
	Post_Exp	,113	22	,200*

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the result of testing the normality, it was found that value of the significance of pre-test and post-test for experimental group was higher than 0.05 at the 95% degree of confidence. It means that that the distribution of the data was normal. The value of the significance of pre-test and post-test for experimental group was 0.200.

➤ Control Group

Table 4. The Result of Normality Test for Control Group Tests of Normality

Group	Kolmogorov-Smirnov ^a		
	Statistic	df	Sig.
Pre_Contr	,130	23	,200*
Post_Contr	,159	23	,138

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the result of testing the normality, it was found that value of the significance of pre-test and post-test for control group was higher than

0.05 at the 95% degree of confidence. It means that that the distribution of the data was normal. The value of the significance of pre-test for control group was 0.200 while the value of the significance of post-test for control group was 0.138.

Test of Homogeneity

Before doing Paired Sample t-Test and Independent Sample t-Test, researcher did homogeneity tes to know whether sample taken has the same variance and does not show the significant difference among data. The researcher used Levene Test to test the homogeneity. Based on the significance level : (1) If the significance probability is greater than level of significance (0.05) the variance is homogenous. (2) If the significance probability is lower than level of significance (0.05) the variance is not homogenous. If the data is homogeneous, then an independent sample t-test will be conducted. However, if the data is not homogeneous, then the next test is by using the Mann Whitney Test. The homogeneity test was presented in the table as follows :

Table 5. The Result of Homogeneity Test Test of Homogeneity of Variance

Result	Based on	Levene			Sig.
		Statistic	df1	df2	
	Mean	1,789	1	43	,188
	Median	1,541	1	43	,221
	Median and with adjusted df	1,541	1	42,865	,221
	trimmed mean	1,730	1	43	,195

The table showed the output of homogeneity test. The homogeneity test had sig. 0.188 it means that the data of post-test of experiment group and the data of post-test of control group was homogenous because sig. of the test had more than 5% (0.05).

Paired Sample T-test

Paired sample T-test was conducted to see whether there was significant effect of using PBL on students' listening ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin. The results as shown in the following table:

Table 6. The Paired Samples Test Paired Samples Test

Paired Differences	t	df	Sig.
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	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		Lower	Upper	F	Sig.	t	df	t-test for Equality of Means					
				Sig. (2-tailed)	Mean Difference							Std. Error Difference	95% Confidence Interval of the Difference				
Pair 1 Pre_Eksperimental - Post_Eksperimental	94,545	35,687	7,609	-110,368	-78,723	-12,4											
Pair 2 Pretest_Control - Posttest_Control	42,609	6,887	1,436	-45,587	-39,631	-29,6	1,789	,188	5,615	43	,000	81,344	14,487	52,128	110,560		
									5,588	40,396	,000	81,344	14,556	51,934	110,754		

Based on the table above, it was found that the sig. (2-tailed) value in Pair 1 was 0.000. It could be concluded that there was a significant effect by using Problem Based Learning (PBL) model on students' listening ability.

Table 7. The difference Pre-test and Post-test of Experimental Group Paired Samples Statistics

Pair	Pre	Mean	N	Std. Deviation	Std. Error Mean
1	Pre Experiment	181,36	22	55,317	11,794
	Post Experiment	296,36	22	53,211	11,345

Based on the table above, it said that the mean value of pre-test in experimental group was 181,36. It increased, after treatment given the mean value of post-test in experimental group became 296,36. So, interval value was 115. It meant that there was improvement of students' listening ability. Furthermore, it can be interpreted that implementation of Problem Based Learning (PBL) model can improve students listening ability.

Independent Samples Test

Independent sample t-test is used to determine whether there was a significant difference on students' listening ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin that was taught by using Problem Based Learning (PBL) in the experimental group and the control group that was taught by using conventional model.

Table 8. Independent Samples Test

Based on the output above, it was found that the sig. (2-tailed) value was $0.000 < 0.05$. It can be concluded that H_0 was rejected, and H_a was accepted. Furthermore, it can be interpreted that there was a significant difference on students' listening ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin that was taught by using Problem Based Learning (PBL) in the experimental group and the control group that was taught by using conventional model.

The differences between post-test in experimental group and post-test control group shown in the result descriptive table of independent sample t-test below :

Table 9. Group Statistics

Result	Group	N	Mean	Std. Deviation	Std. Error Mean
	Experimental Group	22	275,91	53,555	11,418
	Control Group	23	194,57	43,299	9,028

Based on the table above, the mean of experimental group was higher than control group. The mean of experimental group was 275.91 while the mean of control group was 194.57. It can be concluded that the use of Problem Based Learning (PBL) model on student's listening ability was more effective than conventional model.

Discussion

The data collection in this study was carried out from August 2 to 20, 2022. The data obtained were pre-test and post-test in experimental and control group. It was analyzed to do hypotheses testing. Before the data was analyzed, the researcher conducted a prerequisite test for data analysis. The prerequisite tests carried out in this

study were the sample normality test and the homogeneity test. Researcher used Kolmogorov-Smirnov technique in testing normality test. Meanwhile, for homogeneity test, the researcher used the Levene statistical technique contained in the SPSS 25 program.

Based on the result of testing the normality, it was found that value of the significance of pre-test and post-test for experimental group and control group was higher than 0.05 at the 95% degree of confidence. It means that the distribution of the data was normal. The value of the significance of pre-test and post-test for experimental group was 0.200. While the value of the significance of pre-test and post-test for control group was 0.138.

Researcher did homogeneity test to know whether sample taken has the same variance and does not show the significant difference among data. The researcher used Levene Test to test the homogeneity. Based on the significance level : (1) If the significance probability is greater than level of significance (0.05) the variance is homogenous. (2) If the significance probability is lower than level of significance (0.05) the variance is not homogenous. If the data is homogeneous, then an independent sample t-test will be conducted. After data analyzed by using SPSS 25, the table showed the output of homogeneity test. The homogeneity test had sig. 0.188 it means that the data of post-test of experiment group and the data of post-test of control group was homogenous because sig. of the test had more than 5% (0.05). After doing the normality and homogeneity test, researcher did hypothesis testing by using the t-test.

Based on the data obtained from the pre-test of the experiment group which taught by using PBL model showed that the minimum score was 40 and the maximum score was 275. Furthermore, the mean of pre-test 181.36. The median was 195.00, the mode 225, and the standard deviation was 55.317. In addition, the data from post-test which taught by using conventional model showed that the minimum score was 160 and the maximum score was 345. Furthermore, the mean of post-test 296.36. The median was 320.00, the mode 325, and the standard deviation was 53.211.

Based on t-test result, it was found that the sig. (2 tailed) value in Pair 1 was $0.000 < 0.05$. By considering the test criteria, namely probability < 0.05 , it can be concluded that H_0 was rejected,

thus H_a is accepted. In other words, It could be concluded that there was significance effect by using Problem Based Learning (PBL) model on students' listening ability of Indonesian Academy and Secretary and Management (ASMI) Citra Nusantara Banjarmasin.

In the output of Independent sample t-test, it was found the sig. (2 tailed) value was $0.000 < 0.05$. It can be concluded that H_0 was rejected, and H_a was accepted. Furthermore, it can be interpreted that there was significance difference on students' listening ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin that was taught by using Problem Based Learning (PBL) in the experimental group and the control group that was taught by using conventional model.

The differences between post-test in experimental group and post-test control group shown in table 8. Group Statistics, It said that the mean of experimental group was higher than control group. The mean of experimental group was 275.91 while the mean of control group was 194.57. It can be concluded that the use of Problem Based Learning (PBL) model on student's listening ability was more effective than conventional model.

There are several previous research that support the result of this research. The first, Juwita Sari Gultom (2018) conducted a research entitled "*The Effect of Using Problem Based Learning Method on Students' Listening Ability in Listening.*" The researcher found in her study that by applying Problem Based Learning method especially for Senior High school students', it can increase their listening ability. The subject of the study was the students of SMA TARBIYAH in the Academic Year 2017/2018.

The second, Teoh Mei Lin (2019) conducted a research entitled "*The Effects of Problem-Based Language Learning on the Listening.*" The subject is Malaysian undergraduate students. The researcher found that this method has made an impact on the listening skills of the learners. PBL proved to be an effective approach to listening comprehension, and it could be suggested to the faculty as a possible alternative to the conventional approach.

Conclusion

The conclusion in this study was the use of Problem Based Learning (PBL) model has significant effect on students's listening ability. In addition, there was significance difference on students' listening ability of Indonesian Academy of Secretary and Management (ASMI) Citra Nusantara Banjarmasin that was taught by using Problem Based Learning (PBL) in the experimental group and the control group that was taught by using conventional model. It shown in the output of Independent sample t-test, that the sig. (2 tailed) value was $0.000 < 0.05$. It can be concluded that H_0 was rejected, and H_a was accepted.

The use of Problem Based Learning (PBL) model on student's listening ability was more effective than conventional model since the mean of experimental group was higher than control group. The mean of experimental group was 275.91 while the mean of control group was 194.57.

Therefore, this study suggests for further research there is a need to conduct similar study with more students' task or activities since this study only focused on students' listening ability. Overall, the finding of this study showed the significant and positive effect of using Problem Based Learning (PBL) model.

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