

## THE INFLUENCE OF THE APPLICATION OF PROBLEM BASED LEARNING TOWARDS THE STUDENTS' SPEAKING ABILITY OF GRADE ELEVEN OF SMA NEGERI 5 BANDAR LAMPUNG

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### Abstract

The students got confused and felt afraid to speak English. It meant that students' bravery was needed to improve their speaking ability. The application of Problem Based Learning (PBL) approach might be appropriate to be applied to solve the problem because PBL had several principles that could improve the students' speaking ability. The objective of this research aimed to find out the influence of the application of Problem Based Learning towards the students' speaking ability of grade eleven of SMA N 5 Bandar Lampung in academic year 2013-2014. Data were collected by incorporating two pre-tests and two post tests in experimental group and control group. Treatment using Problem Based Learning was administered in experimental group, while control group received by standard teaching. Data analysis was attempted using t-Test for two group design. Result indicated that p-value 1% = 2.65, 5% = 2.00 and t-value = 3.92. It meant that p-value was smaller than t-value. Therefore, hypothesis testing showed that null hypothesis ( $H_0$ ) was rejected and alternative hypothesis ( $H_a$ ) was accepted. The researcher concluded that the influence of the application of Problem Based Learning (PBL) was more effective than standard teaching. It could be concluded that teaching speaking through Problem Based Learning (PBL) was quite success. It could be seen in the students' speaking scores that they who learnt speaking through Problem Based Learning had a significant difference. It meant that there was influence of using Problem Based Learning in teaching speaking. Therefore, English teacher should apply cooperative learning using Problem Based Learning (PBL) to teach English in the classroom to make the class more interesting and help the students' improve their speaking ability.

*Keywords:* first language (L1) use, English foreign language (EFL) use, performance assessment, retelling activity (RTA).

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### 1. INTRODUCTION

Based on my internship experience in SMP N 10 Bandar Lampung, the students got confused and felt afraid to speak English. They were confused because they didn't understand English. Another reason is that they were afraid to make mistakes in speaking English. It means that students' bravery is needed to improve their speaking ability. It is caused by teachers' inappropriate approach or method they used to teach English. Additionally, if they are always afraid and do not want to speak English, it will be a problem for them in mastering the language. It is because speaking is the root of the language.

In this opportunity, the researcher is interested in choosing Problem Based Learning which supports group discussion activity as the teaching technique. It would be applied in this experimental research. As we know, the use of experimental research is to find the appropriate technique in learning process. Besides, group discussions in Problem Based Learning can be presented easily, students would have much time to practice their speaking ability not only inside the class but also outside and helps them become socialized, and makes students become more active in teaching and learning process and at the same time makes their learning more meaningful and fun for them.

## 2. PERFORMANCE ASSESSMENT AND L1 USE TOWARDS THE STRANDS OF LANGUAGE COURSE

Problem Based Learning was firstly designed for medical subject. Problem-based learning, or PBL (in short), is basically developed based on the theory of modern cognitive psychology which states that learning is a process in which learners actively constructs his knowledge by interacting to the learning environment which has been designed by the teacher. This theory consists of two main concepts which are learning is a process of constructing knowledge rather than receiving (receptive process) and learning is done through social interaction and be contextual to from the lesson itself. So, this theory also describes that in the classroom setting, PBL requires the students to construct their knowledge of a certain material, then interaction between two or more students or the teacher become the social environment (Barrows, 1992 and Amir, 2009).

There are four detailed characteristics of PBL. First, the objective of learning is designed to develop student's ability in problem identification. Second, continual problem, means the problem enables students of relevant concept or principle with the material which is being discussed. The problem then should be real. Third, in teaching by using PBL, there is presentation of the problem so that the students can get the point of the problem itself. Fourth, teacher works as facilitator to develop students' creative in thinking (Sumarji, 2009).

PBL is a learning method which gives students opportunity to learn how to learn and cooperate within a group to find solution of a certain problem in the real world (contextual). Implementing problem-based learning in a language class needs to consider the procedures during the implementation and how the assessment will be conducted (Athoillah, 2010).

Speaking ability in communication is now regarded as core skill that everyone should possess. Speaking always occurs within context. Further, a speaker can ask questions, answer the questions, and influence others so that other people understand his way of thinking, directions, and make generalization. In conclusion, speaking ability means ability to convey a message through expressing ideas, thought, and feeling by audible symbol (sound) or bodily action (gestures) to other person (s) as the participant within context and purpose of the speaking itself (Burns, 1999).

Speaking is a productive skill that can be directly and empirically observed, those observations are invariably colored by the accuracy. For more explanation, to make calculated judgements for assessing speaking, there is a modified form of scale such as grammar, vocabulary, comprehension, fluency, and pronunciation as seen in table 1 below.

Table 1: Oral proficiency scoring categories (Brown, 2001, pp. 406-407)

Level	Grammar	Vocabulary	Comprehension	Fluency	Pronunciation
A (81-100)	Errors in grammar are frequent, but speaker can be understood by a native speaker used to dealing with foreigners attempting to speak his language	Speaking vocabulary inadequate to express anything but the most elementary needs	Within the scope of his very limited language experience, can understand simple questions and statements if delivered with slowed speech, repetition, or paraphrase.	(No specific fluency description. Refer to other four language areas for implied level of fluency.)	Errors in pronunciation are frequent but can be understood by a native speaker used to dealing with foreigners attempting to speak his language
B (61-80)	Can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar.	Has speaking vocabulary sufficient to express himself simply with some circumlocutions.	Can get the gist of most conversations of non-technical subjects (i.e., topics that require no specialized knowledge).	Can handle with confidence but not with facility most social situations, including introductions and casual conversations about current events, as well as work, family, and autobiographical information.	Accent is intelligible though often quite faulty.

C (41-60)	Control of grammar is good. Able to speak the language with sufficient structural accuracy to participate effectively in most formal and informal conversations on practical, social, and professional topics.	Able to speak the language with sufficient vocabulary to participate effectively in most formal and informal conversations on practical, social, and professional topics. Vocabulary is broad enough that he rarely has to grope for a word.	Comprehension is quite complete at a normal rate of speech.	Can discuss particular interests of competence with reasonable ease. Rarely has to grope for words.	Errors never interfere with understanding and rarely disturb the native speaker. Accent may be obviously foreign.
D (21-40)	Able to use the language accurately pertinent to professional needs. Errors in grammar are quite rare.	Can understand and participate in any conversations within the range of his experience with a high degree of precision of vocabulary.	Can understand any conversations within the range of his experience	Able to use the language fluently on all levels normally pertinent to professional needs. Can participate in any conversations within the range of his experience with a high degree of fluency.	Errors in pronunciation are quite rare.
E (0-20)	Equivalent to that of an educated native speaker.	Speech on all levels is fully accepted by educated native speakers in all its features including breadth of vocabulary and idioms, colloquialisms, and pertinent cultural references.	Equivalent to that of an educated native speaker	Has complete fluency in the language such that his speech is fully accepted by educated native speaker.	Equivalent to and fully accepted by educated native speakers.

In the table, there are six components used to assess the test of speaking ability based on Brown (2001), such as, grammar, vocabulary, comprehension, fluency, pronunciation, and task. However, I just took five components. They are grammar (G), vocabulary (V), comprehension (C), fluency (F), and pronunciation (P) because the test is administered by debating. In debate, there is no session of asking and answering question which is the session included in task component. So, I do not use it to asses the test. Then, each component has 20% score. Therefore, all components result 100% score.

### 3. METHOD

Variable or modification was the representative from a group of people and their behaviors. The representative was different from one individual to another one. Variable as a representative of a group described the behaviors of the group. It meant that variable was a symbolic and significant thing (Setiyadi, 2006).

A research variable was an attribute or characteristic. It was activities that had special variations determined by the researcher to be learned. And then, the results were concluded (Sugiyono, 2010).

The researcher used speaking test instrument to get the data. The speaking test was chosen because the researcher required understanding of the students' ability to explore their thoughts and ideas. The speaking tests were related to the particular topic. The topic was "This House Believes that Children Should be Allowed to Own and Use Mobile Phones". There were several ways in administering the test. First, the researcher gave the text. Second, students read and found the problem in the text, they discussed the problem, they developed the result. The last, they analyzed and evaluated the result from problem solving as in principle of Problem Based Learning.

Data collection was defined as collection of data from surveys, or from independent or networked locations via data capture, data entry, or data logging. Pre-test, treatment and post-test were the data collection of this research. They were attempted to find out the influence of the application of Problem Based Learning towards students' speaking ability. The data was collected incorporating pre-test and post-test for experimental group and control group. The pre-test were administered before treatment to experimental and control group. The test administered was a spoken test. The respondents were asked to speak based on the topics given. Treatment was designed for experimental group. The treatment was administered after pre-test. Control group was treated with traditional teaching. The post-test were administered for control group and experimental group. In this post test, the students of experimental group were instructed to speak out using Problem Based Learning, while in control group students were instructed to speak out without any treatment

The t-Test of two group designs was employed to test the significance of the difference among population mean and sample mean and to test whatever the difference of mean among the groups is statistically significant. The formula of t-Test for two group design was presented as follows:

Equation:

$$t = \frac{|M_x - M_y|}{\sqrt{\left(\frac{\Sigma x^2 + \Sigma y^2}{N_x + N_y - 2}\right) \left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

Figure 1. The Equation of t-Test two group design

#### 4. FINDINGS AND DISCUSSION

t-value = 3.92 Therefore,  $p < t$  ~~-2.65~~ / 2.00 < 3.92. The data was analyzed by using t-Test formula. It indicated that p-value 1%=2.65, 5%=2.00 and t-value = 3.92. The result of the analysis showed that p-value was smaller than t-value. Therefore, null hypothesis ( $H_0$ ) was rejected and alternative hypothesis ( $H_a$ ) was accepted. Based on the findings of this study, it was found that there is significant influence of the application of Problem Based Learning (PBL) towards the students' speaking ability of grade eleven of SMAN 5 Bandar Lampung.

There are some results discussed. The first is calculation of the scores of pre-test of experimental group. Second, calculation of the scores of post-test of experimental group. Third, calculation of the scores of pre-test of control group. Fourth, calculation of the scores of post-test of control group. Fifth, calculation of both to find out the score of experimental group ( $y$ ) and  $y^2$ . Sixth, calculation both of them to find out the score of control ( $x$ ) and  $x^2$ . The last is the calculation of all the results which is the last result discussed gives the final findings.

The calculation of all results which is the last result discussed gives findings. The research findings indicate that there is influence of the application of Problem Based Learning towards students' speaking ability of grade eleven of SMA Negeri 5 Bandar Lampung through statistic analysis. From the statistic analysis, it is proved by the value of  $t$  - value that is greater than p-value. The  $t$  - value is 3.92. Based on the p-value table with  $N = 36$ , it shows that p-value table is 2.00 in 5% and 2.65 in 1%. So, it describes clearly that the  $t$  - value is greater than the p-value.

Moreover, these facts indicate that Problem Based Learning gives a useful contribution for their ability in speaking. From the result of the research, it can be concluded that the alternative hypothesis ( $H_a$ ) is accepted and the null hypothesis ( $H_0$ ) is rejected. So, there is influence of the application of Problem Based Learning (PBL) towards the students' speaking ability as PBL was firstly designed for medical subject. It is basically developed based on the theory of modern cognitive psychology which states that learning is a process in which learners actively construct their knowledge. Learning is done through social interaction and be contextual to from the lesson itself. So, this theory also describes that in the classroom setting, PBL requires the students to construct their knowledge of a certain material, then interaction between two or more students or the teacher become the social environment.

## 5. CONCLUSION AND SUGGESTION

Based on the result of the research, the researcher concludes that there is an influence of the application of Problem Based Learning towards students' speaking ability of grade eleven of SMA 5 Bandar Lampung. The conclusion is taken based on four considerations. The considerations are the average score of pre-test of experimental group, the average score of post-test of experimental group, the average score of pre-test of control group, the average score of post-test of control group, the results obtained from the calculation by using t-Test and the last is hypothesis of the research.

The result shows that t-value is 3.92. The p value with the 5% significant level is 2.00 and the 1% significant level is 2.65. It means that t-value is greater than p value. The hypothesis of the research is the last consideration. Based on the result of the research, it shows the t-value is 3.92 which are greater than p-value. So, it means that the alternative hypothesis is accepted and the null hypothesis is rejected. Therefore, the researcher concludes that the influence of the application of PBL towards the students' speaking ability is significant.

From the calculation, there are some suggestions that can be given. The suggestions are for teacher and students. First, English teacher should apply cooperative learning using Problem Based Learning (PBL) to teach English in the classroom to make the class more interesting and help the students' improve their speaking ability. Since, PBL focuses on a deep understanding of a problem, increases students' initiatives, and requires students to actively participate in finding information to increase their understanding of the material (knowledge). It also gives students opportunity to explore their knowledge and thinking with the other students under teacher's guidance so that they will be motivated in the process of learning. Moreover, it provides learning situation which is more active, dynamic, and qualified because the teacher acts as the guider rather than lecturer and provides students with various skills and process of understanding problem solving in mastering the material.

Second, the teacher should be both a facilitator and a motivator. He has to encourage the students to be active in teaching and learning process. The last suggestion is for the students. They should be more motivated in studying English. They should be active in the classroom and more active in speaking comprehension with their teacher or friends.

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