

# The Effect of Problem Based Learning Strategy on Speaking Skill at SMK Siti Banun

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## Abstrak

Strategi pembelajaran berbasis masalah adalah strategi yang berpusat pada siswa yang dapat diartikan sebagai kegiatan belajar yang menekankan pada proses penyelesaian masalah yang dihadapi secara ilmiah. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh strategi pembelajaran berbasis masalah terhadap keterampilan berbicara. Populasi dalam penelitian ini adalah semua siswa kelas XI SMK Siti Banun tahun 2019/2020 yang terdiri dari 4 kelas dengan total 250 siswa. Penelitian sampel diambil menggunakan teknik purposive sampling dengan metode eksperimen. Data diambil dengan pretest dan post-test. Rata-rata hasil belajar siswa pada pretest menunjukkan data, kelas eksperimen = 70.21 dan kelas kontrol = 68.1. Setelah diajar menggunakan strategi pembelajaran berbasis masalah, data menunjukkan = 80.8 dengan standar deviasi = 4.51 sedangkan yang tidak menggunakan strategi pembelajaran berbasis masalah = 75.62 dengan standar deviasi = 2.66. Hasil analisis data juga menunjukkan bahwa skor T-test lebih tinggi dari t tabel ( $5.975 > 1.667$ ) dengan level  $\alpha = 0.05$ . Menunjukkan bahwa siswa yang mendapat strategi pembelajaran berbasis masalah perawatan lebih baik daripada mereka yang tidak mendapatkannya. Dalam proses pengajaran siswa lebih aktif dan percaya diri untuk berbicara bahasa Inggris. Jadi dapat dilihat bahwa penggunaan strategi pembelajaran berbasis masalah dapat mempengaruhi keterampilan berbicara pada siswa kelas sebelas di SMK Siti Banun pada tahun akademik 2019/2020.

**Kata Kunci:** Pembelajaran Bahasa Inggris, Keterampilan Berbicara, Pembelajaran Berbasis Masalah, Pembelajaran Bahasa Kedua, Sekolah Menengah Atas

## Abstract

Problem based learning strategy is student-centered strategy that can be interpreted as a learning activity that emphasizes the process of solving problems faced scientifically. The purpose of this research was to determine the effect of problem based learning strategy on speaking skill. Populations in this research were all class XI SMK Siti Banun 2019/2020 academic year that consisted of 4 classes with 250 students in total. The research of sample was taken using a purposive sampling technique with experimental method.

The data was taken by pretest and post-test. The average students learning outcomes on pretest showed data, experimental class = 70.21 and control class = 68.1. After being taught using problem based learning strategy the data showed = 80.8 with a standard deviation = 4.51 while those that did not use problem based learning strategy = 75.62 with a standard deviation = 2.66. The result of analyzing the data also showed that the score of T-test is higher than t table ( $5.975 > 1.667$ ) with level  $\alpha = 0.05$ . Indicated that students who got treatment problem based learning strategy is better than those who did not get it. In the teaching process the students were more active and confident to spoke English. So it can be seen that the use of problem based learning strategy can affected speaking skill at the eleventh grade students of SMK Siti Banun in the academic year 2019/2020.

**Keywords:** English Learning, Speaking Skill, Problem Based Learning, Second Language Learning, Senior High School

## 1. INTRODUCTION

English is an international language used by many countries over the world. English is very important in modern era like nowadays. In the English language, there are four skills to be mastered. They are listening, speaking, reading and writing. In Indonesia English language has been taught for years even in elementary school. Kayi (in Rohim, 2014, p. 1) said, that the main part of second language learning teaching is speaking. Speaking is described as the activity as the ability to express oneself in the situation, or the activity to report acts or situation in precise words or the ability to converse or to express a sequence of ideas fluently (Ladouse in Hamid, 2014, p. 213). Richard (in Juhana, 2010, p. 100) added speaking skill is considered important because most students often evaluate their success in language learning on how much they feel they improved in their speaking proficiency. Curriculum 2013 even said, students are expected to be able to express either transactional or interpersonal communication in a daily context, for example expressing and responding to sympathy.

The students' speaking skill influenced by many factors such as internally and externally. Internally factor can include fear of making mistake, student's beliefs, shyness, and confidence. Fear of making mistake becomes one of the main factors of the students' reluctance to speak in English in the classroom (Tsui in Juhana, 2012, p. 101). It is important for teachers to convince their students that making mistakes is not a wrong or bad thing because students can learn from their mistakes. Besides that, externally factor can include schools' facilities, teachers' skill, and learning strategy. The researcher conducted the preliminary study in SMK Siti Banun and found that fear of making mistake, low of confidence, and shyness are the student's problem in speaking skill. Related to the situation above, it means an appropriate learning strategy is needed to solve those problems and improving student's speaking skill. The researcher is trying to solve those problems by using Problem Based Learning.

Problem based learning is a strategy that moves from the problem in order to get the right solution. According to Sanjaya (in Unimed, 2012, p. 181) Problem-based learning can be interpreted as a learning activity that emphasizes the process of solving problems faced scientifically. In addition, Tan (2003, p. 31) stated problem based learning is to emphasize skill such as self-directed learning, independent information mining, collaborative learning, and reflective thinking. The problem is encountered first in the learning process of Problem-based learning (in Barret, 2017, p. 2). Problem as the starting point expected to makes students to be more interesting and enthusiastic in learning process and solving problems given.

Problem based learning has the characteristic according to (Tan, 2002, p. 46) as follow as:

1. The problem is the starting point of learning.
2. The problem is usually a real world problem that appears unstructured.
3. Self-directed learning is primary.
4. Learning is collaborative, communicative and cooperative. Students thus work in the small group with a high level of interaction for peer learning, peer teaching, and group presentations.
5. Development of inquiry and problem solving skill is as important as content knowledge acquisition for the solution of the problem.

Next, Dahlan (in Rohim, 2014, p. 2) said the procedure in teaching speaking by using problem based learning as follow as:

- Teacher gives topic or problem that easily to be discussed.
- Teacher classifies them into pair. Teacher can divide students into group or pair randomly.
- Teacher gives guide question to make the discussion run well or easier and makes students understand what must be done and the students make the related question to the topic.
- The students share or discuss the topic in pairs. In here, the students are being taught to make the result from many ideas.
- Teacher gives time for each other pairs to express the idea. Teacher take a role as facilitator and not to interrupt the student's idea nor while they are expressing the idea.
- Teacher asks students to retell the result of discussion to class randomly.

Based on the explanation above, the researcher became interested and would like to use the Problem Based Learning strategy in doing research under the title, “The Effect of Problem Based Learning Strategy on Speaking Skill at the Eleventh Grade Students of SMK Siti Banun in 2019/2020 Academic Year”.

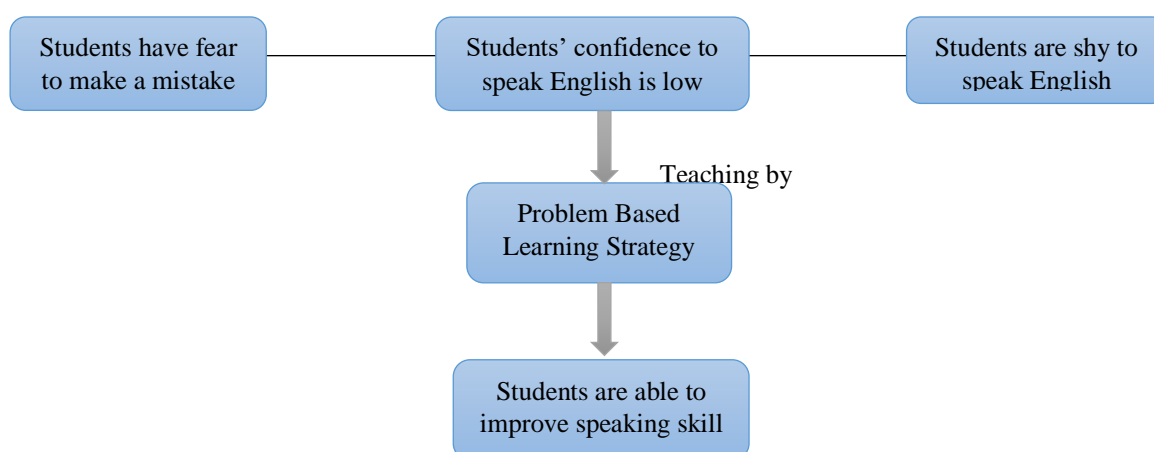
## 2. DISCUSSION AND FINDINGS

### 2.1. Discussion

Problem-based learning is a student-centered learning activity. Problem-based learning helps students to be more independent in taking initiatives to solve the learning problems they face. Problem-based learning challenges students’ abilities and gives satisfaction to determine new knowledge for students. Beside that, Problem-based learning helps students to be more responsible in the learning they do and makes the student realized that the process of learning benefited them. In addition, Nurhadi (in Rohim, 2014, p. 2) stated Problem based learning is real life experience as the students’ media that is fun and enjoyable strategy of English communication learning. Further Nunan (2003, p. 49) stated that speaking is important skill but for many years people taught speaking by repeat sentences and recite memorizes textbook dialogues. But in the facts, real conversation is so different from textbook dialogues. That is why it is really important to teach the learners by the real situation. Based on the definition above, Problem based learning strategy is suitable strategy on teaching speaking skill. Problem based learning provides opportunities for students to apply the knowledge they have through problem solving. Because of this, students can also expand knowledge about the problems given.

Arends (2001, p. 1) stated that teaching is about teacher and teaching, students and learning. Besides that, Hughes (2011: 6) said, teaching speaking makes the teacher able on focus of classroom activity, carried out to help student gain awareness of some aspect of linguistic knowledge, develop productive skills, and pragmatics point.

**Figure 1.** Concept of the study



Next, This research was conducted with the aim to find out “The Effect of Problem Based Learning Strategy on Speaking Skill at the Eleventh Grade Students of SMK Siti Banun in the Academic Year 2019/2020.” In this research the pretest and posttest were carried out on XI AK 2 as an experimental class and XI RPL 2 as a control class. The researcher used a purposive sampling technique, which is to take a predetermined sample. Ary, (2010: 156) Purposive sampling is also referred to as judgment sampling sample elements judged to be typical, or representative, are chosen from the population.

The method used in this research was quantitative experimental research method. This design used in this research Quasi Experimental and used the Nonequivalent Control Group Design model. Both of the experimental and control class will be given a test namely pretest before implementing the treatment. Experimental class will be treated using problem based learning strategy while the control class will be treated using conventional method. Then after being given treatment, the experimental group and the control group were given another test namely posttest, to find out the state of the group after treatment. Pre-test was given to know the student ability before implementing problem based learning and post-test was given to know whether the problem based learning strategy affected or not on students' speaking ability.

**Table 1.** Sample and Research Design Concept

Class	Amount	Pre-test	Treatment	Post-test
XI AK <sup>2</sup> (Experimental Class)	35	√	√	√
XI RPL <sup>2</sup> (Control Class)	36	√	-	√

This research conducted using observation, test, and documentation as the techniques of data collecting. Observation is a complex process, which is a process observation and memory (Brown, 2004, p. 12). This observation was made while the researchers conducted research in senior high school. According to Arikunto (2014, p. 266) tests are a series of questions or exercises and other tools used to measure skills, intelligence, abilities or talents possessed by individuals or groups. Last technique is documentation; according to Sugiyono (2017, p. 329) Documentation is document of the situation that happened in the past. Next, this research modified from of scale such pronunciation, grammar, vocabulary, fluency, comprehension. The cumulative score ranging from 0-100 form of scoring data by Brown (2001: 406-407).

**Table 2.** Scale for Assessing Students' Speaking Test

Categories	Criteria	Score
Pronunciation	5 (81 - 100)	The students can pronounce the words very well.
	4 (61 - 80)	The students can pronounce the words well.
	3 (41 - 60)	The students can pronounce the words adequate enough.
	2 (21 - 40)	The students can pronounce the words frequently unintelligible.
	1 (0 - 20)	The students can pronounce the words poorly.
Vocabulary	5 (81 - 100)	The student has board vocabulary.
	4 (61 - 80)	The student has adequate vocabulary.
	3 (41 - 60)	The student has good enough vocabulary.
	2 (21 - 40)	The student has limited vocabulary.
	1 (0 - 20)	The student has very limited vocabulary.
Grammar	5 (81 - 100)	The student has very good grammar.
	4 (61 - 80)	The students' error in grammar is quite rare.
	3 (41 - 60)	The students' grammar is good enough, able to speak the language with sufficient structural.
	2 (21 - 40)	The students' construction of grammar is quite accurately but does not have thorough or confidence control.
	1 (0 - 20)	The students' error is frequent but the content still understood.
Fluency	5 (81 - 100)	The student is able to continue speech without too much hesitation.
	4 (61 - 80)	The student's fluency is having a little disruption by

		language problem.
	3 (41 - 60)	The students make a lot of mistake in language problem.
	2 (21 - 40)	The students often doubt and stop because of limited language.
	1 (0 - 20)	The students often break off and stop while conveying dialogue.
Comprehension	5 (81 - 100)	The students comprehend the dialogue well and the content is clear.
	4 (61 - 80)	The students comprehend the dialogue in all although there is repeating in certain part.
	3 (41 - 60)	The students comprehend the dialogue but there are some repetitions.
	2 (21 - 40)	The students comprehend enough the dialogue but difficult to reply what their friend said.
	1 (0 - 20)	The student does not comprehend although in simple dialogue.

## 2.2. Findings

Based on finding of the test, it could be proved that there is effect of problem based learning strategy on students' speaking skill. The average result of pretest in the experimental class was 70.21 while in the control class 68.1. After being taught using Problem based learning strategy, the average protest increased to 80.8 in the experimental class. Whereas in the control class that was not taught using Problem based learning strategy showed 75.6.

**Table 3.** The result of the Pretest and Posttest

No	Experiment Class		Control Class	
	Pretest	Posttest	Pretest	Posttest
1	70	92.5	65	77.5
2	67.5	80	65	77.5
3	70	82.5	70	67.5
4	75	75	72.5	77.5
5	62.5	82.5	62.5	75
6	72.5	80	70	75
7	67.5	80	67.5	77.5
8	72.5	87.5	77.5	75
9	70	82.5	72.5	75
10	75	80	75	77.5
11	70	80	70	75
12	72.5	80	72.5	75
13	75	75	75	75
14	67.5	80	67.5	75
15	65	77.5	65	77.5
16	67.5	77.5	70	75
17	72.5	85	65	75

18	75	75	60	67.5
19	72.5	77.5	62.5	75
20	67.5	85	60	75
21	72.5	92.5	60	77.5
22	65	85	70	82.5
23	67.5	80	62.5	75
24	70	90	65	75
25	72.5	77.5	70	75
26	75	75	75	75
27	70	82.5	72.5	75
28	80	82.5	62.5	80
29	67.5	80	65	77.5
30	65	77.5	65	77.5
31	72.5	75	70	75
32	65	77.5	60	77.5
33	67.5	80	65	72.5
34	75	80	77.5	75
35	65	80	70	77.5
36			75	75

### 2.2.1. Result Validiy Problem

Validity test is carried out to determine the validity of an instrument. Number of student (N) = 36, if significances level  $\alpha = 0.05$  by 0.329. The evaluation criteria  $R_{xy}$  said if the result obtained r count > r table then the instrument is valid. For question number 1 for pretest, r count = 0.527 while r table = 0.329 and for question number 1 for posttest, r count = 0.644 while r table = 0.329. It indicates that question number 1 on both pretest and posttest is valid.

### 2.2.2. Result Reliability Problem

By using formula of determining reliability in chapter III obtained reliability coefficient with (N) = 36 and significances level  $\alpha = 0.05$  by 0.329. Pretest data obtained r count = 0.702 while Posttest data obtained r count = 0.717. Assessment criteria can be said good if the r count or  $r_{11} > 0.70$ . The result of  $r_{11}$  on bothpretest and posttest are in high correlation criteria.

**Tabel 4.**Reliability Criteria

Coefficients	Qualification
0.80 - 1.00	Very High
0.60 - 0.80	High
0.40 - 0.60	Fairly
0.20 - 0.40	Low
Negative - 0.20	Very Low

### 2.2.3. Data Analysis Research

Calculation of Mean (Average) and standard deviation of students learning outcomes are:

Pre-test : $\bar{X} 1 = 70.21$	SD1 = 3.90
Post-test : $\bar{X} 1 = 80.8$	SD1 = 4.51
Pre-test : $\bar{X} 2 = 68.1$	SD2 = 5.11
Post-test : $\bar{X} 2 = 75.62$	SD2 = 2.66

#### 4.1.2.1. Normality Test Data

The test used to test students' ability is the Lilliefors test. From the calculation of the two classes, namely the value of learning outcomes of problem based learning strategy on students' speaking skill in class XI AK 2 SMK Siti Banun post-test obtained L count = 0.0358325 while L table = 0.1498, and error analysis of students using problem based learning strategy on students' speaking skill in class XI RPL 2 SMK Siti Banun post-test obtained L count = -0.004872, L table = 0.147667. Because L count < L table it can be concluded that two groups of samples are normal distribution. The data is obtained about normality is attached in appendix.

#### 4.1.2.2. Homogeneity Test Data

The calculation in the appendix, show that price of F e.c = 0.858 with F table = 4.14 and F c.c = 1.007 and F table = 4.13 with the real level  $\alpha = 0.05$ . Turn F count < F table, means learning outcomes with using Problem Based Learning Strategy on students' speaking skill have the same variance (homogenous). The data is obtained about homogeneity is attached in appendix.

#### 4.1.2.3 Hypothesis Testing

It is known that two sets of data are normally distributed and have the same variances (homogenous). The data used for resting this hypothesis is the ultimate test of student learning. Hypothesis testing is done to test the one hand by using statistical T-test.

From the calculation in appendix obtained t count = 5.975. After comparing prices with price t count t table with significances level  $\alpha = 0.05$  for the t distribution list obtained t table = 1.667. Ha is accepted shown in the result of t count (5.975) > t table (1.667). It can be concluded that there is a significant effect of Problem Based Learning Strategy on speaking skill at eleventh grade students of SMK Siti Banun in the academic year 2019/2020.

### 3. CONCLUSIONS AND SUGGESTIONS

Based on the result of the research under the title The Effect of Problem Based Learning Strategy on Speaking Skill at the Eleventh Grade Students of SMK Siti Banun in the Academic Year 2019/2020, the researcher stated that there is a significant effect of Problem Based Learning Strategy on students speaking skill. Problem Based Learning Strategy helped student be more active and confident to speak English. The previous data showed that Hypothesis (Ha) is accepted and Null Hypothesis (H<sub>0</sub>) is rejected. The average value using Problem Based Learning Strategy on student's speaking skill = 80.8 (4.51) and the average value of studying without using Problem Based Learning Strategy on student's speaking skill = 75.62 (2.61). The result of analyzing data, score of T-test is higher than t table (5.975 > 1.667). It explains that the class that gets treatment is better than the class that does not get it. That can be concluded that there is a significant effect of Problem Based Learning Strategy on speaking skill at the eleventh grade students of SMK Siti Banun in academic year 2019/2020.

The researcher believes that this thesis is far from being perfect. So, the researcher hopes that this will bring good attention to the readers in understanding Problem Based Learning Strategy in teaching speaking skill. Regarding to the teaching speaking by using Problem Based Learning, the researcher gives some suggestion. It is suggested to teach speaking using Problem Based Learning Strategy because this strategy can make students more active and confident to speak English. Besides that, this strategy can help student to overcome the problem in speaking skill such as: fear of making mistake, low of confidence, and shyness. Teacher should be more creative on providing some various topics to draw students' attention. Teacher should control the

activity the classroom activity without interrupt and judging students. In teaching process, the teacher should encourage students to speak English so students can improve the speaking skill. The researcher hopes the result of this research can be used as an additional reference for other researchers who will examine in the same field.

## REFERENCES

- Arends, Richard I. (2012). *Learning to Teach*. Ninth Edition. New York: McGraw-Hill.
- Arikunto, Suharsimi. (2014). *Produser Penelitian suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Ary, Donal. (2010). *Introduction to Research in Education*. 8<sup>th</sup> Edition. Canada: Nelson Education Ltd.
- Barret, Terry. (2017). *A New Model of Problem-based learning: Inspiring Concepts, Practice Strategies and Case Studies from Higher Education*. Maynooth: AISHE.
- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy*. San Francisco: San Francisco University.
- Hamid, Siti Maryam. (2014). "The Effect of Using Problem Based Learning (PBL) Method Towards Students' Speaking Skill". *Jurnal Keguruan dan Ilmu Pendidikan (JKIP)*, 1(2), 209-219.
- Hughes, Rebecca. (2011). *Teaching and Researching Speaking, Second Edition*. United Kingdom: Pearson Education Limited
- Juhana. (2012). "Psychological Factors That Hinder Students From Speaking in English Class". *Journal of Education and Practice*, 3(12), 100-110.
- Nunan, David. (2003). *Practical English Language Teaching*. New York: McGraw-Hill.
- Rohim, Abdur. (2014). "Improving Students' Speaking Skill through Problem-Based Learning (PBL) Strategy". *UNISMA*, 3(8), 1-7.
- Sugiyono. (2017). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: ALFABETA, CV.
- Tan, Oon-Seng. (2002). *Problem-Based Learning: More Problems for Teacher Education*. Singapore: National Institute of Education.
- \_\_\_\_\_. (2003). *Problem-Based Learning Innovation: Using Problems to Power Learning in the 21<sup>st</sup> Century*. Singapore: Cengage Learning.
- Unimed. (2012). *Modul Pendidikan dan Latihan Profesi Guru (LPG) Bidang Studi: Bahasa Indonesia*. Medan: Unimed.