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Applying Problem-Based Classroom Learning to Assist Students in increase Students' Speaking Skill

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ABSTRACT

The purpose of this study was to elucidate how SMPN 3 Asembagus class VIII students could benefit from problem-based learning interactions in order to improve their speaking skills in 2023–2024. This study used classroom action research (CAR) as its research approach. They have an extremely small vocabulary, which makes it difficult for them to speak English. As a result, students require an additional teaching strategy known as problem-based learning (PBL) to develop their speaking skills. The objective of this research was to determine how to use problem-based learning as a teaching strategy to improve the speaking skills of students and their academic achievement. The action research was carried out in some manner. These procedures included the pre-test, post-test, and the cycle that starts with planning, acting, observing, and reflecting. Methods for gathering data include testing, documentation, and observation. This method was used in exams, in-class activities, observations, documentation, and student evaluations of both themselves and their peers. The study's findings indicated that there had been a quantitative improvement in the students' speaking skills. Additionally, students engaged more fully in the oral instruction and learning process. In summary, the eighth grade students in SMPN 3 Asembagus were able to speak English more fluently and effectively thanks to the great and efficient use of problem-

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based learning. As a result, the students' speaking skills improved, as is clear from the preceding result, and this strategy contributed favorably to the improvement of speaking skills. This approach is useful for making the process of teaching students to speak English more pleasurable.

1. Introduction

English is a crucial international language in a variety of our lives these days(Dutta, 2019). Students must master English, particularly speaking, in order to be able to communicate with people around the world (Linse, 2005).Speaking is one of the four talents that one needs to get proficient in, following reading, writing, and listening. Speaking is essential in daily life since it allows one to directly communicate with another person (Febriyanti, 2011).It affects a person's success in a variety of areas, including social, political, business, and education. A skilled presenter who can communicate clearly in front of large audiences is the source of a great presentation (Khotimah, 2014). peaking is a way to communicate ideas, show that what you are saying is true overall, and have a conversation with someone (Burns, 1998). The recommended student activities can be carried out by the students, with a variety of participants included in each activity to incorporate as many learners as possible in the experience (Joshi & Joshi, 2022). Therefore, it is important for them to have an abundance of ideas in their minds. Related to fluency, this refers to the ability to speak quickly, calmly, with a natural flow, as well as with clear and precise pronunciation (Isma 2014).A communicative, pragmatic perspective of the language classroom links speaking abilities closely (Hashim & Yunus, 2019). Speaking is a collaborative method that combines information production, reception, and processing to create meaning (Ning & Hornby, 2010).

Problem-based learning tries to educate students on how to proceed critically when faced with challenges by using difficulties as a teaching tool too (Esema et al., 2012). Additionally, this approach teaches students how to collaborate with others (Khotimah, 2014). Problem-based learning is the use various types of intelligence to do confrontations with real-world challenges and the ability to face all of the new and existing complexity (Rahmat et al., 2020). Problem-based learning (PBL) is focused experiential learning that revolves around the examination and resolution of challenging, real-world problems (Hung et al., 2008). Problem-based learning (PBL) assists learners in comprehending the fundamental concepts or framework of a field (Agus Suprijono 2016). he problem-based learning technique is a helpful tactic for motivating students to read (Sumantri, 2015).The term "problem" can refer to an obstacle or a description of a task, an intriguing result, or an unforeseen event. Furthermore, a number of problem-based learning characteristics are critical to reaching the objectives (O'Grady et al., 2012). These include teamwork, self-directed learning, the problems themselves, the facilitator, the PBL tutorial process overall, and post-problem reflection (Bridges et al., 2012). In an attempt to address this issue, the author suggested using the problem-based

learning (PBL) paradigm to raise students' achievement in speaking comprehension. The students' speaking comprehension improved with the help of the problem-based learning (PBL) paradigm. A useful strategy for motivating students to communicate more is the problem-based learning approach. Students are assisted in identifying the problem and applying scientific reasoning by the steps in this learning paradigm.

PBL has a positive impact on the student's achievement in the class, yet they need guidance from the teacher. This research used problem-based learning to increase junior high school students' speaking skills and tried to acquire information about the effect of the effect of problem-based learning and student responses to it. Problem-based learning helps students become more proficient speakers.

2. Methods

The researcher used classroom action research. (CAR) design (Arikunto, 2009)CAR should be carried out in at least two cycles continuously, and the researcher should plan, implement, and reflect the action in each cycle. Pre- and post-tests were employed to calculate the speaking skills score. This study's test was conducted orally, with the researcher describing and assessing the test for the students based on the four speaking components. They were fluency, pronunciation, accuracy, and vocabulary. The researcher gave the score based on (Brown, 2004).

3. Result & Discussion

A. Cycle I

The researcher implemented the action using English problem-based learning as the medium and as the speaking teacher, who is expected to be able to reach the goal of increasing students' speaking skills in VIII grade. The researcher gave the students a pre-test before they received the treatment. The student's final score is displayed in the table as follows:

Table.1

The Resulted Pre-Test of Students' Speaking Skills in Eight Grades, Junior High School 3 Asembagus

Total	1232
Average	73,11
Completeness percentage	52,94%
Note	Very Low

Source: The Resulted the Pre-test

Table.2 The Result of Students' Speaking Criteria Pre-Test Score

Speaking Criteria	1	2	3	4	5	6	7	8	9	10
Number of Students	0	0	3	2	3	0	2	2	0	4

Source: The Result of the Pre-Test

As the following table demonstrates, only three students completed the test, while twelve failed. The standard minimum for the speaking lesson in junior high school is 3 asembagus.

a) Planning

In study, this medium to be prepared is book oral and image media, such as pictures of two scarce in Indonesia. Media is prepared to make it easier for students to understand the speaking skill material. The action in every cycle was divided into 3 steps as a detailed explanation. The researcher presented the steps when the researcher had done the research as follows:

1) Pre-teaching activities.

The teacher started the class by greeting and leading the students to pray together. Then we continued by checking the attendance list of elementary-level speaking classes. There were 17 students, but one of them was sick. Before giving material, the teacher sets the student's mood with an icebreaker such as a tongue twister that makes them interested in the process of learning, and a researcher also introduces themselves in order to be closer to the real teacher in the class. Last, the students were questioned by the researcher when they felt prepared to follow along with the lesson.

2) While-teaching process

At first, open your teacher's lesson by saying hello. Then the teacher asked the students, "When does this not come in?" At the same time, the students replied, "No, ma'am." Continuity with inviting students to pray together. The students also prayed together as usual. Then the teacher asked the students, "How do they say the kids?" Also reply, "Alhamdulillah, unusual, my great Lord, yes." Teachers motivate through the "spirit of clapping." The teacher then appreciated it by asking, "Is there anything you remember about Monday that we were learning about?" Which student continues with the momentum of having just had a related problem while saying, If your sibling was playing tennis at 11 o'clock yesterday, what would be the outcome? presented by the teacher and began to look for answers. The teacher tries to get the answer from each student, asking a certain number of students. Students' answers had many different answers, ma'am; some of them answered, "My dear, I've played, ma'am." Then the teacher explained this answer to them: Nothing is wrong; everyone is right. The teacher explains to the students that the day we study the determination of multiplication, the result includes a problem in everyday life. Next, the teacher explains multiplication with practice, using the material in the form of a book. Then the teacher divides the students into groups of 5–6. After the group was formed, the teacher gave the students the worksheet (LKS) and three pictures of scaly animals in Indonesia to teach the group, and the teacher also asked all the groups to give each group a photo of the information. Newspapers and teachers also ask all groups for a picture and bulletin board of the carcass scavenger given by the teacher.

3) Post-teaching activities

The researcher gave them some feedback on the students' answers during the process of speaking using English problem-based learning. There was a group prayer to end the class. After the problem-based learning approach's implementation efforts are complete, after the students were given the task orally, the researcher gave them a post-test to assess their learning process. . In the post-test, six students belonged to the successful category. The result of the students' test was better than the students' test before treatment. In this phase, the researcher got the result of the students' post-test in cycle. I The result can be seen as follows:

Table 3. The Post-Test I Speaking Skill of the Students in Cycle I

Total	1275
Average	74,16
Completeness percentage	74,46%
Note	Average

Source: The Result of Post-test I

Table.4 The Result of Students' Speaking Criteria of Post-tests I

Speaking Criteria	1	2	3	4	5	6	7	8	9	10
Number of Students	1	2	2	3	1	2	3	2	0	1

Source: The Result of Post-test I

Based on the facts above, six students passed the test, and nine students are in the unsuccessful category. It was higher than the pre-test result. Successful learning occurs when 75% of students pass the test with a score greater than the required 60. Nonetheless, the data showed that the children's test results were inadequate.

b) Observation

The researcher conducted a meeting to give the drug to the students in cycle I. The text that detailed the daily activities was supplied by the researcher. A small number of students may actively engage in the learning process. The children also participated in problem-based learning exercises. They seemed happy and enjoyed the learning process. Some students listened intently to the researcher's explanation of the material, while others were too sleep-deprived to give their entire attention in class.

c) Reflecting

Table.5 The Result of Students' Pre-Test and Post-Test **I**

Number of Students	15	
Students Result	Pre-test	Post-test I
Total	257	328
Average	17,13	21,86

Source: the resulted pre and post-test I

Based on the resulted post-test 1, the number of students' who reached the complete score of 13 among 17 students produced a mount of 74,46%. It meant that the degree of students' speaking skills after applying PBL increased, although it was still included in the criteria of average. Therefore, the researcher was encouraged to revise Cycle 2, which is the next stage of implementation, to improve the students' speaking abilities.

Some of the students were tired because the speaking class was held in the afternoon. It made them not focus on the material; they looked passive, and several students were still confused about how to discuss it because they had never known problem-based learning before giving the treatment. Moreover, the students find it difficult to pronounce English words because of their mother tongue. It was hard to remove their habit, but they have enjoyed the learning process enough. Thus, cycle II of the research should continue based on the preceding findings. The cycle I outcome would serve as guidance for the subsequent cycle.

B. Cycle II

As in Cycle I, Cycle II involves planning, acting, observing, and reflecting. There will be a more thorough explanation of the following:

a) Planning

The researchers prepared the lesson plan as not different from Cycle I, but it has been revised as problems appeared in Cycle I to continue Cycle 2. Considering the outcome of Cycle I, the researcher used a different example but the same topic, which is about describing a hobby from the British Council. For the students who are more interested and for guidance, more specifically on students who have not been seen, pay attention. And prepared the evaluation using a grading rubric to determine which of the students' performance in speaking class has improved.

b) Action

1) Pre-teaching activities

At the start, open teaching and learning with a greeting. Then the teacher asked the student, "What day does this something not come in?" The student simultaneously replied, "No, there is, ma'am." Master, continue to invite students to pray together. Students pray together like normal. Then the teacher asked the students, "How do they say children's day is this?" They simultaneously replied, "Thank God, outside normal, my God great, yes." Teachers give motivation other than "clap spirit.".

2) While-teaching process

The teacher does apperception and submits the question, “Is there still remembering us Sunday, then study about what?” which continued with motivating students to convey a related issue by speaking, "We were having our lunch when someone... At the door, how do I answer?” A number of students also paid attention to problems presented by the teacher and tried to look for the answer. Master tries to dig up answers from every student by asking a number of students. Students answered with various answers: "knocked, ma'am," some answered, someone knocked at the door, mom." Then the teacher confirmed that the answer was that nothing is wrong; everyone is right.

The teacher explains to students on the day We will study results involving speaking operations problems in life every day. Furthermore, the teacher gives an explanation about speaking with accompanied practice and uses the topic every day. Then the teacher divides the students into groups of 4-5 members. After the group forms, the teacher gives sheet work students (LKS) to each group, and the teacher explains or informs in a general manner what to do with the LKS. Students are given time by the teacher to finish problems that exist in LKS with their own methods.

In stage this, students already start to get used to the work group, so the work walking bias group with the good-compared activity work group in cycle I.

Then the teacher asked group for pasting results discussion they on board write. From the results discussion, there are 4 groups that have methods different from groups 2, 3, 4, and 7. The teacher asked four groups earlier to read the results the discussion. Before the representative group read the results discussion, the teacher asked other students to listen or ask on delivery felt friends were still not yet understandable. On this deep stage, a number of brave students give feedback and ask questions.

Activity discussion class going on with atmosphere kind of class crowded, because Lots different ways in finish answer from LKS. Teacher gives affirmation that all method used no something is wrong, everyone method used is right. For then, the teacher neither guides the student nor makes a conclusion involving speaking operations problems in life every day.

The researcher received the student post-test results for cycle II at this session. The outcome is seen as the following:

Table.6 The students' post-test results for speaking abilities in cycle II

Total	1346
Average	78,86%
Completeness percentage	92,11%
Note	Very High

Source: The Resulted Post-test II

Table. 7 The Resulted Students’ Speaking Criteria of Post-tests II

Speaking Criteria	1	2	3	4	5	6	7	8	9	10
Number	3	3	2	3	2	0	0	2	0	1

of Students	

Source: The Resulted Post-test II

Regarding the outcome, the number of students who achieved a complete score of 15 out of 17 students produced a percentage of 92.1%. It showed that after the problem-based learning paradigm was put into practice, the level of students' speaking abilities for the second time got much better and was included in the criteria of very high. So, that researcher was satisfied and decided to end the research in cycle 2.

The researcher can observe that, compared to the prior meeting, the conditions in the class were better. The students' were able to follow the steps of the problem-based learning model. The class is already noisy when the ice-breaking test begins. Most of them enjoy and compete with one another to avoid the baby powder that will spread in their faces when they lose the game related to the animal picture.

c) Reflecting

The results of Cycle II were superior to those of Cycle I. There was a noticeable improvement in this cycle. The researcher analyzed the data that has been collected as follows:

Table.8 The Score of Students' Pre-Test, Post-Test I and Post-test II

Students Result	Pre-test	Post-test I	Post-test II	Category
Total	1232	1275	1346	Increase
Average	73,11	74,16	78,86	Increase

Source: the resulted pre-, pos I, and post-test II

The table above clearly shows that the students' post-test I scores were higher than their pre-test results. Compared to cycle I, post-test II grew more in cycle II. The students achieved the objective. The majority of students earned grades greater than 60, and 93% of them graduated. Additionally, there has been an increase in student involvement. It suggests that problem-based learning can help students become more Speaking Skill.

Table.9 The Comparation of Students' Scores of Post-tests II of Speaking Skill

Speaking Criteria		1	2	3	4	5	6	7	8	9	10
Number of Students	Pre-cycle	0	0	3	2	3	0	2	2	0	4
	Cycle 1	1	2	2	2	1	2	1	3	0	1
	Cycle 2	3	3	2	3	2	0	0	2	0	1

Based on the result, the number of students who achieved a complete score of 15 out of 17 students produced a percentage of 92.1%. It meant that the level of students' abilities for speaking after applying the PBL model for the second time got much better and was included in the criteria of very high. So, that researcher was satisfied and decided to end the research in cycle 2.

The result of observing student activities has also been an increase from cycle I, which initially had a final score of 3 and entered in the good criteria in cycle II, resulting

in a final score rating of 92,11%. So that by using problem-based learning, students experience an increase in communication skills in the material speaking, and the following is a diagram of the results of observing the activity:

Table.10 Students' Feelings Before Treatment

No	Preparation	Rated Aspect	
1	Physical preparation of student in taking lesson	√	
2	Preparation of tools		√
	Implementation (Initial Activity)		
3	Student Answer greeting and read prayer together	√	
4	Student answer present when the teacher's name is called		√
5	Student listen to the teacher delivery of the learning objective and learning method that will use	√	
6	Student listen to the motivation and benefits of the study	√	
	Implementation (Core Activity)		
7	Student listen to the learning material explained by the teacher	√	
8	Students respond to the matters relating to the material described	√	
9	Student make group according to their own wishes		√
10	Student gather and discuss the material that must be mastered	√	
11	Student explained the material obtained to other groups	√	
12	Student take the paper given by the teacher		√
Implementation (Final Activity)			
13	Students consider the lessons they have learned thus far	√	
14	Student listen to the material that will be studied at the next meeting	√	
15	Student pray together and answer greetings		√
	Total Score	51	

Based on the results of a written communication skills test conducted by researchers with students in learning materials speaking using the problem-based learning (PBL) method at the stages of pre-cycle I and cycle II, It has been shown that in each cycle, there has been a significant increase.

This is evident by looking at the ordinary value of a student's ability to speak English after implementing problem-based learning (PBL).

The interpretation stage of the results of data analysis is carried out after pre-cycle data collection, cycles I and II.

Table.11 The result of observation made against the teachers

No	Rated Aspect	Score			
	Preparation	1	2	3	4
1	Preparing students to learn				√
2	Motivate students to follow lesson				√
	Implementation (Core Activity)				
3	Presents initial information regarding material			√	
4	Ask students to attention to what the teacher says			√	
5	Request that students respond to the teacher's inquiries.			√	
6	Ask students to conclude what the teacher has said				√

	Implementation (Evaluation Activities)		
7	Evaluation of the learning process and final evaluation	√	
	Implementation (Final Activity/Closing)		
8	Concluding learning		√
	Total Score	28	

The data shows that the value of the activity teachers in cycle 1 has experienced an increase in cycle II, that is, initially getting a final score. In cycle II, the final score students' ratings have improved to 92,11%. From the data above, it can also be conveyed that the value has fulfilled predetermined performance indicators. As well, this has also proven that implementing problem-based learning (PBL) in communication material has obtained good results in terms of the application carried out by the teacher. The final teacher activity assessment score has increased to 92.11 percent. From the data, it can also be conveyed that the value has fulfilled the predetermined performance indicators. As well, it has also proved that the applicability of the approach of problem-based learning (PBL) on the material speaking has gotten good results in terms of its application carried out by the teacher.

Table.12 The analytical rating scale of the Foreign Services Institute (FSI)

Accent	
1. The pronunciation is often unclear. 2. It is difficult to understand due to frequent egregious blunders and a strong accent; extensive repetition is necessary. 3. Listening intently is necessary when hearing someone with a foreign accent, as misinterpretations can occasionally result in misunderstandings and apparent grammatical and lexical problems. 4. A noticeable foreign accent and sporadic mispronunciations that don't impede comprehension. 5. There are no obvious mispronunciations, yet one would not mistake them for natural speakers. 6. Pronunciation that is native, devoid of any foreign accent.	
Vocabulary	Rating
1. Insufficient vocabulary to carry on even the most basic discussion. 2. A vocabulary restricted to terms related to time, food, transportation, family, and other necessities of life. 3. Word choices can be imprecise, and language restrictions can hinder conversation at certain points during an exchange. 4. A sufficient vocabulary, accompanied by some evasions, to engage in the conversation. 5. A broad and accurate vocabulary that is sufficient to handle increasingly difficult issues. 6. Apparently extensive and correct vocabulary comparable to that of a native speaker.	

This observation indicator includes: response student during the learning process; liveliness and enthusiasm student during activity learning; ability student in solving problem.

Table. 13 r Criteria Speaking of Post-Test, Cycle 1, Cycle 2

No	Criteria	Score					Amount of Students
		1	2	3	4	5	
1	Pronunciation frequently unintelligible.			√			
2	Understanding is challenging due to frequent major faults and a strong accent, which necessitates repeated listening.		√				
3	Noticeable foreign accent and sporadic mispronunciations that don't impede comprehension.				√		
4	Though there are no obvious mispronunciations,				√		
5	One would not mistake them for native speakers.			√			
6	Pronounce words correctly, without a hint of a foreign accent.		√				
7	insufficient vocabulary to carry on even the most basic discussion.			√			
8	Limited vocabulary to terms related to time, food, transportation, family, and other necessities of life.		√				
9	Sometimes imprecise word choices and vocabulary restrictions hinder conversation at certain points throughout an exchange.		√				
10	Sufficient vocabulary, perhaps with some amplifications, to engage in the conversation.			√			

According to the above table, seven students (47%) agreed that problem-based learning is helpful, and eight students (53%) felt that it increases students' desire to communicate. 7 students (47%) concur that pupils' confidence is modeled by problem-based learning. Seven students (47%) agreed that problem-based learning improves students' pronunciation fluently. Six students, or 40% of the group, agreed that learning through problems is simple. This finding suggests that using problem-based learning as a medium is engaging and improves students' speaking abilities.

Table. 14 Student Evaluation Questions In The Post Test Cycle I

1. Talk about a famous female leader
2. Describe a close friend in your home
3. Talk about your game would like by yourself
4. Describe an occasion when you wake up early
5. Talk about a film you would like to discuss with your friends
6. Describe a time when you first met someone
7. Talk about and advertisement that you remember
8. Describe your favourite food
9. Talk about your hometown
10. A time when you shifted to a new house or new school

Table. 14
Student Evaluation Questions In Post Test Cycle Ii

1. Describe your favourite picture you like
2. Describe your favourite elementary that you like
3. Things you want to buy in the future
4. Describe someone you consider good leader
5. A TV program that made you laugh
6. Describe a story popular in your village
7. Describe an artist you admire
8. Describe a useful plant you know about
9. Describe your favourite dress
10. Think you want idea in the future

4. Conclusion

Based on the research results and findings about how to enhance students' speaking skills through problem-based learning, eighth-grade junior high school students took part in the action research project. Speaking skills among junior high school students increased. The mean score for the students was 73,11 for the pre-test, 74,16 for the post-test I, and 78,86 for the post-test II. The learning method was effective, as evidenced by the fact that more than 75% of the pupils passed the KKM. It showed that the eighth-grade junior high school's use of problem-based learning had a positive impact on the speaking skills of the pupils. The results of the study showed that students' speaking skills had significantly improved; most students' replies supported this conclusion.

References

Bridges, S., Botelho, M., Green, J. L., & Chau, A. C. M. (2012). Multimodality in problem-based learning (PBL): An interactional ethnography. *Problem-Based Learning in Clinical Education: The next Generation*, 99–120.

Burns, A. (1998). Teaching speaking. *Annual Review of Applied Linguistics*, *18*, 102–123.

Dutta, S. (2019). The importance of "English" language in today's world. *International Journal of English Learning & Teaching Skills*, *2*(1), 1028–1035. https://www.ingentaconnect.com/content/smart/ijelts/2019/00000002/00000001/art00019

Esema, D., Susari, E., & Kurniawan, D. (2012). Problem-Based Learning. *Satya Widya*, *28*(2), 167–174.

Febriyanti, E. R. (2011). Teaching speaking of English as a foreign language: Problems and solutions. *Jurnal Bahasa, Sastra, Dan Pembelajarannya*, *1*(2), 133–146.

Hashim, H. U., & Yunus, M. M. (2019). Digital Learning with massive open online courses (Moocs): English for communication. *Modern Journal of Language Teaching Methods*, *9*(3), 1–5. file:///F:/mjltm/www.mjltm.org

Hung, W., Jonassen, D. H., & Liu, R. (2008). Problem-based learning. In *Handbook of research on educational communications and technology* (3rd Editio, pp. 485–506). Routledge.

Joshi, R., & Joshi, R. (2022). Evaluating input representation for language identification in hindi-english code mixed text. *ICDSMLA 2020: Proceedings of the 2nd International Conference on Data Science, Machine Learning and Applications*, 795–802. https://link.springer.com/chapter/10.1007/978-981-16-3690-5_73

Khotimah, S. (2014). THE USE OF PROBLEM BASED LEARNING TO IMPROVE

STUDENTSâ€™ SPEAKING ABILITY. *ELT Forum: Journal of English Language Teaching*, *3*(1), 50–56. https://doi.org/https://doi.org/10.15294/elt.v3i1.4011

Linse, C. T. (2005). *Practical English language teaching: Young learners*. McGraw-Hill.

Ning, H., & Hornby, G. (2010). The effectiveness of cooperative learning in teaching English to Chinese tertiary learners. *Effective Education*, *2*(2), 99–116.

O'Grady, G., Yew, E. H. J., Goh, K. P. L., & Schmidt, H. G. (2012). *One-day, one-problem: An approach to problem-based learning*. Springer.

Rahmat, M. R., Arip, A. G., & Nur, S. H. (2020). Implementation of Problem-Based Learning Model Assisted by E-Modules on Students' Critical Thinking Ability. *JPI (Jurnal Pendidikan Indonesia)*, *9*(3), 339–346.

Sumantri, M. S. (2015). Learning Model of Fundamental Long Jump Movement Based On Game Approach. *Indonesian Journal of Early Childhood Education Studies*, *4*(1), 35–41.