

Problem Based Learning (PBL): Concrete Steps to Improve Students' Communication Skills

Najwa Nurfajriah¹*, Imam Tabroni², Nursyifa Faujiah³, Ridha Nurjannah⁴, Tiara Putri⁵

STAI Dr. KH. EZ Muttaqien Purwakarta

Corresponding Author: Najwa Nurfajriah njwanurf8@gmail.com

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ABSTRACT

Improving the communication skills of class XII at Madrasah Aliyah Purwakarta need to use learning methods which in the learning process can encourage students to actively communicate. One of the learning models which in its implementation process encourages students to actively communicate is the Problem Based Learning (PBL) method. This study uses a quantitative experimental research approach. With experimental design Preexperimental design is a design that includes only one group or class that is given pre and post tests. This one group pretest and posttest design was carried out on one group without a control or comparison group. The student data obtained in this study was from a test in the form of a questionnaire given to class XII students at MA Al-Manar Purwakarta. It can be concluded that the Problem Based Learning (PBL) method is effective in improving the communication skills of class XII students at MA Al-Manar Purwakarta

INTRODUCTION

In the 21st century, the skills that students need to have are not only the skills to solve questions and get good grades. However, like the webinar organized by SEAMEO QITEP in Language (SEAQIL), the webinar invites teachers and education staff in Southeast Asia to understand and implement 6 C skills in learning. The 6 C terms as quoted on the official website of the Ministry of Education and Culture are character, citizenship, critical thinking, creativity, collaboration, and communication. And communication skills are one of the skills that students must master (*Kemendikbud.Go.Id*, 2022).

Student communication skills are student participation in expressing thoughts, ideas, knowledge, or new information they have in the form of verbal and nonverbal in learning activities (Hanum, 2017). So that communication skills with the learning process are two things that cannot be separate (Listari et al., 2022). Because the learning process occurs as a result of communication, both intrapersonally such as thinking, remembering, and perceiving, as well as interpersonally, namely through the process of channeling ideas or information ideas to others, and listening to arguments conveyed by others (Ryckman, 2012). And the ability to communicate is an important requirement in the learning process. So that communication has an important role in educational activities. Because it can help and facilitate students to express ideas, and exchange information with teachers or fellow students (Sari & Tabroni, 2022). So the existence of communication will build interaction to convey educational messages and expand ideas that can be used as information and knowledge. In addition, if students can communicate well, it will affect the quality of education and the achievement of the goals of learning activities (Sari & Tabroni, 2022).

In the school environment students are required to be able to communicate well. However, not all of them can communicate well. There are some students who have difficulty in communicating. These difficulties are like, students have difficulty expressing their opinions, embarrassed, anxious, and afraid of making mistakes (Acker, 1992).

Therefore, an educator needs to use a learning model that encourages students to have communication skills (Putri Nurul Fadillah et al., 2022). And one of the learning methods that is currently being noticed by educators is the *Problem Based Learning* (PBL) method, namely a learning model in which students are involved in trying to solve problems with several stages of the scientific method so that students are expected to be able to learn knowledge related to problems. and at the same time students are expected to be able to have skills in solving problems (Cendekia & Lismaya, 2019).

The *Problem Based Learning* (PBL) method, in the implementation process students do not just listen, record then memorize the subject matter but also actively think, communicate, search and process data and finally draw conclusions (Savin Baden & Howell Major, 2004). By using the *Problem Based Learning method* (PBL) in the teaching and learning process aims to make learning more focused on class activity, not being silent and waiting for results from other people, meaning that problem-based learning is not empty of thinking activities to arrive at conclusions solving problems. So that it can encourage students to be skilled in communicating during the learning process (Schwartz, 2013).

Therefore, this study raises the problem of class XII students at MA Al-Manar who find it difficult to express opinions or communicate the ideas they have, so that in the learning process there is no interaction between students and students. Also between students and teachers who make the learning becomes monotonous.

The aim of this study was to determine the effectiveness of the *Problem Based Learning* (PBL) method to improve the communication skills of class XII students at MA Al-Manar. The question that the researchers did was "How is the effectiveness of the problem-based learning method to improve the communication skills of class XII students at MA Al-Manar?".

LITERATURE REVIEW

A. Problem Based Learning

Problem Based Learning (PBL) or problem-based learning is a teaching model that focuses on real problems as a context for students to learn to think critically, innovatively, and hone problem-solving skills and acquire knowledge of the facts of the problem (Savin Baden & Howell Major, 2004).

Problem Based Learning Model (PBL) is a learning model in which students are involved in trying to solve problems by going through several stages of the scientific method so that students are expected to be able to learn knowledge related to these problems and at the same time students are expected to have skills in solving problems. The Problem Based Learning (PBL) learning model is a learning approach that seeks to apply problems that occur in the real world as a context for students to practice how to think critically and gain skills in problem solving, as well as not forgetting to gain knowledge as well as important concepts. of the teaching materials discussed (Moust et al., 2021).

From some of the definitions above, it can be concluded that the *Problem Based Learning* (PBL) learning model is a learning approach that seeks to apply problems that occur in the real world as a context for students in practicing how to think critically and gain skills in problem solving, as well as unforgettable to

gain knowledge as well as important concepts from the teaching materials talked about (Lalwani et al., 2018).

The learning process using problem based learning focuses on student activity, here students are encouraged to be able to develop their knowledge (Zhu & Zhou, 2019). In the implementation of learning using problem based learning, the teacher only acts as a facilitator (Boud & Feletti, 1998). However, even though the teacher's role is only as a facilitator, the teacher must monitor student progress and be able to encourage students to be able to solve a problem properly and encourage students to achieve the goals or targets to be achieved (Savin-Baden, 2000).

B. Student Communication Skills

Communication comes from the Latin (communicare) which means to share (sharing) is an activity of conveying information through exchanging thoughts, messages or information with visual speech, signals, writing or behavior (Sully & Dallas, 2005). It is a meaningful exchange of information between two or more living things (Farhathullah, 2002). Communication is the sending and receiving of messages or news between two or more people so that the intended message can be understood (Rajshri, 2011). From this understanding it can be said that communication is the process of conveying messages from one person to another either directly (orally) or indirectly (through the media) (John Wiley, 1999).

The ability to communicate is very important for students to master so that students can obtain the information received and convey information appropriately so that meaningful learning occurs (Van Servellen, 1997). Communication is a skill needed in the 21st century (Akunjee et al., 2022). Communication is the way teachers and students interact to obtain information (Subudhi & Sinha, 2022). Communication skills can help students more easily capture information and are needed when conveying the results of discussions (Tabroni, 2019).

The ability to communicate is a necessary and very important skill for students and teachers (Viona et al., 2022). Apart from teachers and students in the school environment (Tabroni, Imam, Mubarok, Zaki Anwar, Sari, 2021), (Tabroni & Purnamasari, 2022). Someone in the community also needs to have good communication skills (Imam Tabroni et al., 2021). This communication ability needs to be sharpened so that students can communicate well and can be understood by the recipient (Ryckman, 2012). It is important for a student to have good communication skills so that students can write down the learning concept completely and correctly (Imam Tabroni, n.d.). In addition, if students are able to communicate well, students can state the problems of everyday life in learning material properly and correctly (Schunk, 2015).

C. Contextual Framework

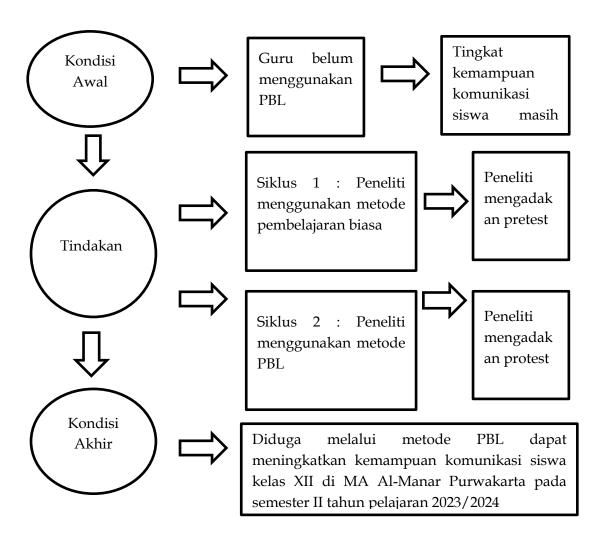


Figure 1. Contextual Framework

D. Hypothesis

Ho: There is no effectiveness of the Problem Based Learning learning model on the communication skills of class XII students

H1: There is the effectiveness of the Problem Based Learning learning model on the communication skills of class XII students

METHOD

A. Place of research and time of research

This research is done at MA Al-Manar, Jl. Purnawarman Barat No.71 Rt 15/03, Sindangkasih Village, Purwakarta District, Purwakarta Regency, West Java Province. This research was also conducted on December 3, 2022 until January 19, 2023.

B. Method

The method used is by conducting direct experiments with the *Problem Based Learning* (PBL) method in class XII. And to analyze the effectiveness of the *Problem Based Learning* (PBL) method in class XII this study used a questionnaire after completing the entire series in the *Problem Based Learning* (PBL) method. What was done during the research was by holding a pre-test and post-test regarding PBL learning methods to 17 sample people who were examined. The aim is to determine whether there is or is no effect of the Problem Based Learning (PBL) method in improving the communication skills of class XII students at MA Al-Manar.

C. Population and Sample

The population is the whole of the research object. If someone examines the entire research area then the research is a population and the sample is part of the population taken as a representative that represents the population. As for the population in this study is all students of class XII MA Al-Manar and the sample of the population is a small group that will be studied.

D. Data Analysis Technique

The data collection technique used in this study was a questionnaire test of the problem based learning method. Filling in the questionnaire was used twice, namely the pre-test and post-test carried out with the aim of knowing the level of communication ability of class XII students. Data collection using a questionnaire. The data is processed using statistics using the Validity Test, Reliability Test, Normality Test, Homogeneity Test, and t-test with the help of the SPSS 25.0 for Windows program. The results of this study were to determine the effectiveness of the Problem Based Learning method to improve the communication skills of class XII students at MA Al-Manar Purwakarta.

RESULTS Test Validity, Reliability, Normality, Homogeneity, and T-test

Table 1. Tests of Normality

]							
	a					Shapiro-Wilk		
	Problem			Stat				
	Based	Statistic			istic			
	Learning	S	df	Sig.	S	df	Sig.	
Student	PBL pretest	,204	13	,141	,922	13	,269	
Communic	PBL post-test	,128	13	,200 *	,954	13	,654	
ation								

^{*.} This is a lower bound of the true significance.

If the significance is less than 0.05, the data is not normally distributed, whereas in this study a significance of 0.654 was obtained, so the data was normally distributed.

Table 2. Test of Homogeneity of Variance

		Levene Statistics	df1	df2	Sig.
Student	Based on	,298	1	24	,590
Communic	Means				
ation	Based on	,412	1	24	,527
	Median				
	Based on	,412	1	23,279	,527
	Median and				
	with				
	adjusted df				
	Based on	,284	1	24	,599
	trimmed				
	mean				

If the significance based on the mean is more than 0.05, then the data is considered homogeneous. In this study, based on the mean of 0.590 so that the data is said to be homogeneous.

a. Lilliefors Significance Correction

Table 3. ANOVA Table

					Mean		
			Sum of		Squar		
			Squares	df	e	F	Sig.
Student	Betwe	(Combi	39,808	5	7,962	3,844	.054
Communicat	en	ned)					
ion *	Group	Linearit	28,913	1	28,913	13,958	,007
Problem	S	y					
Based		Deviati	10,895	4	2,724	1.315	,352
Learning		on from					
		Linearit					
		y					
	Within	Groups	14,500	7	2,071		
	Total		54,308	12			

The deviation from linearity in the significance obtained in this study is 0.352. If the dfl significance is more than 0.05, it can be said that the variable is linear.

Table 4. Paired Samples Statistics

				std.	std. Error
		Means	N	Deviation	Means
Pair 1	Before	44,62	13	1,710	,474
	After	46,77	13	2.127	,590

Table 5. Paired Samples Correlations

		Correlatio	
	N	n	Sig.
Pair 1 before after	13	,730	,005

It was found that the correlation coefficient of this study was 0.05, meaning that the correlated data was significant.

Table 6. Paired Samples Test

	Paired Differences								
			95%						
	Confidence								
					Inter	val of the			Sig.
			std.	std.	Difference				Sig. (2-
		Mea	Devi	Error	Low				taile
		ns	ation	Means	er	Upper	t	df	d)
Pair 1	before	-	1,463	,406	-	-1,270	-	12	,000
	after	2.154			3,038		5,307		

Based on the t-test conducted, it was found that the significance value of the t-test was 0.00, which is less than 0.05. These results can be interpreted that the PBL method can improve students' communication skills so that the method proves to be effective.

DISCUSSION

Communication is the process of exchanging information, ideas or feelings between two or more individuals or groups (Van Servellen, 1997). While students' communication skills are students' abilities to send and receive information, ideas, or feelings effectively and efficiently. This skill is considered important because it can help students to interact with others effectively and create good feelings with others (Rajshri, 2011). Communication is also a student skill to exchange ideas and hone each other's knowledge gained by colleagues. Communication is an important factor in students' cognitive, affective, and psychomotor development. This is driven by the active role of all students in improving certain abilities and skills (Akunjee et al., 2022).

Good student communication skills are needed to meet the demands of the 21st century which requires individuals to be able to adapt to rapid changes and technological developments (Thut et al., 1964). Good communication skills will help students communicate well inside and outside the classroom, as well as in interacting with others in various situations. Good communication skills will also assist students in collaborating with classmates, completing assignments, and expressing their opinions clearly and effectively. With good communication skills, students can develop themselves and compete in an increasingly competitive world of work (Siti Maesaroh et al., 2022).

The ability to communicate in the school environment, students are expected to be able to communicate well in order to be able to interact with teachers and friends effectively (Khodijah et al., 2021). However, some students

may experience difficulties in communicating for various reasons (Farhathullah, 2002).

Some students may have difficulty expressing their opinions because they lack self-confidence, are shy, or are afraid of being rejected by their peers. This can cause students to be quiet and less active in class discussions. Students may also feel anxious or afraid of making mistakes when speaking in front of the class. This can cause students to become nervous and less focused when speaking. For this reason, in this study, problem-based learning or problem-based learning was carried out to see if there was an increase in students' communication skills, in this case students at MA Al-Manar in learning activities in class.

Problem-based learning (PBL) is a learning method that places problems or cases as the main focus in the learning process. Students learn by solving problems or cases that are relevant to the topic being taught. In *Problem Based Learning* (PBL), students play an active role in finding solutions to a given problem, using the skills and knowledge they have previously acquired (Boud & Feletti, 1998).

Problem Based Learning (PBL) prioritizes the learning process rather than the final result, students are required to be active in the learning process, solve problems, and work together with their classmates.

MA Al-Manar has not implemented *Problem Based Learning* (PBL) as a learning method in class, causing learning to be conventional and monotonous. One-way monotonous learning can make students less active and reluctant to participate in the learning process.

Most of the MA students in class XII Al-Manar have difficulty communicating in class, whether in expressing their opinions or expressing their ideas to their teachers or friends. This lack of communication will cause learning in class to be more monotonous and uninteresting for students.

Research shows that the normality test shows that the data is normally distributed because the significance is greater than 0.05. The homogeneity test shows that the data is considered homogeneous because the significance is greater than 0.05. Analysis of variance (ANOVA) shows that the variable is linear because the significance is greater than 0.05. The correlation test shows that the correlated data is significant because the correlation coefficient is greater than 0.05. The t test shows that the *Problem Based Learning* (PBL) method can improve students' communication skills because the significance is less than 0.05.

Based on the initial hypothesis, h0 is rejected and h1 is accepted, which means that the problem-based learning method positively influences students' communication skills. Thus the problem based learning method has proven to

be effective and can be used as a way to improve students' communication skills.

CONCLUSIONS AND RECOMMENDATIONS

Communication skills with the learning process are two things that cannot be separated. Communication skills are also an important requirement in the learning process. Because it can help and facilitate students to express ideas, and exchange information with teachers or fellow students. However, not all of them can communicate well. There are some students who have difficulty in communicating. Therefore, in overcoming this problem, researchers used the *Problem Based Learning* (PBL) method to improve students' communication skills. *Problem Based Learning* (PBL) is a problem-solving-based learning method where students are expected to be able to solve problems and be able to express them clearly and easily understand them.

The results of this study indicate that using the *Problem Based Learning* (PBL) method there is an increase in overcoming difficulties in student communication. This increase was discovered after being tested by holding pre-tests and post-tests using the *Problem Based Learning* (PBL) method regarding students' communication difficulties. Based on the hypothesis h0 and h1 above, it means that using the *Problem Based Learning* (PBL) method positively influences students' communication skills. Thus the *Problem Based Learning* (PBL) method has proven effective and can be used as a way to improve students' communication skills.

From the results of the analysis and conclusions, the researcher provides the following recommendations:

- a. Experimental research on the *Effectiveness of Problem Based Learning* (PBL), is effective in improving the communication skills of class XII students at MA Al-Manar. For this reason, Madrasah Aliyah Al-Manar Purwakarta can facilitate teachers in the form of training on how to apply the *Problem Based Learning* (PBL) method correctly. So that it can support success in learning.
- b. Research on learning using the problem-based learning model has positively influenced students' communication skills at MA Al-Manar Purwakarta. Thus this problem based learning method can be used as a way to improve students' communication skills.

FURTHER STUDY

In order to improve better results for future research, to examine more deeply about the study of the *Problem Based Learning* (PBL) method, while we recommend that others need to be integrated, including; learning based on inquiry learning, discovery learning, problem solving, and project based learning (PjBL). The learning method is an integrative method of scientific learning in the 2013 curriculum, the elaborative essence of student-based learning.

REFERENCES

- Acker, D. D. (1992). Skill in Communication: A Vital Element in Effective Management. Defense Systems Management College.
- Akunjee, M., Akunjee, N., Siddiqui, S., & Mallick, A. S. (2022). *The Easy Guide to OSCEs for Communication Skills*. CRC Press.
- Boud, D., & Feletti, G. (1998). The Challenge of Problem-based Learning. Kogan Page.
- Cendekia, M. S., & Lismaya, L. (2019). *Berpikir Kritis & PBL: (Problem Based Learning)*. MEDIA SAHBAT CENDEKIA.
- Farhathullah, T. M. (2002). Communication Skills for Technical Students. Sangam Books Limited.
- Hanum, L. (2017). Perencanaan Pembelajaran. Syiah Kuala University Press.
- Imam Tabroni, A. R. B. (n.d.). Implementation Of Islamic Education Learning With Social Care Participants Educated. *Jurnal Multidisiplin Madani (MUDIMA)*, 2(2), 805–810. https://doi.org/https://doi.org/10.54259/mudima.v2i2.443.
- Imam Tabroni, Alya Siti Nurhasanah, & Vina Maulidina. (2021). BUILD STUDENT CHARACTER THROUGH ISLAMIC RELIGIOUS EDUCATION. *SOKO GURU: Jurnal Ilmiah Kependidikan*, 1(3 SE-Articles), 23–26.
 - http://ejurnal.politeknikpratama.ac.id/index.php/sokoguru/article/view/58.
- John Wiley, S. (1999). Communication Skills for the Environmental Technician. Wiley.
- Kemendikbud.go.id. (2022).
- Khodijah, I. S., Khodijah, A., Adawiyah, N., & Tabroni, I. (2021). Tantangan pendidikan karakter di era digital. *Lebah*, 15(1 SE-Articles), 23–32. https://www.plus62.isha.or.id/index.php/abdimas/article/view/75.
- Lalwani, K., Cohen, I. T., Choi, E. Y., & Raman, V. T. (2018). *Pediatric Anesthesia: A Problem-Based Learning Approach*. Oxford University Press.
- Listari, M., Imam Tabroni, & Nurjanah, E. (2022). Kerjasama Orang Tua dan Guru dalam Meningkatkan Kedisiplinan Siswa di UPTD SDN 1

- Campakasari. EL Bidayah: Journal of Islamic Elementary Education, 4(2 SE-Articles), 200–212. https://doi.org/10.33367/jiee.v4i2.2944.
- Moust, J., Bouhuijs, P., & Schmidt, H. (2021). *Introduction to Problem-Based Learning*. Taylor \& Francis.
- Putri Nurul Fadillah, Imam Tabroni, & Nur Aisah Jamil. (2022). Improving Learning Motivation in Islamic Education Through Animation Video Media. *Indonesian Journal of Society Development*, 1(1 SE-Articles), 27–38. https://doi.org/10.55927/ijsd.v1i1.2039.
- Rajshri. (2011). Communication Skill. Educreation Publishing.
- Ryckman, R. M. (2012). Theories of Personality. Cengage Learning.
- Sari, N., & Tabroni, I. (2022). Character Formation in Children through Periodic Counseling during the Covid-19 Period. *Jurnal Pengabdian Masyarakat Bestari*, 1(8 SE-Articles), 735–746. https://doi.org/10.55927/jpmb.v1i8.1825
- Savin-Baden, M. (2000). Problem-Based Learning in Higher Education: Untold Stories. McGraw-Hill Education.
- Savin Baden, M., & Howell Major, C. (2004). *Foundations Of Problem-Based Learning*. McGraw-Hill Companies, Incorporated.
- Schunk, D. H. (2015). *Learning Theories: An Educational Perspective* (Schunk, D.). Pearson Education.
- Schwartz, P. (2013). *Problem-based Learning*. Taylor \& Francis.
- Siti Maesaroh, N., Tabroni, I., & Syaprudin, D. (2022). The Influence of Google Classroom Learning Media on Student Learning Motivation During Covid-19 (Study of Students of SMK Negeri 2 Purwakarta PAI Subjects). *Paedagogie: Jurnal Pendidikan Dan Studi Islam*, 3(01 SE-Articles), 35–56. https://doi.org/10.52593/pdg.03.1.03.
- Subudhi, B., & Sinha, G. R. (2022). Development of Employability Skills Through Pragmatic Assessment of Student Learning Outcomes. IGI Global.
- Sully, P., & Dallas, J. (2005). Essential Communication Skills for Nursing. Elsevier Mosby.
- Tabroni, Imam, Mubarok, Zaki Anwar, Sari, R. P. (2021). TEACHER'S EDUCATING STUDENT **CHARACTER** STRATEGY IN IN THE CORONAVIRUS DISEASE (COVID-19). Iurnal Ilmu Pendidikan Muhammadiyah Kramat Jati, 2(1),1-7.https://doi.org/https://doi.org/10.55943/jipmukjt.v2i1.13.
- Tabroni, I. (2019). *Model Pendidikan Islam: Teknik Mendidik Anak dengan Treatment di Era* 4.0. CV Cendekia Press.
- Tabroni, I., & Purnamasari, R. (2022). Kajian Yasinan Mingguan dalam Membina Karakter Masyarakat Pada Masa Covid-19 di Perumahan Lebak Kinasih Purwakarta. *Sivitas*: *Jurnal Pengabdian Dan Pemberdayaan Masyarakat*, 2(1), 9–18. https://doi.org/10.52593/svs.02.1.02.

- Thut, I. N., Adams, D. K., Adams, D. K., & Adams, D. (1964). *Educational Patterns in Contemporary Societies*. McGraw-Hill.
- Van Servellen, G. M. (1997). *Communication Skills for the Health Care Professional: Concepts and Techniques*. Aspen Publishers.
- Viona, Imam Tabroni, & Ayit Irpani. (2022). Constraints of Parents in Accompanying Children in Distance Learning (PJJ) in Bungursari Village. *Acta Psychologia*, 1(3 SE-Articles), 100–104. https://psychologia.pelnus.ac.id/index.php/Psychologia/article/view/6
- Zhu, Z., & Zhou, C. (2019). Global Perspectives on Fostering Problem-Based Learning in Chinese Universities. IGI Global.