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The Effect of Project-Based Learning on Students' Speaking and Interpersonal Communication Skills

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ABSTRACT
This study aims to determine the influence and effectiveness of project-based learning on students' speaking and interpersonal communication skills in Indonesian language subjects. The method used in this study is quantitative descriptive with a quasi-experimental design. This study involved two main classes, namely the experimental class and the control class. The research design used pre-tests and post-tests. Data analysis was conducted using a quantitative descriptive approach, using paired sample t-tests and independent sample t-tests. The results of this study indicate that project-based learning has a significant effect on students' speaking and interpersonal communication skills. This can be seen from the significance value (two tails) of 0.001, which is smaller than 0.05. This means that there is a significant difference in students' speaking skills after implementing the project-based learning model. Similarly, interpersonal communication skills also experienced a significant increase, namely a significant difference in the application of project-based learning on students' interpersonal communication skills. This is evidenced by a significance value (two tails) of 0.001, which is smaller than 0.05. The implications of these research results reinforce that project-based learning can improve speaking skills and build communication skills through structured social practices.

Keywords: project-based learning, student speaking skills, interpersonal communication skills

Pengaruh Pembelajaran Berbasis Proyek terhadap Keterampilan Berbicara dan Komunikasi Interpersonal Mahasiswa

ABSTRAK
Penelitian ini bertujuan untuk mengetahui pengaruh dan efektivitas pembelajaran berbasis proyek terhadap keterampilan berbicara dan komunikasi interpersonal mahasisiwa pada mata kuliah bahasa Indonesia. Metode yang digunakan dalam penelitian ini adalah deskriptif kuantitatif dengan jenis eksperimen semu *(quasi-experimental design)*. Penelitian ini melibatkan dua kelas utama, yakni eksperimen dan kontrol. Desain penelitian ini menggunakan *pre-test* dan *post-test*. Analisis data dilakukan secara deskriptif kuantitatif menggunakan *paired samples t-test* dan *independent sample t-test*. Hasil penelitian ini menunjukkan adanya pengaruh yang signifikan pada penerapan pembelajaran berbasis proyek terhadap kemampuan berbicara dan komunikasi interpersonal mahasiswa. Hal ini terbukti pada nilai signifikan (2-*tailed*) 0,001 lebih kecil dari 0,05. Artinya, terdapat perbedaan hasil yang signifikan pada kemampuan berbicara mahasiswa setelah menerapkan model pembelajaran berbasis proyek. Demikian halnya dengan kemampuan komunikasi interpersonal juga mengalami peningkatan signifikan, yakni adanya perbedaan yang signifikan atas perlakuan pembelajaran berbasis proyek terhadap kemampuan komunikasi interpersonal mahasiswa. Hal ini dibuktikan pada nilai signifikansi (2-*tailed*) 0,001 lebih kecil daripada 0,05. Implikasi hasil penelitian ini memberikan penguatan bahwa pembelajaran berbasis proyek dapat meningkatkan keterampilan berbicara dan membangun keterampilan komunikasi melalui praktik sosial yang terstruktur.

Kata kunci: pembelajaran berbasis proyek, keterampilan berbicara, komunikasi interpersonal

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INTRODUCTION

Conventional learning methods are often dominated by lectures (Iqbal et al., 2021; Sailer & Sailer, 2021; Trullàs et al., 2022) and other passive methods. These methods often lack real-world context and adequate practice opportunities for students to develop their speaking skills. Yet, speaking skills are crucial fundamental aspects of academic and professional environments (Ad & Ummah, 2024; Santika, 2024; Yunusova et al., 2025). This lack of focused and authentic practice makes it difficult for students to present ideas clearly, actively participate in discussions, and communicate effectively in real-world situations. Therefore, we need new methods that can provide students with more opportunities for hands-on practice. One method considered capable of addressing the aforementioned problems and gaps between theory and practice is project-based learning (Kokotsaki et al., 2016; Satar et al., 2025; Taufiqurrahman & Junaidi, 2021).

Project-based learning (PjBL) centers on complex, authentic, and collaborative project assignments (Hussein, 2021; Mutanga, 2024; Siminto et al., 2025). The principles of PjBL require students to produce tangible products or solutions (Santana & de Deus Lopes, 2024). The authentic nature of these projects inherently creates a need for students to communicate effectively, both when planning projects, working in teams, and presenting their results. During the process, students engage in various structured speaking activities (Sormunen et al., 2020; Wicaksono et al., 2023), such as group discussions to solve problems, negotiate roles and resources, and interact with external parties if the project requires it.

The speaking activities inherent in PjBL—especially the final project presentation—have the potential to significantly improve students' speaking skills (Maulana & Suparmadi, 2024; Safitri et al., 2025; Song et al., 2024). Presentations provide a platform for students to practice organizing ideas, using persuasive language, and mastering public speaking techniques. All of this takes place in a meaningful, low-pressure context compared to actual professional situations. Furthermore, constructive feedback from lecturers and peers after presentations serves as an important mechanism for continuous improvement. According to Yoel et al. (2023), this will impact the quality and style of an individual's interpersonal communication.

Interpersonal communication is the process of exchanging information, ideas, and feelings directly between two or more people (Braithwaite et al., 2021; Efektif, 2024; Hargie, 2021). This communication involves interactions aimed at building mutual understanding and agreement. Therefore, interpersonal communication is how we communicate with others in everyday life.

Interpersonal communication encompasses more than just speaking (Fazri et al., 2022), but also listening, understanding, and responding appropriately. Interpersonal communication can occur anywhere (Aji et al., 2023), such as conversations between two friends, family members, or even three people. The purpose of this communication is to build positive relationships (Rachmad, 2022; Xie & Derakhshan, 2021), understand each other, enjoy each other, influence each other, and reflect on oneself. Conversations between friends, family, discussions, and even classroom conversations between teachers and students or lecturers and students are examples of interpersonal communication. Therefore, Solomon & Theiss (2022) state that interpersonal communication is crucial for building positive and successful social relationships.

Based on the background of the problem described above, the research questions are formulated as follows:

1) How does project-based learning affect students' speaking skills?
2) How does project-based learning affect students' interpersonal communication skills?

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Meanwhile, the objectives of this study are: 1) to assess the effect of project-based learning on students' speaking skills? and 2) to assess the effect of project-based learning on students' interpersonal communication skills.

The benefits of this research are divided into several aspects, including:

1) for lecturers, the use of interactive learning methods—such as Project-Based Learning (PjBL)—is highly recommended to improve student learning outcomes. Furthermore, the development of the 4Cs (critical thinking, creativity, collaboration, and communication) can occur simultaneously.
2) for students, learning becomes more varied and enjoyable. This can foster a sense of enthusiasm for learning.
3) for institutions, the implementation of project-based learning can support the 7-year Higher Education Competency Standards (KPI) of higher education institutions.

Several studies on project-based learning methods related to language skills, particularly speaking skills, have received considerable attention. One such study was conducted by Gd et al. (2019) on the Project-Based Learning Model: Its Effect on Speaking Skills and the Learning Process. Hasnawati et al. (2025) examined the Effect of Project-Based Learning on the Speaking Skills of Grade X DPB Students at SMK Negeri 1 Soppeng. Sumitro & Rizqi (2024) on High School Students' English Speaking Skills: An Experimental Study of Project-Based Learning Methods. Widiasari et al. (2025) on Project-Based Learning Strategy P-5 to Improve Elementary School Students' Speaking Skills. One study by Gd et al. (2019) combined this research with another dependent variable, namely the learning process. However, several other studies focused solely on the concept of the influence of project-based learning on general speaking skills. Meanwhile, this study attempted to combine it with another dependent variable, namely interpersonal communication.

Interpersonal communication is a crucial aspect of interpersonal interactions (Darmawan et al., 2025; Purwati, 2023). In essence, good communication is born from complex thought patterns and concepts. Therefore, this study aims to empirically test the extent and significance of the implementation of Project-Based Learning (PjBL) on improving students' speaking and interpersonal communication skills, as well as to provide data-based evidence regarding the effectiveness of this innovative learning model.

METHOD

This study employed a quantitative descriptive design with a quasi-experimental design and a non-equivalent control group design. This design was chosen because the researchers used pre-formed classes (intact groups) without fully randomizing the subjects. The study involved two main classes: an experimental class that received Project-Based Learning (PjBL) and a control class that followed conventional learning. The research design employed a pre-test and post-test. This design allowed the researchers to compare results between the study groups before and after the treatment.

The population in this study was all nine classes of Law Study Program students in the odd semester of the 2025/2026 academic year at Bangka Belitung University. Two classes were selected to meet the sample size. One class served as the experimental class and the other as the control class. The classes were selected using purposive sampling or cluster random sampling.

The research steps were carried out in several stages, including:

1. Preparation Stage

   The lecturer—of course—prepared a Semester Learning Plan (RPS) that aligns with the learning process and methods using the PjBL method. The research instrument was prepared and validated by an evaluator to ensure its validity and reliability.

Jurnal Pembelajaran Bahasa dan Sastra
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2. Implementation Stage

The researcher determined the experimental and control classes. The researcher also administered pre-tests to both the experimental and control classes to determine the students' initial abilities.

The experimental class: learning used the PjBL method for 8 meetings, or until mid-semester. Students were divided into several learning project groups. Then, students presented the results of their learning projects.

The control class: learning used a conventional method with a lecture approach for 8 meetings, or until mid-semester.

The researcher then observed, assessed, and compared the two classes after the learning process concluded.

3. Evaluation Stage

The researcher conducted a post-test to assess their reactions and relevance to the learning that had been conducted. Interviews were conducted with some of the experimental classes to elaborate on their experiences during the PjBL learning process.

This study used three main instruments: a speaking ability test, interpersonal communication observations, and limited interviews. The speaking ability test, adapted from Hughes (2021), assessed pronunciation, fluency, grammar, vocabulary, and idea organization.

The steps in developing a student speaking ability test include: first, the researcher determines the main objective, which is to assess the effect of PjBL on speaking ability and to compare achievement between the control and experimental classes. Second, the researcher determines the form of the test to be administered, namely a performance test. Third, the researcher determines the assessment aspects according to Huges (2021), namely pronunciation, fluency, grammar, vocabulary, and organization of ideas. Fourth, the researcher develops a test instrument outline and rubric. Fifth, the researcher administers the test. Finally, the researcher scores and analyzes the assessment.

Observations examine student participation, openness, empathy, responsiveness, interaction effectiveness, and courage in public speaking. Meanwhile, interviews gather in-depth information about the learning experience using projects.

The steps in developing observation guidelines include: first, the researcher determines the observation objective, which is to assess students' speaking ability in the context of performance (project presentations). Second, the researcher determines the aspects to be observed: pronunciation, fluency, grammar, vocabulary, and organization of ideas. Third, the researcher develops a rating scale, including very good, good, sufficient, poor, and very poor. Fourth, the observation is conducted. Finally, the score is interpreted. Similarly, with interviews, the interview guidelines cover everything from developing questions and determining interview subjects, to conducting and interpreting the results.

The data was analyzed using quantitative and qualitative descriptive analysis. The quantitative analysis employed descriptive tests, normality tests, paired sample t-tests, and independent sample t-tests. These tests were conducted to examine differences in scores between the experimental and control classes before and after the test. Meanwhile, the qualitative analysis was used to describe the observation instruments for interpersonal communication and interviews.

RESULTS

1. Project-Based Learning on Students' Speaking Skills

Before conducting paired sample t-tests, independent sample t-tests, and data normality tests, researchers need to examine the data descriptively, such as the number of samples, minimum value, maximum value, mean, and standard deviation. The following are the results of the descriptive statistical tests in Table 1.

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Table 1
Descriptive Statistical Data of Speaking Ability

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pretest-Experiment	30	57	71	64.83	3.779
Post-test-Experiment	30	81	98	89.17.00	4.572
Pretest-Control	30	55	75	64.57.00	3.875
Post-test-Control	30	61	77	69.73	4.487

In Table 1 above, the sample size (N) for both the experimental and control classes was 30. The minimum score for both classes was 57. The maximum score for both classes was 98. The mean scores for both classes, respectively, were 64.83, 89.17, 64.57, and 69.73. The standard deviations for both classes, respectively, were 3.77, 4.57, 3.87, and 4.48. Statistically, the mean scores for both variables, both pre-test and post-test, increased. A significant increase occurred in the experimental class, or the project-based learning treatment, from 64.83 to 89.17.

To answer the first question above—the effect of project-based learning on students' speaking skills—the researchers used a pre-test and post-test in the experimental class. The pre-test was administered to measure students' speaking skills before being exposed to the project-based learning treatment. Meanwhile, the post-test was administered to measure students' abilities after being exposed to the project-based learning treatment. A paired sample t-test was used to determine differences in students' speaking abilities before and after project-based learning. This test was chosen because the data came from the same group (Syuhada et al., 2025), but at two different time points (pre-test and post-test). The statistical results of the paired sample t-test using SPSS are presented in Table 1.

Table 2
Results of the Normality Test of Speaking Ability Data

Tests of Normality						
Group	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-test Eksperiment	.118	30	.200*	.945	30	.127
Post-test Eksperiment	.128	30	.200*	.968	30	.480
Pre-test Control	.111	30	.200*	.972	30	.591
Post-test Control	.113	30	.200*	.953	30	.204

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The results of the normality test showed that the speaking ability data were normally distributed. The significance values for all classes (experimental and control) using the Shapiro-Wilk method were greater than 0.05, indicating that the data were normally distributed.

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Table 3
Results of the Paired Sample T-Test of Experiment Class on Speaking Skill

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test Post-test	-24.333	6.255	1.142	-26.669	-21.998	-21.307	29	.000

The results of the normality test indicate that the data are normally distributed. The significance value for all classes (experimental and control), using both the Kolmogorov-Smirnov and Shapiro-Wilk methods, was <0.05, indicating that the data were normally distributed. This means that this research phase can be continued with a paired sample t-test.

To answer the first question above—the effect of project-based learning on students' speaking skills—the researchers used a pre-test and post-test in the experimental class. The pre-test was administered to measure students' speaking skills before being exposed to project-based learning. Meanwhile, the post-test was administered to measure students' skills after being exposed to project-based learning. The paired sample t-test was used to determine differences in students' speaking skills before and after being exposed to project-based learning. This test was chosen because the data came from the same group (Syuhada et al., 2025) but at two different time periods (pre-test and post-test). Before conducting the t-test, the researcher conducted a Shapiro-Wilk normality test, which showed that the data were normally distributed (0.480 > 0.05), allowing parametric testing to be used. The statistical results of the paired sample t-test using SPSS are shown in Table 3.

Table 4
Results of the Paired Sample T-Test of Control Class on Speaking Skill

Independent Samples Test

	Levene's Test for Equality of		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	.000	.990	16.616	58	.000	19.433	1.170	17.092	21.774
Equal variances not assumed			16.616	57.980	.000	19.433	1.170	17.092	21.774

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The results of the paired sample t-test analysis in Table 3 above show a significance value (2-tailed) of 0.001, which is less than 0.05. This means there is a significant difference in students' speaking ability after implementing the project-based learning model.

Next, an independent sample t-test was used to determine the difference in speaking ability between the experimental and control classes. The two groups came from different subjects and were unrelated (Syuhada et al., 2025). The statistical results of the independent sample t-test are shown in Table 5.

Table 5
Independent Sample t-Test Results on Speaking Skill

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Speaking Ability	Equal variances assumed	.000	.990	16.616	58	.000	19.433	1.170
	Equal variances not assumed			16.616	57.980	.000	19.433	1.170

The results of the independent sample t-test in Table 4 above show a significance value (2-tailed) of 0.000, which is less than 0.05. This means there was a significant difference between the experimental and control groups in the post-test (0.000 < 0.05). This indicates that the project-based learning treatment had a very positive impact on students' speaking skills.

2. Project-Based Learning on Students' Interpersonal Communication Skills

Before conducting paired sample t-tests, independent sample t-tests, and data normality tests, researchers need to examine the data descriptively, such as the number of samples, minimum value, maximum value, mean (average), and standard deviation. The results of the descriptive statistical tests are shown in Table 6.

Table 6
Results of the Paired Sample T-Test on Interpersonal Communication Skills

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest-Experiment	30	60	77	69.37.00	4.529
Post-test-Experiment	30	68	80	75.20.00	3.556
Pretest-Control	30	60	71	64.33.00	2.721
Post-test-Control	30	60	75	68.40.00	2.343

Jurnal Pembelajaran Bahasa dan Sastra
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In Table 6 above, the sample size (N) for both the experimental and control classes was 30. The minimum value for the interpersonal communication skills variable for both classes was 60. The maximum value for both classes was 80. The mean values for both classes, respectively, were 69.37, 75.20, 64.33, and 68.40. The standard deviations for both classes, respectively, were 4.52, 3.55, 2.72, and 2.34. Statistically, the mean values ??for both variables, both pre-test and post-test, increased. A significant increase occurred in the experimental class, or the project-based learning treatment, from 69.37 to 75.20.

Table 7
Results of the Normality Test of Interpersonal Communication Skills Data

Tests of Normality

	Kelas	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Interpersonal Communication Skills	Pre-test Experiment	.115	30	.200*	.951	30	.176
	Post-test Experiment	.160	30	.048	.931	30	.053
	Pre-test Control	.111	30	.200*	.972	30	.591
	Post-test Control	.113	30	.200*	.953	30	.204

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

To answer the second question above—the impact of project-based learning on interpersonal communication skills—pre-tests and post-tests were also used to assess students' interpersonal communication skills. Similar to the student speaking ability test above, the pre-test was used to assess students' interpersonal communication skills before being given the treatment. Meanwhile, a post-test was conducted after the students were given project-based learning. The results of the paired sample t-test are shown in Table 7.

Table 8
Results of the Paired Sample T-Test of Control Class on Interpersonal Communication Skills

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Interpersonal Communication Experiment Pre-Test - Interpersonal Communication Experiment Post-Test	-5.833	2.588	.472	-6.800	-4.867	-12.348	29	.000

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The results of the paired sample t-test analysis in Table 7 above indicate a significant difference between the project-based learning treatment and students' interpersonal communication skills. This is evidenced by the 2-tailed significance value of 0.001, which is less than 0.05.

Next, an independent sample t-test was used to determine the difference in interpersonal communication skills between the experimental and control classes. The two groups were from different subjects and were unrelated. The statistical results of the independent sample t-test are shown in Table 9.

Table 9
Results of the Independent Sample T-Test of Control Class on Interpersonal Communication Skills

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Interpersonal Communication Skills	Equal variances assumed	.793	.377	-22.469	58	.000	-24.333	1.083
	Equal variances not assumed			-22.469	56.016	.000	-24.333	1.083

The results of the independent sample t-test showed a significant difference between the experimental and control groups in the post-test (0.001 < 0.05), indicating that PjBL was effective in improving interpersonal communication skills with a 2-tailed significance value of 0.001.

DISCUSSION

The results of the study indicate that the implementation of project-based learning had a significant positive impact on students' speaking skills. Quantitatively, the post-test scores for speaking skills increased significantly compared to the pre-test. This indicates that authentic student activities—such as project presentations, group discussions, and simulations—provide students with opportunities to practice speaking in real-life contexts, thus accelerating the development of speaking skills.

Furthermore, interpersonal communication skills also experienced significant improvements; students became more active and skilled at listening, providing constructive feedback, working in teams, making joint decisions, and solving problems collaboratively. This intense interaction during the project process naturally develops interpersonal skills. This is also evidenced by the statistical results with a significance value (2-tailed) of 0.001, which is less than 0.05. This means there is a significant difference between the project-based learning treatment and interpersonal communication skills.

Both variables—speaking skills and interpersonal communication—have data with a normal distribution. This is evident from the significance value emerging from the data, which is greater than 0.005.

These findings align with several pieces of literature stating that project-based learning has a significant positive impact, improving communication skills (Sintia & Safitri, 2025; Yulianti, 2022), and effectively engaging students in group learning (Fariza & Kusuma, 2024). The results of this study also add empirical evidence

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to the context of language learning and interpersonal skills at the tertiary level. However, the effectiveness of this learning has an important caveat. The implementation of project-based learning depends on the quality of its implementation (Nurasman & Alfalah, 2025; Nusa, 2021; Putri et al., 2021). This means that if project-based learning outcomes are not yet positive, this may be due to inadequate project planning or unbalanced working groups. Therefore, it is crucial for lecturers to effectively manage student project groups.

Furthermore, other findings suggest that a project-based approach that provides contextual experiences (Ramadhan & Hindun, 2023; Zega, 2022) can be used as a substitute for conventional lecture methods if the learning objectives emphasize communication and collaboration skills. However, it is important to understand that Project-Based Learning (PjBL) is not the only option; its success depends on planning, instructional support, and resource availability (Nadila & Lestari, 2025; Saputri et al., 2024; Amri & Thahar, 2022).

Based on the findings above, there are several practical recommendations for implementing project-based learning, including: first, the project design should include outputs that can be presented verbally; second, the formation of heterogeneous groups to facilitate mutual learning; and third, each group should produce a logbook report so that the lecturer can monitor the process and progress of each group. Furthermore, the lecturer's competence and capacity in classroom management and conflict management need to be considered for effective PjBL implementation.

The implications of this research are quite broad. Theoretically, the results confirm several previous studies that suggest that learning that focuses on real-life tasks can build communication skills through structured social practices. Practically, project-based learning makes the lecturer's role a facilitator, designing a fun learning experience that emphasizes collaborative processes.

CONCLUSION

First, project-based learning has been shown to have a positive and significant impact on students' speaking skills. Students participating in project-based learning demonstrated significantly better speaking skills than students learning through conventional methods. This improvement is evident in the paired sample t-test (Table 3), which shows a significant value (2-tailed) of 0.001, less than 0.05, and the independent t-test (Table 4), which shows a significant value (2-tailed) of 0.001, less than 0.05. This indicates a significant effect of project-based learning. Furthermore, students' active involvement in project planning, discussion, production, and presentation provides them with the opportunity to practice speaking more intensively, significantly improving their speaking skills.

Second, the Effect of Project-Based Learning on Students' Interpersonal Communication Skills In addition to improving speaking skills, project-based learning also positively impacts students' interpersonal communication skills. The collaborative interactions that occur during the project process enable students to develop their ability to express opinions, build cooperation, solve problems together, and demonstrate empathy toward other group members. This is also evident in the paired sample t-test results in Table 5 above, which show a 2-tailed significance value of 0.001, which is less than 0.05, and an independent t-test with a 2-tailed significance value of 0.001. This means that the implementation of PjBL effectively improves students' interpersonal communication skills.

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REFERENCES

Ad, F. F., & Ummah, H. (2024). Menumbuhkan Keterampilan Berbicara dalam Pembelajaran Bahasa di Sekolah. *Demagogi: Journal of Social Sciences, Economics and Education*, *2*(4), 239–251.

Aji, R., Aji, S. R., Noorma, N., & Suratman, S. (2023). Interpersonal Communication. *Repository.* Lambert Academic Publishin.

Amril, K. J., & Thahar, H. E. (2022). Pengembangan Modul Elektronik Menulis Teks Cerpen Berbasis Project Based Learning bagi Siswa Kelas XI SMA. Diglosia: Jurnal Kajian Bahasa, Sastra, Dan Pengajarannya, 5(3), 715-730. https://doi.org/10.30872/diglosia.v5i3.489

Darmawan, D., Reksadji, R., & Hanafi, S. (2025). Penerapan Komunikasi Interpersonal Pembina Terhadap Keterbukaan Diri Siswa. *Jambura Journal of Community Empowerment*, 356–362. *https://doi.org/10.37411/jjce.v6i2.3760*

Efektif, I. Y. (2024). Jurnal Inovasi Global. *Jurnal Inovasi Global*, *2*(2), *265—275. https://Doi: 10.58344/jig.v2i2.60*

Fariza, N. A., & Kusuma, I. H. (2024). Implementasi Model Pembelajaran berbasis Proyek dalam Meningkatkan Kreativitas Siswa Sekolah Dasar. *Pubmedia Jurnal Penelitian Tindakan Kelas Indonesia*, *1*(3), *1—10. https://doi.org/10.47134/ptk.v1i3.453*

Fazri, M. A. L., Putri, I. A., & Suhairi, S. (2022). Keterampilan Interpersonal dalam Berkomunikasi Tatap Muka. *Da'watuna: Journal of Communication and Islamic Broadcasting*, *2*(1), 46–58. *https://doi.org/10.47467/dawatuna.v2i1.510*

Gd, L., Budiarta, R., Ganesha, U. P., & Berbicara, K. (2019). *Model Pembelajaran Berbasis Proyek/ : Pengaruhnya*. *3 (1)*, 71–77. *https://doi.org/10.36002/jmk.v3i1.735*

Hargie, O. (2021). *Skilled Interpersonal Communication: Research, Theory and Practice (7th ed.)*. Routledge. *https://doi.org/10.4324/9781003182269*

Hasnawati, H., Sultan, S., & Saleh, M. (2025). Pengaruh Pembelajaran Berbasis Proyek dalam Keterampilan Berbicara Siswa Kelas X DPB SMK Negeri 1 Soppeng. *Panthera: Jurnal Ilmiah Pendidikan Sains Dan Terapan*, *5*(3), 709–721. *https://doi.org/10.36312/panthera.v5i3.560*

Hussein, B. (2021). Addressing Collaboration Challenges in Project-based Learning: The Student's Perspective. *Education Sciences*, *11*(8), 434. *https://doi.org/10.3390/educsci11080434*

Iqbal, M. H., Siddiqie, S. A., & Mazid, M. A. (2021). Rethinking theories of Lesson Plan for Effective Teaching and Learning. *Social Sciences & Humanities Open*, *4*(1), 100172. *https://doi.org/10.1016/j.ssaho.2021.100172*

Kokotsaki, D., Menzies, V., & Wiggins, A. (2016). Project-based Learning: A review of the Literature. *Improving Schools*, *19*(3), 267–277. *https://doi.org/10.1177/1365480216659733*

Maulana, C., & Suparmadi, S. (2024). Using Project-Based Learning To Improve Speaking Skills. *Journal of Science and Social Research*, *7*(3), 833–842. *https://doi.org/10.54314/jssr.v7i3.2070*

Mutanga, M. B. (2024). Students' perspectives and experiences in project-based learning: A qualitative study. *Trends in Higher Education*, *3*(4), 903–911. *https://doi.org/10.3390/higheredu3040052*

Nadila, A. D., & Lestari, O. (2025). Pengalaman Siswa dalam Mengikuti Pembelajaran

Proyek (Project-Based Learning) pada Kurikulum Merdeka. *Jurnal Pendidikan Dan Pembelajaran*, *4*(02), 338–346. *https://ojs.smkmerahputih.com/index.php/juperan/article/view/874*

Nurasman, M. S., & Alfalah, A. (2025). Strategies for Implementing The Project-Based Learning Model in Improving Creative Writing Skills in Indonesian Language Learning. *Jurnal Pembelajaran Bahasa Dan Sastra*, *4*(3), 331–340. *https://doi.org/10.55909/jpbs.v4i3.727*

Nusa, J. G. N. (2021). Efektivitas Model Project Based Learning pada mata Kuliah Vulkanologi terhadap Hasil Belajar Mahasiswa. Jurnal Ilmiah Mandala Education, 7(2), 210–214. https://doi.org/10.36312/jime.v7i2.2041

Purwati, E. (2023). *Komunikasi Interpersonal Integrasi Ayatisasi dan Psikologi Komunikasi*. Bogor: Guepedia.

Putri, F. P. W., Koeswanti, H. D., & Giarti, S. (2021). Perbedaan Model Problem Based Learning dan Project Based Learning terhadap Hasil Belajar Siswa Sekolah Dasar. Edukatif: Jurnal Ilmu Pendidikan, 3(2), 496–504. https://doi.org/10.31004/edukatif.v3i2.356

Rahmi, S. (2021). *Komunikasi Interpersonal dan Hubungannya dalam Konseling*. Aceh: Syiah Kuala University Press.

Ramadhan, E. H., & Hindun, H. (2023). Penerapan Model Pembelajaran Berbasis Proyek untuk Membantu Siswa Berpikir Kreatif. *Protasis: Jurnal Bahasa, Sastra, Budaya, dan Pengajarannya*, *2*(2), 43–54. *https://doi.org/10.55606/protasis.v2i2.98*

Safitri, N. H., Nuru, S., Silawati, A. M. N., Nurjannah, N., & Ruhhiyah, M. A.-Y. (2025). Peningkatan Kemampuan Berbicara Mahasiswa Menggunakan Metode Project Based Learning melalui Pembuatan Podcast. *Cendekia: Jurnal Ilmiah Pendidikan*, *13*(1), 55–63. *https://doi.org/10.33659/cip.v13i1.376*

Sailer, M., & Sailer, M. (2021). Gamification of in class activities in flipped classroom lectures. *British Journal of Educational Technology*, *52*(1), 75–90. *https://doi.org/10.1111/bjet.12948*

Santana, A. L. M., & de Deus Lopes, R. (2024). Using Real-World Problems and Project-based Learning for Future Skill Development: An Approach to Connect Higher Education Students and Society through User-Centered Design. *Creating the university of the future: A global view on future skills and future higher education* (pp. 393–417). Springer. *https://doi.org/10.1007/978-3-658-42948-5_20*

Santika, E. (2024). Teknik yang Efektif Untuk Menumbuhkan Kemampuan Berbicara Siswa di Sekolah Dasar. *Journal Sultra Elementary School*, *5*(1), 733–744. *https://doi.org/10.64690/jses.v5i1.403*

Saputri, R. E., Rizkia, A. S., & Sabibah, S. N. (2024). Peran Guru Profesional dalam Mengembangkan Pembelajaran berbasis PjBL Kelas II (Project Based Learning). *Jurnal Pendidikan Guru Sekolah Dasar*, *2*(1), 12. *https://doi.org/10.47134/pgsd.v2i1.1097*

Satar, S., Judijanto, L., Haryono, P., Septikasari, D., Zamsir, Z., Pirmani, P., Wijaya, S. A., Djollong, A. F., & Gaspersz, V. (2025). *Metode dan Model Pembelajar Inovatif: Teori dan Praktik*. Yogyakarta: PT. Green Pustaka Indonesia.

Schrodt, P., Scharp, K.M., & Braithwaite, D.O. (Eds.). (2021). Engaging Theories in Interpersonal Communication: Multiple Perspectives (3rd ed.). Routledge. *https://doi.org/10.4324/9781003195511*

Siminto, S., Majdi, M., Hardiansyah, A., Rofi'i, A., & Gazali, A. (2025). Pembelajaran Berbasis Proyek: Mengembangkan

https://pembahas.dialeks.id/index.php/jp
p-ISSN : 2809-5367
e-ISSN : 2809-6355

Kreativitas dan Kemampuan Kolaboratif. *Jurnal Pendidikan dan Keguruan*, *3*(4), 308–320.

Sintia, H., & Safitri, D. (2025). Penerapan Pembelajaran Project Based Learning untuk Meningkatkan Kemampuan Berkomunikasi Peserta Didik SMP dalam Pembelajaran di Kelas. *JIMAD: Jurnal Ilmiah Mutiara Pendidikan*, *3*(2), 78–93. *https://doi.org/10.61404/jimad.v3i2.383*

Solomon, D., & Theiss, J. (2022). *Interpersonal Communication: Putting Theory into Practice (2nd ed.). Routledge. https://doi.org/10.4324/9781351174381*

Song, X., Razali, A. B., Sulaiman, T., Jeyaraj, J. J., & Ds, P. (2024). Impact of project-based learning on critical thinking skills and language skills in EFL context: A review of literature. *World*, *14*(5). *https://doi.org/10.5430/wjel.v14n5p402*

Sormunen, K., Juuti, K., & Lavonen, J. (2020). Maker-Centered Project-based learning in Inclusive Classes: Supporting Students' Active Participation with Teacher-Directed Reflective Discussions. *International Journal of Science and Mathematics Education*, *18*(4), 691–712. *https://doi.org/10.1007/s10763-019-09998-9*

Sumitro, E. A., & Rizqi, H. (2024). Kemampuan Berbicara Bahasa Inggris Siswa Sekolah Menengah Atas: Studi Eksperimen Metode Pembelajaran berbasisProyek. *Jurnal Riset dan Inovasi Pembelajaran*, *4*(2), 768–776. *https://doi.org/10.51574/jrip.v4i2.1689*

Syuhada, M. N., Risnawati, R., & Hamdani, M. F. (2025). Analisis Uji T-Student Dua Sampel Berpasangan dalam Evaluasi Perubahan Individu. *Indonesian Research Journal on Education*, *5*(4), 419–422. *https://doi.org/10.31004/irje.v5i4.2898*

Taufiqurrahman, T., & Junaidi, J. (2021). Pembelajaran berbasis Proyek (Project-based Learning) untuk Nengembangkan Keterampilan Abad 21. *INCARE, International Journal of Educational Resources*, *2*(2), 225–241. *https://doi.org/10.59689/incare.v2i2.255*

Trullàs, J. C., Blay, C., Sarri, E., & Pujol, R. (2022). Effectiveness of Problem-based Learning Methodology in Undergraduate Medical Education: a Scoping review. *BMC Medical Education*, *22*(1), 104. *https://doi.org/10.1186/s12909-022-03154-8*

Wicaksono, S. R., Hakim, A., Degeng, M. D. K., & Ferdianto, J. (2023). *Collaborative Project Based Learning.* Malang: Seribu Bintang.

Widiasari, D., Aulia, V., & Rachman, I. F. (2025). Strategi Pembelajaran Berbasis Proyek P5 untuk Meningkatkan Kemampuan Berbicara pada Siswa Sekolah Dasar. *Jurnal Konsepsi*, *13*(4), 184–191. *https://www.p3i.my.id/index.php/konsepsi/article/view/401*

Xie, F., & Derakhshan, A. (2021). A Conceptual Review of Positive Teacher Interpersonal communication Behaviors in the Instructional Sontext. *Frontiers in Psychology*, *12*, 708490. *https://doi.org/10.3389/fpsyg.2021.708490*

Yoel, S. R., Akiri, E., & Dori, Y. J. (2023). Fostering graduate Students' Interpersonal Communication Skills via Online Group Interactions. *Journal of Science Education and Technology*, *32*(6), 931–950. *https://doi.org/10.1007/s10956-022-09998-5*

Yulianti, E. (2022). Analisis Pengaruh Pembelajaran Berbasis Proyek terhadap Kemampuan Komunikasi Siswa Sekolah. *Buletin Ilmiah Pendidikan*, *1*(2), 112–118. *https://doi.org/10.56916/bip.v1i2.699*

Yunusova, M. T., Normetov, K. P., & Yuldasheva, T. A. (2025). The Role of Teachers in Developing Speech Competence in a Bilingual Environment. *Mental Enlightenment Scientific-Methodological Journal*, *6*(03), 48–54. *https://doi.org/10.37547/mesmj-V6-I3-06*

Zega, A. (2022). Implementasi Pembelajaran Inovatif Model Project Based Learning pada Mata Kuliah Konstruksi Bangunan. *Edukatif: Jurnal Ilmu Pendidikan, 4(3), 4398–4407. https://doi.org/10.31004/edukatif.v4i3.2861*