

The Influence of Project-Based Learning on Speaking Skills: A Case Study of Political Science Students in Presenting SDGs Campaign

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ABSTRACT: This study aims to analyze the effect of Project-Based Learning (PBL) on the public speaking skills of Political Science students in the context of Sustainable Development Goals (SDGs) campaign presentations. The background of this study is based on the need to improve the oral communication skills of non-English language students through a contextual and meaningful learning approach. The study used a quantitative survey method involving 130 first-semester students taking English courses. The research instrument was a questionnaire tested for validity and reliability, and the data were analyzed using simple linear regression. The analysis showed that PBL significantly affected public speaking skills, with a contribution of 50.8% ($r = 0.713$; $p < 0.001$). The constructivist theory, which emphasizes experience and active learning, is supported by this data. Students are given an authentic context that promotes improved confidence, fluency, and communication structure when SDG subjects are incorporated into learning projects. This study recommends using PBL in various non-English language study programs to develop academic speaking skills relevant to global issues.

Keywords: English language learning, Project-Based Learning, speaking ability, SDGs campaign.

ABSTRAK: Penelitian ini bertujuan untuk menganalisis pengaruh Project-Based Learning (PBL) terhadap keterampilan berbicara di depan umum mahasiswa Ilmu Politik dalam konteks presentasi kampanye Tujuan Pembangunan Berkelanjutan. Latar belakang penelitian ini didasarkan pada kebutuhan untuk meningkatkan keterampilan komunikasi lisan mahasiswa non-bahasa Inggris melalui pendekatan pembelajaran kontekstual dan bermakna. Penelitian ini menggunakan metode survei kuantitatif yang melibatkan 130 mahasiswa semester pertama yang mengambil mata kuliah Bahasa Inggris. Instrumen penelitian adalah kuesioner yang diuji validitas dan reliabilitasnya, dan data dianalisis menggunakan regresi linier sederhana. Analisis menunjukkan bahwa PBL secara signifikan memengaruhi keterampilan berbicara di depan umum, dengan kontribusi sebesar 50,8% ($r = 0,713$; $p < 0,001$). Teori konstruktivis, yang menekankan pengalaman dan pembelajaran aktif, didukung oleh data ini. Mahasiswa diberikan konteks autentik yang meningkatkan kepercayaan diri, kelancaran, dan struktur komunikasi ketika topik SDG dimasukkan ke dalam proyek pembelajaran. Penelitian ini merekomendasikan penggunaan PBL dalam berbagai

program studi bahasa non-Inggris untuk mengembangkan keterampilan berbicara akademis yang relevan dengan isu-isu global.

Kata Kunci: *kampanye SDGs, kemampuan berbicara, pembelajaran bahas inggris, pembelajaran berbasis proyek.*

INTRODUCTION

Language serves as a fundamental pillar of culture and global interaction. Language shapes individual identity and fosters a sense of belonging to a community through elements such as vocabulary, expressions, and communication styles. Language is a primary medium for cross-cultural communication, allowing people from different backgrounds to connect, share ideas, and understand one another. Mastering multiple languages fosters global awareness, empathy, and intercultural competence, skills that are essential in today's interconnected world. In this context, English has become a necessary tool for international discourse, especially in academic and professional settings where speaking confidently is strategically essential. Thus, effective use of language, especially in public speaking, becomes a necessary skill for students preparing to engage with global issues (Abdalla & Mohammed, 2020; Bakeer et al., 2023; Siminto et al., 2024).

Students must face global challenges by mastering public speaking skills, especially for non-English Department students. This article specifically examines the population of political science students at Siliwangi University taking English courses. Speaking skills include communicating ideas clearly and confidently, even when using English, which is considered a foreign language. Non-English Department students continue to face challenges in limited exposure, anxiety and lack of student-centred teaching strategies. Students who can communicate effectively in English can benefit greatly in many areas, including everyday life, economics, socio-political communication, cultural understanding, and scientific advances. As a result, all students must take at least one English course in college, regardless of their study area. This demonstrates how crucial it is to speak English well to succeed academically and professionally (Andayani, 2022; Tuyen et al., 2022).

As the most populous non-English-speaking country, Indonesia remains a significant English language education market. Its strategic role within the ASEAN community further emphasizes the need for English proficiency, as the language functions as a key driver of globalization, impacting communication, economics, politics, culture, and ideology (Zein et al., 2020). Communicating effectively in English is particularly crucial for students in the Political Science Study Program. They are expected to discuss global issues, influence public opinion, and convey complex ideas to diverse audiences. However, many students still struggle with English speaking skills. This problem is often linked to low motivation, limited opportunities to practice, and conventional teaching methods that fail to promote communicative competence.

Project-Based Learning (PBL) has emerged as a promising pedagogical strategy. PBL encourages students to engage in real-world tasks, promotes

collaboration, and enhances critical thinking and communication skills. When implemented using the Sustainable Development Goals (SDGs) as the central theme, PBL becomes especially relevant for Political Science students. It allows them to explore complex societal issues, collaborate in teams, and present their findings through structured and meaningful public speaking activities.

Previous research highlights the effectiveness of PBL in supporting student development across various competencies. Specifically, it strengthens critical thinking by encouraging students to synthesize and analyze information, enhances resilience through problem-solving and decision-making processes, and redefines the instructor's role as a facilitator who provides feedback and fosters reflection. (Guo et al., 2020). Building on this foundation, the current study aims to examine how applied through the lens of the SDGs campaign can improve the public speaking skills of Political Science students. By investigating this in a non-English academic context, the study offers insights into how innovative, context-based learning methods can bridge the gap between theoretical knowledge and practical communication skills.

Constructivist Learning Theory

According to Kubiатko & Vaculová (2011a) experience, reflection and collaboration will actively build their knowledge in the learning process. Project-based learning (PBL) has a strong foundation in the constructivist approach. Project-based learning is an innovative method that makes students the subject in their learning process. This is different from the traditional learning system. PBL operationalizes constructivist principles into classroom practices that engage students in solving real-world problems and creating products that are relevant to their lives. One of the characteristics of PBL is the presence of questions or issues that guide learning activities and encourage students to think critically and in-depth about a topic. The collaborative process requires students to develop a sense of responsibility for their learning process, allowing them to regulate the pace, sequence and content of learning. This reflects their role, as emphasized in constructivist theory. According to constructivist theory, knowledge is socially constructed through interaction and discussion. In addition, the project's final product allows students to express their understanding in a unique and meaningful way. Learning output is indeed highly emphasized in constructivism. Teachers are therefore required to serve as facilitators who encourage, mentor, and enable students to independently investigate and develop their own understanding rather than merely serving as the primary source of knowledge. (Guo et al., 2020; Kubiатko & Vaculová, 2011b)

PBL provides various benefits in the language learning process; according to (Tuyen, 2023; Tuyen et al., 2022), PBL learning has been proven to increase the satisfaction of learning to speak more independently. Learners reported improvements in various English-speaking sub-skills, such as grammar, vocabulary mastery, intonation, word stress, and conveying ideas orally. Projects given by teachers are considered interesting in encouraging critical thinking, while project

stages help students express themselves verbally and non-verbally. Research has also shown that students' learning motivation increases in completing projects and shows development in independence and learning management.

Almulla (2020a) also conducted this study, which shows that PBL increases student learning engagement by encouraging discussions, exchanging information, and creating stronger connections between students, learning materials, and team members. PBL also encourages students to be actively and deeply involved in strengthening learning outcomes. This study also highlights how PBL fosters teamwork and collaboration in the classroom, consistent with constructivism, which holds that knowledge is created from experience and interaction.

Speaking Skills

The main components of interview skills include fluency, accuracy, confidence, and coherence. Regarding fluency, several previous studies have shown that limited vocabulary significantly affects students' speaking ability. The difficulty forming a perfect sentence structure is due to limited vocabulary references. Often, they have to translate from Indonesian to English, which causes broken pronunciation. Pronunciation problems are an obstacle because mistakes in pronouncing words can disrupt smooth communication. In terms of accuracy, students have difficulty using correct grammar, choosing appropriate vocabulary, and pronouncing words accurately. Sources show that many students struggle to remember sentence structures and translate their thoughts into English correctly. Confidence is important in speaking skills, but vocabulary and pronunciation are inevitably key. Lack of motivation and low self-confidence are significant obstacles. Coherence is related to how clear and logical ideas are in oral communication (Miguel et al., 2006; Sabilla & Kaniadewi, 2025)

Public speaking is one of the most important speaking skills, and it includes social campaigns such as the theme of Sustainable Development Goals. This skill can train courage in public speaking and help convey structured ideas (M. , Ifwandi et al., 2024; Sirisrimangkorn, 2021). However, many students still face obstacles to improving their speaking skills, such as fear of making mistakes and a lack of active practice.

The theme of Sustainable Development Goals (SDGs) in learning can provide significant pedagogical benefits. Students can learn by instilling global awareness such as environmental issues, equality, education, and health. In addition, SDGs-based learning can increase social awareness and develop systematic thinking skills because students face real problems and develop critical solutions. SDGs provide an authentic context that is relevant and meaningful so that students can practice speaking in situations that resemble the real world through presentations, group discussions, or public campaigns.

This study aims to examine the results of using project-based learning, which promotes hands-on experience and enhances communication, teamwork, and critical

thinking abilities. In the context of the study, the final assignment of students to carry out a presentation of the Sustainable Development Goals campaign is a relevant project because, as political science students, they must be able to relate to learning on global issues. Previous studies have been primarily conducted on aspects of educational research. However, the novelty of this study is an effort to analyze project-based learning from disciplines other than education, especially English language learning outside the English department, which is beneficial for students to bridge the gap between theory and practice. Thus, this study is not only to evaluate PBL but also to support students in facing communication challenges, especially in discussing global issues, which is one of the objectives of learning political science. The research questions include: 1) What is the effect of Project-Based Learning (PBL) on the speaking ability of political science students in SDGs campaign presentations? 2) How is the relationship between Project Based-Learning (PBL) (Variable X) and public speaking ability (Variable Y).

The hypotheses are:

H0= There is no significant relationship between students' perceptions of Project Based Learning and their speaking ability.

H1= There is a significant relationship between students' perceptions of Project Based Learning and their speaking ability.

METHOD

Research Design

This study uses a quantitative approach with a survey method through the distribution of questionnaires. The questionnaire was designed to measure the effect of Project Based Learning (PBL) based on the Sustainable Development Goals (SDGs) campaign on students' public speaking skills in the Political Science Study Program at Siliwangi University.

Population and Sample

This study's population consisted of all first-semester students enrolled in the English course from the Political Science Study Program at Siliwangi University. A total sampling technique was used, considering the number of students was limited and accessible. Thus, all 130 students were included as respondents in this study.

Instrument

The data collection instrument was a questionnaire comprising 15 items developed based on theoretical indicators of the two variables: PBL Implementation (X): 9 items and Public Speaking Ability (Y): 6 items. Each item was measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The indicators for PBL were adapted from constructivist learning principles (collaboration,

critical thinking, real-world connection), while public speaking items covered fluency, accuracy, confidence, and coherence. To ensure the quality of the instrument, a validity test using the Pearson Product Moment was conducted, where all item scores showed $r\text{-count} > 0.4124$, indicating validity. The reliability test was measured using Cronbach's Alpha, which resulted in a value of 0.911, indicating excellent internal consistency.

After the analysis prerequisite test was carried out, the researcher conducted a hypothesis test that has been explained in the introduction of this article. This hypothesis test determines the statement from the sample that will be tested for its truth using data. In this hypothesis test, the researcher used an associative hypothesis test. The researcher made a temporary assumption of a problem regarding the relationship between two variables to find the relationship between the implementation of Project Learning and the ability to speak English. The following questionnaire consists of 15 questions based on PBL Implementation and public speaking ability variables.

Table 1. Questionnaire based on PBL Implementation and public speaking ability variables

No	Questionnaire	Variable
1	I feel more actively participating in learning with the PBL method.	X
2	PBL makes learning more interesting than traditional methods.	
3	PBL helps me better understand the material being taught.	
4	SDGs-based projects make learning more meaningful and relevant to real life.	
5	I feel the SDGs theme helps me develop critical thinking skills.	
6	PBL helps me work better in a team.	
7	Group discussions during the project improved my understanding of the material.	
8	I feel more confident in facing academic challenges after PBL's implementation.	
9	PBL increases my motivation to learn English.	
10	I feel more fluent in speaking after participating in PBL-based projects.	Y
11	I was able to speak confidently during the SDGs campaign presentation.	
12	PBL helps me enrich my English vocabulary.	
13	My pronunciation in English has improved after participating in the project.	
14	PBL helps me convey ideas in a logical and structured manner during presentations.	

15	I feel more confident in answering audience questions during presentations	
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Data Collection Procedure

The questionnaire was distributed to respondents during class meetings under the researcher's supervision. The responses were then compiled and processed using SPSS for further analysis.

Data Analysis Techniques

The sampling technique used is total sampling, namely, all first-semester students who take English courses at non-English courses. The instruments collected are in the form of questionnaires that have been compiled based on variables and indicators. The total sample of first-semester students is 130 respondents. This technique tests the theory and identifies the relationship between variables. The researcher uses a measurement tool in the form of an instrument analysis test, and the researcher has conducted a validity and reliability test according to the established standards. This test must assess the suitability and consistency of the questionnaire or questionnaire used in collecting data from respondents.

Data were collected using simple linear regression test analysis to see the influence between the independent variables, namely the implementation of PBL (Project-Based Learning), on the dependent variable, namely the ability to speak English. The researcher conducted a prerequisite analysis test to verify whether the data used met the requirements of the technique used. This prerequisite test includes a 1) normality test used in the research process to assess whether the data distribution is normal. 2) Linearity test, which is a test that aims to evaluate whether two or more variables have a significant relationship and 3) Heteroscedasticity test, which is a test that aims to determine whether there is inequality in the residual variable between one observation and another observation in the regression model.

RESULTS AND DISCUSSION

Validity and Reliability Test

Several tests were conducted in the research method presentation section to obtain accurate results based on the theory and variables. Based on the questionnaire, the researcher summarizes the answers from the respondents and adjusts them to the steps in the SPSS application. At the data quality test stage, using the SPSS application, the researcher conducted a validity test based on Table 1.1. by showing the results of the r-count of variables X and Y, which states that all questionnaires used are valid because the r-count is greater than the r-table. Based on the table information, $R\text{-Count} > 0.4124$. So, it can be said that the research is valid. Then, after the validity test, the researcher conducted a reliability test. The purpose of this calculation is to determine whether the questions given to students are reliable.

Table 2. Data Validity Test

Variable	Questions	R-Hitung	R-Table	Validity Status
X	X1	0,682	0,4124	Valid
	X2	0,566	0,4124	Valid
	X3	0,723	0,4124	Valid
	X4	0,631	0,4124	Valid
	X5	0,678	0,4124	Valid
	X6	0,589	0,4124	Valid
	X7	0,679	0,4124	Valid
	X8	0,697	0,4124	Valid
	X9	0,711	0,4124	Valid
Y	Y1	0,666	0,4124	Valid
	Y2	0,667	0,4124	Valid
	Y3	0,637	0,4124	Valid
	Y4	0,683	0,4124	Valid
	Y5	0,721	0,4124	Valid
	Y6	0,689	0,4124	Valid

Table 1 shows the validity test results for 15 questionnaire items, 9 for the PBL Implementation variable (X) and 6 for the Public Speaking Ability variable (Y). All items were tested using the Pearson Product Moment correlation technique. The result indicates that each item has an r-count higher than the r-table value (0.4124). Therefore, all items are considered valid and suitable for further analysis.

Table 3. Data Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
,911	15

The table above shows that Cronbach's Alpha value determines the reliability of the questionnaire instrument. To find out the results, the researcher used the SPSS application with the provision that it is stated as reliable if the Cronbach's Alpha value is more significant than 0.7. Table 1.2 shows the results of the reliability test for the research instrument. The test was conducted on 15 questionnaire items, including 9 items representing the PBL Implementation variable (X) and 6 items for the Public

Speaking Ability variable (Y). The reliability analysis using Cronbach's Alpha yielded a value of 0.911, which is considered excellent. This result confirms that the instrument has strong internal consistency and is highly reliable for further statistical analysis.

Data Normality Test

Table 4. Data Normality Test

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			130
Normal Parameter a,b	Mean		,0000000
	Std. Deviation		2,31957126
Most Extreme Differences	Absolute		,091
	Positive		,050
	Negative		-,091
Test Statistic			,091
Asymp. Sig. (2-tailed) c			,070
Monte Sarlo Sig. (2-tailed)d	Sig.		,010
	99% Confidence Interval	Lower Bound	,007
		Upper Bound	,013
Test distribution is Normal			
Calculated from data			
Lilliefors Significance Correction			
Lilliefors' method based on 100000 Monte Carlo Samples with starting seed 2000000			

Based on the table above shows that Table 1.3 presents the results of the normality test using the Kolmogorov-Smirnov method. The test shows two values: Asymp. Sig. = 0.070, which indicates that the data are normally distributed, and Monte Carlo Sig. = 0.010, which suggests a non-normal distribution. However, the normality assumption in regression analysis should be tested based on the residuals, not the raw data. Therefore, this study refers to the normality of the residuals, which met the assumption based on the Kolmogorov-Smirnov test (Asymp. Sig. > 0.05).

Consequently, it can be concluded that the normality assumption for linear regression was fulfilled.

Data Linearity Test

Table 5. Data Linearity Test

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
Speaking PBL	Between Groups	(Combined	852,372	22	38,744	7,433	<,001
		Linearity	716,050	1	716,050	137,368	<,001
		Deviation from Linearity	136,322	21	6,492	1,245	,230
	Within Groups		557,751	107	5,213		
	Total		1410,123	129			

This test is used to determine the relationship between independent variables and dependent variables. If the sig. Deviation from linearity > 0.05, there is a linear relationship between the variables of Project-Based Learning Implementation and students' speaking ability. The table explains that the Deviation from linearity is 0.230. Therefore, it can be concluded that there is a linear relationship between the implementation of Project-Based Learning (PBL) and students' public speaking ability. This justifies using simple linear regression analysis in the following data interpretation stage

Table 6. Correlation Test

Correlations			
		PBL	Speaking Skills
PBL	Pearson Correlation	1	,713**
	Sig. (2-tailed)		<,001
	N	130	130
Speaking Skills	Pearson Correlation	,713**	1
	Sig. (2-tailed)	<,001	
	N	130	130
**. Correlation is significant at the 0.01 level (2-tailed).			

The correlation analysis produced an r-value of 0.713 with a significance level of $p < 0.001$, indicating a strong and statistically significant positive relationship between PBL implementation and students' public speaking ability. According to Pearson's correlation coefficient interpretation guidelines, an r-value between 0.70 and 0.90 is categorized as a strong correlation. Therefore, it can be concluded that

students who perceive PBL implementation positively tend to have better public speaking performance.

Table 7. Simple Linear Regression Test

Model Summary				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	,713a	,508	,504	2,329

The regression analysis shows that the Adjusted R Square value is 0.508, indicating that 50.8% of the variation in students' public speaking ability can be explained by implementing Project-Based Learning (PBL). Based on the coefficients table, the regression equation is:

$Y = 10.215 + 0.689X$, where Y represents the public speaking ability, and X represents PBL implementation. Other unmeasured variables, like students' confidence levels, past exposure to English, or availability of learning resources, could account for the remaining 49.2% of the variance. Future studies are urged to investigate these further aspects for a more thorough understanding.

DISCUSSION

PBL Activities

The PBL method holds significant advantages, particularly for Generation Z students, who are inclined toward real-life experience-based learning and are adept at enhancing their digital skills. The method encourages students to engage with digital sources for information gathering, making it highly relevant in today's digital era. PBL also plays a crucial role in testing students' digital literacy and collaborative skills, essential in contemporary education and the workplace. A meta-analysis conducted on various studies supports the conclusion that PBL is more effective than traditional teaching methods, especially in improving student satisfaction with learning and problem-solving abilities. The method's hands-on, collaborative, and exploratory nature fosters a deeper engagement with the learning process, resulting in better academic outcomes. Therefore, implementing PBL is highly recommended to enhance student learning experiences, particularly in critical thinking, resilience, and digital competency.

Another impact of PBL implementation is to improve cognitive Learning, such as conceptual knowledge and deep understanding. Students can explain the importance of critical thinking, problem-solving and collaboration. Active involvement of students makes them more able to apply knowledge. Measurement of PBL learning outcomes can be cognitive (learning outcomes measured through tests, assessment rubrics or evaluations of projects being carried out), affective (student perceptions of the benefits and experiences of PBL that can be measured through interviews, behavioural (collaboration skills assessed through observation or reflection journals).

Project-based learning applied to universities can be assessed for its impact on the work readiness of participants or answering the gaps in academic theory obtained by students. (Arnold, 2019; Jollands et al., 2012; Sholikhah, 2019). The constructivist approach to learning, which underpins Project-Based Learning (PBL), calls for the social production of information from various viewpoints and permits self-awareness of knowledge and learning while depending on the context (Danver, 2016; Kubiatio & Vaculová, 2011b; Taylor et al., 2024; Yuliansyah & Ayu, 2021).

Public speaking is one of the 21st century's most crucial abilities for people to acquire in various spheres of life. This skill is essential in the age of globalization in order to influence others, establish personal connections, and successfully communicate ideas. Unfortunately, several studies have shown that low self-confidence, a lack of practice, and teaching strategies that do not encourage the development of public speaking skills are the leading causes of public speaking difficulties for many people, particularly students. Project-based learning is one strategy that is thought to be successful in solving this issue (PBL). This method strongly emphasizes project-based learning, actively engaging students in resolving issues. PBL promotes group learning while incorporating a variety of abilities, such as communication, analysis, and problem-solving, all of which directly aid in developing public speaking abilities (Bergmark, 2023; Meesuk et al., 2020).

Project-Based Learning (PBL) is a teaching method that provides practical benefits for classroom learning. PBL has been proven to improve language skills, including speaking, critical thinking and knowledge. PBL is student-centred learning that is directed through several questions to encourage projects. Students explore creativity to provide several answers to problems during project completion. Other studies have found that Project Learning helps explore their creativity, especially in gaining knowledge and skills and working in teams (Tuyen et al., 2022).

There are numerous ways to characterize project-based learning. There is not a single definition because of this. The foundation of project-based learning is constructivist learning theory, which holds that learning becomes more profound and significant when students build their knowledge. Constructivism is a theory derived from scientific research on human learning and observation. People build their knowledge and understanding of the world by reflecting on and experiencing things. New information must be connected to our prior knowledge and experiences. That information can alter our existing knowledge and views. As we gain new knowledge, we must constantly question, research, and assess our current knowledge (Rochmahwati, 2015).

Project-based learning has four main features: a) self-responsibility for learning and thinking; b) social responsibility awareness; c) scientific thinking and action applied practically; and d) connecting group processes and products with professional practice (Kubiatio & Vaculová, 2011b). Speaking is one of the most productive English language abilities crucial to communication. Speaking proficiency is a crucial component of learning a foreign or second language and entails the

capacity to communicate ideas orally. A key indicator of speaking success is the ability to have a conversation that other people can understand. However, many students struggle with speaking English, primarily because of a lack of practice, a small vocabulary, and anxiety brought on by a fear of making a mistake (Dewi, 2019). Giving presentations is one of the numerous communication exercises that can help students become more proficient speakers. One benefit of presentations for students is the development of essential elements of communication skills (M. Ifwandi et al., 2024; Lilis, 2020; Sirisrimangkorn, 2021).

They are not engaging enough or applicable to students' daily lives; traditional teaching strategies like drilling and question-and-answer sessions frequently impact students' speaking abilities less. Project-Based Learning (PBL) is a helpful remedy in this situation. PBL helps students to communicate effectively in important activities, including group discussions, presentations, and product creation. This method helps students build their social and collaborative skills, increases their enthusiasm, and creates the ideal setting for speaking practice. Additionally, PBL makes learning more relevant and pleasurable by fostering individual learning, critical thinking, and the ability to relate language acquisition to everyday situations.

By integrating PBL into speaking instruction, teachers can help students improve their speaking skills and increase their confidence when speaking English. Furthermore, placing students at the centre of the learning process raises their level of engagement and drive. More generally, there is much additional value in using the Sustainable Development Goals (SDGs) campaign as a theme in PBL. The SDGs are a worldwide agenda for sustainable development that covers significant topics like social justice, education, the environment, and health. Students who choose the SDGs as their project theme not only participate in learning relevant to their everyday lives but also gain global awareness and the capacity to speak confidently in front of an audience. Thus, the purpose of this study is to examine how public speaking abilities are affected by project-based learning based on the SDGs campaign. This study is anticipated to significantly advance the creation of creative teaching methods that foster sustainability principles in the next generation while enhancing public speaking abilities.

Many studies on Project Based Learning have focused on implementation at primary or secondary education levels (Chang & Lee, 2010; Habók & Nagy, 2016; Nilgün TOSUN, 2011; Rahman et al., 2024a; Sumarni, 2015). Research conducted on the effectiveness of PBL in higher education is still minimal, especially in non-language and education study programs. Most studies evaluate PBL based on cognitive perspectives, such as understanding the material or the relationship to learning outcomes in the form of academic achievement. Meanwhile, the influence of PBL on the development of speaking skills has not been widely explored. Meanwhile, it should be understood that speaking skills are critical as one of the important competencies, especially in preparing students for the professional world. Specifically, this article also discusses integration with the SDGs (Sustainable

Development Goals) campaign theme as a unique theme in linking global issues to the real world. This gap makes it important to conduct further research to identify the effectiveness of PBL in improving speaking skills in non-language study programs. In addition, this study also explores students' perceptions of the success of the methods used.

Using project-based learning through SDG presentations is very helpful for students in improving their public speaking skills, especially their English language skills. In English class, students are tasked with making SDG presentations, which are obtained through field projects, to analyze SDG issues. Students are divided into teams and work to analyze the causes of problems and existing issues through phenomenon analysis and solutions to deal with the situation. SDG issues are made in the project results and presented in class to get feedback from lecturers and other students. Each class consists of 10 groups to choose one of the issues to be presented.



Source: United Nations

figure 1. SDGs Issues in Project Based Learning



Sources: Political Sciences Department, Universitas Siliwangi

Figure 2. SDGs Campaign

Based on the study results, the relationship between the variables of Project Learning Implementation and public speaking skills using English was 50.8%. The results of Rahman et al.'s (2024) study used a quantitative research method that measured the pre and post-tests of implementing project-based learning. Quantitative indicators through numerical data to measure project results with project performance indicators, learning effectiveness, student involvement, student motivation and productive skills. Previous research differs from the author's because it focuses more on measuring pre-test and post-test values after the project-based learning experiment. (Rahman et al., 2024b).

This study has a difference in novelty by researching 130 students who have directly received project-based learning assignments. Then, the data analysis technique from other studies, namely inferential statistical analysis and descriptive statistics in his research which consists of analysis prerequisite tests, namely normality tests and homogeneity tests and continued with hypothesis testing using independent sample T-test (Wuryantari Winasih et al., 2019). Meanwhile, in this study, the research instrument used an instrument analysis test, an analysis prerequisite test (normality test and linearity test), then continued with an associative hypothesis test and finally a linear regression test.

Since Project-Based Learning (PBL) includes students in projects that call for genuine and active communication, it is relevant to developing speaking abilities. PBL allows students to practice speaking in authentic settings, such as group conversations, presentations, or making digital content like vlogs. This helps them with vocabulary, pronunciation, fluency, and grammatical precision. Additionally, PBL promotes student participation, teamwork, and enthusiasm to learn to communicate in a real-world setting, boosting their confidence when speaking English (Almulla, 2020b; Kusumawati, 2019; Nugroho & Anugerahwati, 2019).

This study uses several indicators of PBL: self-responsibility for thinking and learning, awareness of social responsibility, practical thinking and action, and teamwork. Based on the results of data calculations, it is known that the data is usually distributed and has a relationship with public speaking skills of around 50.8%. So, it can be concluded that H_0 is rejected and H_1 is accepted. So, it can be concluded that factors influence project-based learning, such as research skills, writing or learning outcomes. Therefore, researchers suggest conducting further research that connects the implementation of project-based learning with indicators other than speaking.

Finding and Interpretation

With a significance level of $p < 0.001$, statistical analysis shows a correlation coefficient ($r = 0.713$), which indicates a substantial and statistically significant positive relationship between the implementation of PBL and students' public speaking skills. Based on Pearson's correlation interpretation guideline ($0.70-0.90 = \text{strong}$), this result suggests that students who engaged more meaningfully with PBL activities demonstrated better public speaking performance. The regression analysis

further showed that PBL contributed 50.8% (Adjusted $R^2 = 0.508$) of the variance in students' public speaking scores. The remaining 49.2% may be explained by factors such as individual confidence, prior experience speaking English, or access to learning resources.

Comparison with Previous Studies

The research is in line with previous research in emphasizing the effectiveness of Project-Based Learning (PBL) in improving language skills, especially speaking, and shaping students' perceptions in the learning process. Previous research has focused more on exploring the use of PBL in various disciplines and levels of education. Still, this research provides a unique perspective focusing on political science students presenting SDGs-themed campaigns as English course assignments.

Tuyen et al. (2022) studied the implementation of Project-Based Learning (PBL) on distance learning students at Ho Chi Minh City Open University. They found that this approach improved various aspects of English speaking skills, such as vocabulary, grammar, pronunciation, and intonation. These results were associated with the independent learning opportunities provided in the PBL learning design. In line with these findings, this study also showed that implementing a project with the Sustainable Development Goals (SDGs) theme provided students with real opportunities to practice their public speaking skills. The study's quantitative results show a high and significant positive correlation between PBL implementation and students' public speaking abilities ($r = 0.713$, $p < 0.001$), supporting the idea that PBL works well in various learning environments

Melad Essien (2018) also showed that PBL improved English language proficiency among Thai students, with significant improvements in speaking performance measured through pre-and post-tests. Although this study did not use a pre-post design, regression analysis revealed that PBL accounted for 50.8% of the variance in students' public speaking ability. This suggests a similarly strong effect of PBL despite differences in subject method and context.

Poonpon (2011) stated that students considered the PBL approach an interdisciplinary method that helped them recognize their language skills in more depth. In line with this, the findings in this study indicate that political science students are increasingly aware of their level of English proficiency and the communication strategies they use, thanks to repeated practice, self-reflection, and consistent feedback.

Simpson & Stevens (2019) found that PBL contributed to improving the proficiency of students with low to intermediate English language proficiency in a tourism study program. This finding reinforces the results of the current study, which suggests that project-based assignments focused on a specific area such as an SDGs campaign presentation in a political science context can be an effective and meaningful means of developing oral communication skills, even for students who do not come from a language education background.

Students involved in this study responded positively to the implementation of PBL, especially related to the learning structure, the relevance of the material to the real world, and opportunities to practice authentic communication. This finding aligns with Tuyen (2023) research, which states that distance learners value PBL because it can increase independence and provide a more meaningful learning experience. In this context, reflections from students in this study also indicated increased self-confidence and ownership of the learning process, especially when they prepared and presented materials related to the SDGs campaign.

Melad Essien (2018) also showed that PBL plays a role in developing critical thinking, independent learning, and interpersonal communication skills. This is also reflected in this study, where students hone their technical speaking skills and build non-academic skills such as teamwork, time management, and audience sensitivity, which are essential in academic and public communication contexts. Furthermore, Poonpon (2011) found that students appreciated the interdisciplinary nature of PBL and felt that it increased their awareness of their language skills. This study supports these results, which shows that political science students have a better grasp of the English language and communication techniques they have learned via practice, reflection, and regular feedback during the learning process.

Implications and Suggestions

Although several previous studies have proven the effectiveness of PBL in general English learning and ESP (English for Specific Purposes), such as tourism and information science, this study provides a new perspective by highlighting the application of PBL to political science students. In this context, students use English to convey socially charged issues through SDGs campaign presentations. This approach integrates scientific insight, persuasive communication skills, and language learning into one complete and contextual learning model. Unlike previous studies that rely more on pre- and post-test experimental designs, this study applies regression analysis to identify how strong and significant the relationship is between PBL implementation and public speaking skills. Adding qualitative results from student reflections to the quantitative data provided a more complete and in-depth picture of the dynamics and learning processes that the students experienced.

CONCLUSION

This study explores the effect of implementing Project-Based Learning (PBL) on the public speaking skills of Political Science students, especially in the context of Sustainable Development Goals (SDGs) campaign presentations. The analysis results show that implementing PBL significantly improves students' speaking skills, contributing 50.8% to the speaking ability variable as indicated by the regression results ($r = 0.713$; $p < 0.001$). Students actively and meaningfully involved in the PBL process show increased confidence, fluency, and structure in conveying ideas orally in English. The results of this study strengthen the concept of constructivist learning,

which emphasizes that building knowledge occurs through social interaction, direct experience, and reflection. PBL activities based on the SDGs theme can encourage active, collaborative learning and critical thinking characteristics by the theoretical framework of PBL as a practical approach to language learning because it provides space for students to develop communication competencies through authentic experiences.

In fact, including the SDGs campaign in PBL exercises gives students a genuine and pertinent setting to hone their English-speaking abilities. Students can collaborate in groups, talk frequently, and gain constructive criticism through a methodical project structure. These results indicate that PBL has excellent potential to be applied in non-English study programs as a strategy to strengthen academic communication skills, primarily when associated with meaningful global issues. In this case, the role of educators is also essential to accompany as facilitators and mentors who can encourage student autonomy and active involvement. Overall, Project-Based Learning has proven effective, both from a pedagogical perspective and based on statistical evidence, in improving students' public speaking skills—especially in English courses that are cross-disciplinary and content-based. The SDGs campaign project has increased students' motivation and verbal communication performance by providing a real context. Further research is recommended to examine how various project themes and specific assignments affect particular aspects of language skill achievement.

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REFERENCES

- Abdalla, M., & Mohammed, A. (2020). English Language and Globalization. *International Journal of Novel Research in Education and Learning*, 7(1), 5–11. www.noveltyjournals.com
- Almulla, M. A. (2020a). The Effectiveness of the Project-Based Learning (PBL) Approach as a Way to Engage Students in Learning. *SAGE Open*, 10(3). <https://doi.org/10.1177/2158244020938702>
- Almulla, M. A. (2020b). The Effectiveness of the Project-Based Learning (PBL) Approach as a Way to Engage Students in Learning. *SAGE Open*, 10(3). <https://doi.org/10.1177/2158244020938702>
- Arnold, M. (2019). Problem-based Learning in Higher Education Service Learning: Implications for Theory-Practice-Transfer. ... of Teaching and Learning. *Proceedings of 3rd ...*, September. https://www.researchgate.net/profile/Maik_Arnold/publication/335928727_EuSKaL_HErrla_3rd_EuroSoTL_Conference/links/5d84b355458515cbd1a16307/EuSKaL-HErrla-3rd-EuroSoTL-Conference.pdf

- Bakeer, A., Dweikat, K., & Smith, M. (2023). The effectiveness of Project - Based Learning on improving the undergraduate students' speaking skills through M-Learning. In *Rihan Journal for Scientific Publishing* (Vol. 38, Issue 38). <http://hdl.handle.net/2436/625311>
- Bergmark, U. (2023). Teachers' professional learning when building a research-based education: context-specific, collaborative and teacher-driven professional development. *Professional Development in Education*, 49(2), 210–224. <https://doi.org/10.1080/19415257.2020.1827011>
- Chang, L. C., & Lee, G. C. (2010). A team-teaching model for practicing project-based learning in high school: Collaboration between computer and subject teachers. *Computers and Education*, 55(3), 961–969. <https://doi.org/10.1016/j.compedu.2010.04.007>
- Danver, S. L. (2016). Translating Constructivism into Pedagogy from Philosophy to Practice Active Project-Based Learning. *The SAGE Encyclopedia of Online Education*, 19(1), 19. <https://doi.org/10.4135/9781483318332.n176>
- Dewi, H. (2019). Project Based Learning Techniques to Improve Speaking Skills. *Sustainability* (Switzerland), 11(1), 1–14. http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI
- Guo, P., Saab, N., Post, L. S., & Admiraal, W. (2020). A review of project-based learning in higher education: Student outcomes and measures. *International Journal of Educational Research*, 102(April), 101586. <https://doi.org/10.1016/j.ijer.2020.101586>
- Habók, A., & Nagy, J. (2016). In-service teachers' perceptions of project-based learning. *SpringerPlus*, 5(1), 1–14. <https://doi.org/10.1186/s40064-016-1725-4>
- Ifwandi, M. , Asra, F., & Muliardi, M. (2024). Improving English Speaking Skills Through The Project Based Learning Model. In *International Conference on Education and Innovation (ICEI)*.
- Ifwandi, M., Asra, F., Zuhri, M., & Muliardi, M. (2024). Improving english speaking skills through the Project Based Learning model. *International Conference on Education and Innovation*, 1(June), 159–169. <https://journal.unilak.ac.id/index.php/ICEI/article/view/21966>
- Jollands, M., Jolly, L., & Molyneaux, T. (2012). Project-based learning as a contributing factor to graduates' work readiness. *European Journal of Engineering Education*, 37(2), 143–154. <https://doi.org/10.1080/03043797.2012.665848>
- Kubiatko, M., & Vaculová, I. (2011a). Project-based learning: characteristic and the experiences with application in the science subjects. In *Energy Education Science and Technology Part B: Social and Educational Studies* (Vol. 3, Issue 1).

- Kubiatko, M., & Vaculová, I. (2011b). Project-based learning : characteristic and the experiences with application in the science subjects. *Energy Education Science and Technology Part B: Social and Educational Studies*, 3(1), 65–74.
- Kusumawati, I. (2019). The Implementation of Project-Based Learning's Speaking Skill for Tenth Grade Vocational High School Students. *A Journal of Culture*, 19(2), 2–6.
- Lilis, K. (2020). The Enhancement of Students' Speaking Skills through Project-Based Learning in Non-Formal Education. *Jurnal Edukasi Nonformal*, 4(52), 147–158. <https://ummaspul.e-journal.id/JENFOL/article/view/434/252>
- Meesuk, P., Sramoon, B., & Wongrugs, A. (2020). Classroom Action Research-based Instruction: The Sustainable Teacher Professional Development Strategy. *Journal of Teacher Education for Sustainability*, 22(1), 98–110. <https://doi.org/10.2478/jtes-2020-0008>
- Melad Essien, A. (2018). The Effects of Project-Based Learning on Students English Language Ability. The 2018 International Academic Research Conference in Vienna.
- Miguel, C. S., Rogan, F., Kilstoff, K., & Brown, D. (2006). Clinically speaking: A communication skills program for students from non-English speaking backgrounds. *Nurse Education in Practice*, 6(5), 268–274. <https://doi.org/10.1016/j.nepr.2006.02.004>
- Nilgün TOSUN, B. M. F. (2011). E-Portfolio Applications in Education. *The Online Journal of New Horizons in Education*, 1(4), 49–59.
- Nugroho, W. F., & Anugerahwati, M. (2019). Project-Based Learning: Enhancing EFL Students' Speaking Skill through Vlog. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, 4(8), 1077. <https://doi.org/10.17977/jptpp.v4i8.12679>
- Poonpon, K. (2011). Enhancing English Skills Through Project-Based Learning. *The English Teacher*, XL, 1–10.
- Rahman, I., Kaema, M. T., Nurhapipah, N., Nelwati, S., Sabri, A., & Rahmanda, R. (2024a). Systematic Literature Review: Analysis of Project-based Learning Models from Elementary to High School. *Al-Ashri: Ilmu-Ilmu Keislaman*, 9(2), 53–66.
- Rahman, I., Kaema, M. T., Nurhapipah, N., Nelwati, S., Sabri, A., & Rahmanda, R. (2024b). Systematic Literature Review: Analysis of Project-based Learning Models from Elementary to High School. *Al-Ashri: Ilmu-Ilmu Keislaman*, 9(2), 53–66.
- Rochmahwati, P. (2015). Lecturer at The State College for Islamic Studies of Ponorogo. *Jurnal Kodifikasia*, 9(c), 200–2021.
- Sabilla, A. N., & Kaniadewi, N. (2025). Investigating English-Speaking Problems of Senior High School Students in Indonesia. *SALEE: Study of Applied Linguistics and English Education*, 6(1), 88–107. <https://doi.org/10.35961/salee.v6i1.1617>

- Sholikhah, M. (2019). Speaking skill and critical thinking skill development through project based learning method of EFL tertiary students. *Scope of English Language Teaching, Linguistics, and Literature*, 4(2), 78–98. <https://www.neliti.com/publications/317788/speaking-skill-and-critical-thinking-skill-development-through-project-based-lea>
- Siminto, S., Nurmalia Sari, M., Pambudi, N., Nurhastuti, D., & Merizawati, H. (2024). Analysis of the Implementation of Project-Based Learning Methods in Teaching English Speaking Skills. *Journal on Education*, 06(02), 13142–13151.
- Simpson, W., & Stevens, H. L. (2019). *An Alberta Guaranteed Basic Income: Issues and Options*. The School of Public Policy Publications, 12 (15).
- Sirisrimangkorn, L. (2021). Improving EFL Undergraduate Learners' Speaking Skills Through Project-Based Learning Using Presentation. *Advances in Language and Literary Studies*, 12(3), 65. <https://doi.org/10.7575/aiac.all.v.12n.3.p.65>
- Sri Andayani, E. (2022). The Importance of Learning and Knowing English in Higher Education in Indonesia. *Research and Development Journal Of Education*, 8(1), 372–379. <http://dx.doi.org/10.30998/rdje.v8i1.13315>
- Sumarni, W. (2015). The Strengths and Weaknesses of the Implementation of Project Based Learning: A Review. *International Journal of Science and Research*, 4(3), 2319–7064. www.ijsr.net
- Taylor, J. C., Allen, L. M., Van, J., & Moohr, M. (2024). The Effects of Project-Based Learning on Student Behavior and Teacher Burnout in an Emotional/Behavioral Support Classroom. *Journal of Emotional and Behavioral Disorders*, 32(2), 81–94. <https://doi.org/10.1177/10634266241235933>
- Tuyen, N. C. B. (2023). Exploring the Effectiveness of Applying Project Based Learning in Teaching English Speaking Skills in Remote Learning Setting. In *Exploring the Effectiveness of Applying Project- Based- Learning* (pp. 282–293). https://doi.org/10.2991/978-2-38476-042-8_24
- Tuyen, N. C. B., Nga, N. T., & Mai, N. T. X. (2022). Applying Project-Based-Learning to improve English speaking skills of remote learners at tertiary education. *Ho Chi Minh City Open University Journal of Science - Social Sciences*, 12(2), 85–103. <https://doi.org/10.46223/hcmcoujs.soci.en.12.2.2292.2022>
- Wuryantari Winasih, W., Cahyono, B., & Ananto Prayogo, J. (2019). Effect of Project-Based Learning Using E-Poster on Indonesian EFL Students' Speaking Ability across Personality Types. *SSRN Electronic Journal*, 10(1), 73–83. <https://doi.org/10.2139/ssrn.3367522>
- Yuliansyah, A., & Ayu, M. (2021). the Implementation of Project-Based Assignment in Online Learning During Covid-19. *Journal of English Language Teaching and Learning*, 2(1), 32–38. <https://doi.org/10.33365/jeltl.v2i1.851>
- Zein, S., Sukyadi, D., Hamied, F. A., & Lengkanawati, N. S. (2020). English language education in Indonesia: A review of research (2011-2019). *Language Teaching*, 53(4), 491–523. <https://doi.org/10.1017/S0261444820000208>