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Enhancing Eleventh-Grade Student Speaking Skills: Implementing Project-Based Learning at SMAN 9 Bandar Lampung

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Abstract

This study aimed to investigate the impact of project-based learning on students' speaking abilities among eleventh-grade students at SMAN 9 Bandar Lampung. Employing a quantitative research approach with a two-group experimental design, the study conducted a series of five therapy sessions for the experimental group, while the control group received no treatment. Pre-test assessments were conducted to gauge students' skills prior to intervention. Data collection instruments were utilized for both pre-test and post-test evaluations. Following the administration of post-tests, data analysis revealed a significant improvement in students' speaking skills in the experimental class, with average scores rising from 61.48 to 68.26. In comparison, the control group exhibited an increase from an average pre-test score of 55.19 to 61.81 after intervention. Statistical analysis, with a t-value of 7.902 and a significance level of .000 ($p < 0.05$), indicated a distinct difference between the two groups, affirming the effectiveness of project-based learning.

Keywords: *Project-based learning; Speaking abilities; Quantitative research; Experimental design.*

Introduction

English is often regarded as a dominant language for global communication in today's interconnected world. This is a vital means of engagement. The widespread use of English as a global language highlights its importance in various aspects of human civilization, as its presence in diverse countries reinforces its standing as a universally recognised method of communication (Crystal & Chowdhury, 1997; Saraceni, 2008; Seidlhofer, 2005).

Oral communication, particularly speaking skills, are crucial for successful interpersonal connection (Nickerson, 2005; Saraceni, 2008). Speech is an essential aspect of communication that enables the sharing of information and the articulation of viewpoints (Ko, 2015; Masuram & Sripada, 2020; Şimon, 2014). Hence, it is crucial for those who wish to participate meaningfully in conversations and interactions to develop effective speaking skills.

Nevertheless, students frequently have difficulties in cultivating their oral communication skills. Speaking fear is influenced by factors such as a restricted lexicon, challenges in accurately expressing words, and a dearth of self-assurance (Şimon, 2014; Smith, 1997). These obstacles not only impede efficient communication but also generate sentiments of shame and unease, emphasising the necessity for inventive teaching methods to tackle these deficiencies (Bhatti et al., 2021; Masuram & Sripada, 2020; Mills, 2009; Şimon, 2014).

Project-based learning is a promising educational technique that can improve students' speaking skills. Project-based learning is an educational strategy that combines conversations, demonstrations, and project work to address real-world problems. It provides a dynamic framework for the development of skills (Khalid et al., 2021; Mills, 2009; Rubin & Morreale, 1996; Şimon, 2014). The instructional technique cultivates students' motivation, problem-solving

aptitude, and collaborative proficiencies, all the while establishing a captivating learning milieu.

Furthermore, project-based learning creates an environment that is favourable for students to participate in public speaking, giving them chances to utilise their language abilities in genuine circumstances similar to those encountered in real life. Engaging in project work allows learners to enhance their communication skills and acquire critical thinking, cooperation, and project management abilities (Bakar et al., 2019; Masuram & Sripada, 2020; Soomro, 2018).

Although the advantages of project-based learning in improving speaking skills are recognised, there is still a lack of understanding regarding its precise influence on eleventh-grade students at SMAN 9 Bandar Lampung. Therefore, the objective of this study is to examine the effectiveness of project-based learning in enhancing students' oral communication abilities in this specific setting. This research will fill a significant research need and add to the existing knowledge on successful language teaching methods.

Literature Review

Quantitative research entails the methodical collection and analysis of data to understand the importance of individuals' or social groups' experiences or problems. For this study, a quantitative research methodology is used to examine how project-based learning affects students' speaking skills. The research design utilises a quasi-experimental methodology, in which two groups are compared to evaluate the efficacy of the intervention (Halim et al., 2023; Praba̓ et al., 2018; Setyawan et al., 2021; Soomro, 2018; Yufrizal et al., 2017).

The research design consists of two separate categories: the experimental group and the control group. A random sampling technique is applied to pick members for each group, providing a representative sample. The intervention in the experimental class involves using project-based learning to improve students' speaking proficiency. Conversely, the control group is subjected to both pre-test and post-test evaluations without being exposed to the intervention (Bakar et al., 2019; Sayuti et al., 2020; Wongpinunwatana et al., 2018).

The research design is outlined as follows: X1 indicates the initial assessment scores of the control group, while X2 reflects the follow-up assessment scores of the control group. Y1 represents the pre-test scores of the experimental class, while Y2 represents the post-test scores of the experimental class. This design facilitates a comparative assessment of the efficacy of project-based learning in enhancing students' speaking abilities, offering useful insights into the effectiveness of this instructional method among eleventh-grade students at SMAN 9 Bandar Lampung (Sayuti et al., 2020; Setyawan et al., 2021; Yufrizal et al., 2017).

Methodology

The sample for this study consisted of 62 eleventh-grade students from SMAN 9 Bandar Lampung during the 2022–2023 academic year. Participants were recruited using a random sampling technique without taking into account any specific strata within the group. The sample comprised two classes, each consisting of 31 pupils, identified as XI 3 (experimental group) and XI 5 (control group). Consequently, the study encompassed a grand total of sixty-two kids (Krisnoviani & Sulistyani, 2022; Masuram & Sripada, 2020; Sayuti et al., 2020).

This study found two categories of variables: dependent and independent. The project-based learning served as the independent variable, whereas the students' verbal articulation ability was considered as the dependent variable. A three-part methodology, consisting of a pre-test, treatment, and post-test, was utilised to assess verbal articulation (Wang, 2019).

The research technique consisted of multiple steps. At first, the population and sample were chosen using a conventional random sampling method. Following that, the participants were given the therapy, which involved engaging in project-based learning activities such as class discussions and completing projects. The course materials were mostly of explanatory texts, accompanied by scheduled discussion sessions and speaking practice. The objective of this stage was to assess the students' advancement in project-based learning (Ariani et al., 2023; Styla & Michalopoulou, 2016).

Data analysis entailed utilising computer-based analytical software to process the data

derived from the initial evaluation test findings. The data was interpreted using various forms of analysis, such as descriptive statistics, independent t-tests, and paired t-tests. By employing SPSS, a statistical software designed for the social sciences, we were able to conduct thorough data analysis in order to derive significant findings from the study (Alsamani & Daif-Allah, 2015; Sirisrimangkorn, 2018).

Result

Experimental interventions were implemented in the experimental group following the pre-test, while a distinct methodology was employed in the control group. Project-based learning served as the teaching approach in the experimental classroom to enhance students' oral communication skills, whereas conventional teaching methods were utilized in the control class. Post-tests were administered to both classes upon concluding the study to assess the degree of improvement in students' speaking skills following the treatment.

Descriptive statistics were calculated to compare pre- and post-project-based learning student scores in the experimental group and pre- and post-conventional instructional scores in the control group. For the experimental group, the pre-test mean was 61.48 with a standard deviation of 11.852, while the post-test mean was 68.26 with a standard deviation of 11.605. In contrast, for the control group, the pre-test mean was 55.19 with a standard deviation of 13.340, and the post-test mean was 61.81 with a standard deviation of 13.257.

Paired sample t-tests were conducted to determine the significance of the results. The results showed a very significant difference ($p < 0.05$) between pre- and post-test scores for both the experimental and control groups. Specifically, the experimental group demonstrated a statistically significant improvement in speaking skills following the project-based learning intervention.

The discussion of the results encompasses the comparison of total scores between the control and experimental classes. After the intervention, the control class showed improvement from an average pre-test score of 55.19 to 61.81, while the experimental class exhibited an increase from a pre-test average of 61.48 to 68.26. The paired sample t-test yielded a p-value of 0.000, indicating a statistically significant improvement in the experimental group's speaking skills. These findings suggest that project-based learning is an effective method for enhancing students' speaking proficiency, as evidenced by the improvement in test scores.

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No	Subject	Pre-test score	Post-test score
1	APK	57	66
2	AYM	58	66
3	AWF	58	61
4	ASI	64	75
5	AMI	63	76
6	APA	75	84
7	DSP	42	58
8	DM	58	58
9	GVR	59	68
10	JAS	45	59
11	KGR	97	97
12	MAPP	67	76
13	AF	53	56
14	MRP	52	52
15	MAR	70	73
16	M	60	68
17	MBRT	64	78
18	MPZS	92	93
19	MRS	48	55
20	MAR	56	65
21	MNF	71	80
22	MRR	52	54
23	NSR	63	76
24	OR	59	67
25	REB	62	65
26	RDP	59	65
27	SUD	69	72
28	SL	54	65
29	TW	54	55
30	VG	51	51
31	ZNA	74	82
	Total	1.906	2.116

Table 1. Comparison of Pre- and Post-Project-Based Learning Student Scores (Experimental Group)

No	Subject	Pre-test score	Post-test score
1	ARW	30	52
2	AIS	94	97
3	AIK	60	70
4	BF	56	78
5	CNH	67	68
6	DO	52	56
7	DV	49	43
8	ES	51	51
9	FMS	55	61
10	GPS	54	54
11	HDP	47	46
12	IPH	53	59
13	MAAG	38	54
14	MBR	47	47
15	MPAG	43	43
16	MRAV	69	74
17	MA	52	52
18	MOPG	30	52
19	MRR	47	47
20	NM	78	80
21	NA	59	67
22	NC	59	70
23	PAZ	60	63
24	REP	52	60
25	ALW	41	61
26	SRR	71	86
27	SNA	62	71
28	THN	49	53
29	YA	58	65
30	ZRH	54	56
31	ZMB	74	80
		1.711	1.916

Table 2. Comparison of Students' Pre- and Post-Conventional Instructional Scores (Control Group)

Descriptive Statistics[a]

N		Minimum	Maximum	Mean	Std. Deviation
pre-test	31	30	94	55.19	13.340
post-test	31	43	97	61.81	13.257
Valid N (listwise)	31				

a. group = Control Class

Descriptive Statistics[a]

N		Minimum	Maximum	Mean	Std. Deviation
pre-test	31	42	97	61.48	11.852
post-test	31	51	97	68.26	11.605
Valid N (listwise)	31				

a. group = Experimental class

Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
pre-test	Control Class	31	55.19	13.340	2.396
	Experimental class	31	61.48	11.852	2.129

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
pre-test	Equal variances assumed	.276	.601	-1.963	60	.054	-6.290	3.205	-12.701	.120
	Equal variances not assumed			-1.963	59.179	.054	-6.290	3.205	-12.703	.122

Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
post-test	Control Class	31	61.81	13.257	2.381
	Experimental class	31	68.26	11.605	2.084

Paired Samples Test[a]

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	post-test - pre-test	6.613	7.495	1.346	3.864	9.362	4.912	30	.000

a. group = Control Class

Double-click to activate

Paired Samples Test[a]

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	post-test - pre-test	6.774	4.773	.857	5.023	8.525	7.902	30	.000

a. group = Experimental class

Double-click to activate

Group Statistics

	group	N	Mean	Std. Deviation	Std. Error Mean
defference	Control Class	31	6.6129	7.49523	1.34618
	Experimental class	31	6.7742	4.77291	.85724

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
defference	Equal variances assumed	3.702	.059	-.101	60	.920	-.16129	1.59595	-3.35367	3.03109
	Equal variances not assumed			-.101	50.895	.920	-.16129	1.59595	-3.36546	3.04288

Discussion

This study utilised a quantitative research technique to examine the influence of project-based learning on students' speaking abilities. It drew upon ideas from existing literature, specifically the works of Halim et al. (2023), Prabaˆ et al. (2018), Setyawan et al. (2021), Soomro (2018), Yufrizal et al. (2017). The study employed a quasi-experimental approach to compare two groups and evaluate the efficacy of the intervention (Bakar et al., 2019; Sayuti et al., 2020; Wongpinunwatana et al., 2018). The experimental group engaged in project-based learning activities with the goal of enhancing their speaking skills, whereas the control group completed pre-test and post-test evaluations without any exposure to the intervention.

An analysis was conducted on the pre-test and post-test scores of both the control and experimental groups to assess the effectiveness of project-based learning. The control group had a significant increase in their average pre-test score, rising from 55.19 to 61.81 following the intervention. In the same way, the experimental group demonstrated a rise from an initial average of 61.48 to 68.26. The statistical analysis, performed using paired sample t-tests, demonstrated a highly significant disparity ($p < 0.05$) in the pre- and post-test scores of the experimental group (Bakar et al., 2019; Sayuti et al., 2020; Setyawan et al., 2021; Yufrizal et al., 2017).

The results of this study are consistent with prior research that demonstrates the efficacy of project-based learning in improving students' oral communication skills (Halim et al., 2023; Prabaˆ et al., 2018; Setyawan et al., 2021; Soomro, 2018; Yufrizal et al., 2017). The observed statistically significant enhancement in speaking abilities subsequent to project-based learning interventions indicates the effectiveness of this instructional strategy. Project-based learning at SMAN 9 Bandar Lampung significantly improves the speaking proficiency of eleventh-grade students by offering them meaningful engagement and real-world application of language abilities.

Conclusion

After examining the findings of the study, it is clear that both the control and experimental groups shown enhancements in students' speaking skills. The implementation of project-based learning had a substantial impact on improving students' oral communication abilities, as evidenced by the paired sample T-test analysis. Although there was no noticeable disparity in the average scores between the control and experimental groups, the statistically significant enhancement in speaking ability provides evidence for the efficacy of project-based learning.

The aforementioned data provide persuasive evidence that implementing project-based learning in the classroom is an effective technique for enhancing students' public speaking abilities. The preponderance of students' post-test results supported the alternative hypothesis (Ha) in contrast to the null hypothesis (Ho), so reinforcing the beneficial influence of project-based learning on students' oral communication skills.

These findings allow for the formulation of several recommendations for stakeholders in the field of English education. Project-based learning can be a highly effective instructional technique for educational institutions, instructors, learners, and higher education organisations. English educators, particularly those emphasising oral communication abilities, are advised to include project-based learning into their instructional approaches. This method not only grabs the students' focus but also improves their mastery of the English language and hones their skills in verbal communication, specifically in spoken English.

In order to enhance the validity of project-based learning in improving students' speaking skills, it is recommended that future researchers carry out treatments across numerous sessions, maybe lasting five sessions.

References

Bakar, N. I. A., Noordin, N., & Razali, A. B. (2019). Improving Oral Communicative Competence in English Using Project-Based Learning Activities. *English Language Teaching*, *12*(4), 73–84. https://doi.org/10.5539/elt.v12n4p73

Alsamani, A.-A. S., & Daif-Allah, A. S. (2015). Introducing Project-based Instruction in the Saudi ESP Classroom: A Study in Qassim University. *English Language Teaching*,

9(1), 51–64. https://doi.org/10.5539/elt.v9n1p51

Ariani, D., Hidayat, A., & Girikallo, A. S. (2023). The Implementation of Project Based Learning in Blended Learning System to Improve English Speaking Skill of Polytechnic Students. *ENGLISH FRANCA : Academic Journal of English Language and Education*, *7*(1), 79. https://doi.org/10.29240/ef.v7i1.6284

Bhatti, A. W., Lohar, S. A., Shaikh, Z. A., & Panhwar, I. A. (2021). Investigating Strategies to Improve English Oral Communication Skills Among Undergrads at Mehran UET, Jamshoro. *Journal of Literature, Languages and Linguistics*, *79*, 43–53. https://doi.org/10.7176/jlll/79-05

Crystal, D., & Chowdhury, K. Bin. (1997). *English as a Global language*.

Halim, N., Boys, M., Fahmi, F., & Nitin, M. (2023). The Implementation of Project-Based Learning in Indonesian EFL Class Between 2017 to 2022: A Systematic Review. *Lingeduca: Journal of Language and Education Studies*, *2*(2), 95–111. https://doi.org/10.55849/lingeduca.v2i2.96

Khalid, A., Malik, G. F., & Mahmood, K. (2021). Sustainable development challenges in libraries: A systematic literature review (2000–2020). *The Journal of Academic Librarianship*, *47*(3), 102347. https://doi.org/https://doi.org/10.1016/j.acalib.2021.102347

Ko, H. (2015). Cross-cultural Leadership Effectiveness: Perspectives from Non-Western Leaders. *Management and Organizational Studies*, *2*(4). https://doi.org/10.5430/mos.v2n4p1

Krisnoviani, R., & Sulistyani, S. (2022). Using Project-Based Learning Model to Promote Students' Listening Comprehension at Vocational High School. *EDUKATIF : JURNAL ILMU PENDIDIKAN*, *4*(4), 6134–6140. https://doi.org/10.31004/edukatif.v4i4.2805

Masuram, J., & Sripada, P. N. (2020). Developing Speaking Skills Through Task-Based Materials. *Procedia Computer Science*, *172*, 60–65. https://doi.org/https://doi.org/10.1016/j.procs.2020.05.009

Mills, K. A. (2009). Floating on a Sea of Talk: Reading Comprehension Through Speaking and Listening. *The Reading Teacher*, *63*(4), 325–329. https://doi.org/https://doi.org/10.1598/RT.63.4.8

Nickerson, C. (2005). English as a lingua franca in international business contexts. *English for Specific Purposes*, *24*(4), 367–380. https://doi.org/https://doi.org/10.1016/j.esp.2005.02.001

Praba̓, L. T., Artini, L. P., & Ramendra, D. P. (2018). Project-based learning and writing skill in EFL: are they related? *SHS Web of Conferences*, *42*, 00059. https://doi.org/10.1051/shsconf/20184200059

Rubin, R. B., & Morreale, S. P. (1996). Setting expectations for speech communication and listening. *New Directions for Higher Education*, *1996*(96), 19–29. https://doi.org/https://doi.org/10.1002/he.36919969604

Saraceni, M. (2008). English as a lingua franca: between form and function. *English Today*, *24*(2), 20–26. https://doi.org/DOI: 10.1017/S0266078408000163

Sayuti, H. A. M., Ann, T. G., Saimi, W. M. S. A., Bakar, M. A. B., Dawawi, S. N. A., & Mohamad, M. (2020). Using Gold Standard Project Based Learning for Intermediate Year Three Pupils to Enhance English Speaking Skill: A Conceptual Paper. *Creative Education*, *11*(10), 1873–1889. https://doi.org/10.4236/ce.2020.1110137

Seidlhofer, B. (2005). English as a lingua franca. *ELT Journal*, *59*(4), 339–341. https://doi.org/10.1093/elt/cci064

Setyawan, D., Shofiyah, A., Dimlantika, T. I., Sakti, Y. T., & Susilo, H. (2021). Implementation of problem-based learning model through lesson study on student communication skills. *AIP Conference Proceedings*, *2330*(1), 030012. https://doi.org/10.1063/5.0043165

Şimon, S. (2014). Enhancing the English Oral Communication Skills of the 1st Year Students of the Bachelor's Degree Program "Communication and Public Relations." *Procedia - Social and Behavioral Sciences*, *116*, 2481–2484. https://doi.org/https://doi.org/10.1016/j.sbspro.2014.01.596

Sirisrimangkorn, L. (2018). The Use of Project-based Learning Focusing on Drama to Promote Speaking Skills of EFL Learners. *Advances in Language and Literary Studies*, *9*(6), 14. https://doi.org/10.7575/aiac.alls.v.9n.6p.14

Smith, G. (1997). Learning to Speak and Speaking to Learn. *College Teaching*, *45*(2), 49–51. https://doi.org/10.1080/87567559709596190

Soomro, A. F. (2018). Pedagogical Practices Employed in Teaching and Learning Speaking Skills at Taif University. *International Journal of English Linguistics*, *8*(4), 273–281. https://doi.org/10.5539/ijel.v8n4p273

Styla, D., & Michalopoulou, A. (2016). Project Based Learning in Literature: The Teacher's New Role and the Development of Student's Social Skills in Upper Secondary Education. *Journal of Education and Learning*, *5*(3), 307–314. https://doi.org/10.5539/jel.v5n3p307

Wang, D. (2019). Multilingualism and Translanguaging in Chinese Language Classrooms. In *Multilingualism and Translanguaging in Chinese Language Classrooms*. Springer International Publishing. https://doi.org/10.1007/978-3-030-02529-8

Wongpinunwatana, N., Jantadej, K., & Jantachoto, J. (2018). Creating Creative Thinking in Students: A Business Research Perspective. *International Business Research*, *11*(4), 47–56. https://doi.org/10.5539/ibr.v11n4p47

Yufrizal, H., Huzairin, ., & Hasan, B. (2017). Project Based - Content Language Integrated Learning (Clil) at Mathematics Department Universitas Lampung. *English Language Teaching*, *10*(9), 131–139. https://doi.org/10.5539/elt.v10n9p131