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## Enhancing Public Speaking Skills through a Collaborative Learning Approach with Performance Assessment

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### Abstract

Public speaking skills offer numerous advantages in enhancing achievement and prestige. Individuals with adept public speaking abilities often garner accolades for their achievements. Moreover, within societal contexts, those proficient in public speaking are more likely to secure esteemed positions and leadership roles. Consequently, mastery of public speaking holds paramount importance in an individual's life. Aspiring teachers, especially students, must possess the capability to effectively communicate, present, and engage in public speaking activities. This study employs a quantitative approach through experimental research methods, utilizing a combined one-group pretest-posttest design. Public speaking proficiency is assessed through video-recorded practice tests, with peer evaluations focusing on content mastery, systematic presentation, performance aspects (body language, facial expressions, poise, confidence, composure, and attire appropriateness), fluency, and language usage. The pretest score averaged 2.45, while the posttest score averaged 3.65, yielding an N-Gain of 0.77. This supports the hypothesis that differences exist in students' public speaking abilities before and after employing the performance assessment-based collaboration model. The data affirms the effectiveness of the collaboration model in enhancing students' public speaking skills.

### Keywords

Public speaking, collaborative model, performance assessment

## 1. Introduction

Public speaking ability is a crucial skill essential in human life (Ilinawati, 2021). This proficiency provides numerous benefits, including increased achievement and prestige (Fuller et al., 2006). Individuals garner awards for outstanding achievements in public speaking (Abella & Cutamora, 2019). Moreover, those with adept public speaking skills often secure esteemed positions and leadership roles in societal contexts (Beckstein, 2021). Therefore, the mastery and enhancement of public speaking skills hold significant importance in an individual's life.

In Pasundan University's study program curriculum, public speaking is a mandatory subject, particularly in the Indonesian Language and Literature Education Study Program at FKIP Pasundan University. Aspiring teachers, enrolled in FKIP, are equipped with the necessary skills to speak and teach effectively, make presentations, and engage in public speaking activities. Consequently, continual improvement of students' public speaking skills is imperative. A survey conducted among 32 fifth-semester students in the Indonesian Language and Literature Education program revealed persistent challenges in public speaking. Common obstacles included nervousness (94%), limited material mastery (88%), lack of confidence (94%), unpreparedness with media (91%), first-time experience (75%), and difficulty mastering proper diction, foreign expressions, and new terms (91%). These findings underscore the need for ongoing efforts to enhance public speaking skills among students in the Indonesian Language and Literature Education Study Program at FKIP Pasundan University.

Examining the requirements of 21st-century learning, education must foster critical thinking, collaboration, creativity, and communication skills (Thornhill-Miller et al., 2023). Consequently, the development of public speaking skills is pivotal, aligning with the demands of 21st-century learning. In light of this, the author has selected a collaborative learning model founded on performance assessment to enhance students' competence in public speaking (Al-Tamimi & Attamimi, 2014). Additionally, based on the UNESCO International Commission, learning should adhere to the four pillars of learning: Learning to know, which involves understanding and deepening the studied material (Apiola & Tedre, 2013). Following comprehension, learning to do entails practicing and applying acquired knowledge to achieve individual goals (Shea & Ceperano, 2018). Successful practical application leads to independence, allowing individuals to develop and thrive in a social context. In this learning process, teachers play a crucial role in cultivating soft skills, necessitating their creativity and innovation in instructional design (Tang, 2020).

This research aims to enhance students' proficiency in various public speaking activities. The chosen approach is a collaborative model based on performance assessment, aiming to cultivate students' competence in mastering material, delivering it systematically, presenting themselves attractively, and fostering self-confidence, critical thinking, collaboration, creativity, and communication skills. The adoption of the collaborative model aligns with the contemporary educational landscape's emphasis on developing 21st-century skills, including critical thinking, collaboration, creativity, and communication. In the face of an increasingly complex and competitive future, collaboration skills are deemed essential for students to navigate life's opportunities and challenges effectively (Le et al., 2018).

Apart from that, attention to the nine ideas proposed by UNESCO for post-COVID-19 education is crucial, encompassing: 1) Education as a common good; 2) Expansion of basic

educational rights; 3) Prioritizing the teaching profession; 4) Special attention to students and young people; 5) Protecting social space in educational transformation; 6) Educational technology; 7) Reviewing the education system; 8) Protecting education financing; and 9) Global Solidarity (9). Derived from these principles, future education must shape individuals with an innovative and collaborative spirit, transitioning from competitive habits to collaborative values. It should facilitate the broader access and dissemination of knowledge, granting educators the autonomy to actively innovate and collaborate. Furthermore, it should emphasize the rights and involvement of students and young people in educational transformation, integrating both face-to-face and online learning. Ensuring easy and free access to learning resources, strengthening scientific literacy in the education curriculum, and addressing global economic inequality are also paramount. These considerations collectively pave the way for the implementation of a learning environment that fosters creativity, innovation, and collaboration.

In the quest for a future where the Indonesian nation can nurture an exceptional and high-caliber generation, the pivotal role of education becomes paramount (Listyaningsih et al., 2021). Thus, this study seeks to advance a collaborative learning model with the aim of augmenting academic achievements, fostering profound comprehension, and imbuing the learning process with a sense of enjoyment. Additionally, the collaborative learning approach aspires to contribute to the cultivation of robust leadership skills, positive character traits, and attitudes, while simultaneously enhancing students' self-esteem, promoting inclusive learning, fostering a sense of belonging, and nurturing 21st-century skills. These facets are perceived as integral in the endeavor to shape a superior and high-quality golden generation in the years to come.

## **2. Research Methods**

Research methods are scientific steps taken by the author to obtain information and data regarding various matters related to the problem being studied. In this study, the research design used was a combination of one group pretest-posttest using one group without a comparison group. The research design only carries out one treatment that is thought to have an effect, then a final test is held. In the experimental model chosen, a group is given treatment, and the results are then observed. The aim of the research is to measure the increase in students' public speaking competence by using a one-shot case study design. In this research design, groups are observed collaboratively by conducting performance assessments in the form of practices, products and projects, then assessed collaboratively using a rubric according to predetermined criteria.

A comprehensive depiction of the utilized performance assessment is as follows: (1) Practical assessment involves evaluating participants' competency through assignments and observations during public speaking practice sessions, aligning with predetermined competency targets. Collaborative assessment is conducted by researchers and students, collectively evaluating participants' knowledge, skills, and attitudes using a predefined rubric. (2) Product assessment scrutinizes the technical and aesthetic quality of planning products and video recordings of public speaking practices made by students. Collaborative assessment of these products is performed by both lecturers and students using predetermined criteria. The participants in this study comprised 32 students enrolled in the Indonesian Language and Literature Education Study Program at FKIP Pasundan University, graduating in the year 2019. The selection of research participants employed a purposive technique, driven by the rationale that collaborative assessments, being

performance-based, may yield inaccurate results with an excessive number of observations, assessments, and data analyses. Data collection involved a range of methods, including trials, tests, observations, questionnaires, and interviews. Qualitative processing was applied to data obtained from questionnaires, observation results, and interviews, while test data underwent analysis using the Wilcoxon Test through the SPSS 23.0 program for decision-making purposes.

### 3. Results and Discussion

This study aimed to enhance the public speaking skills of students enrolled in the Indonesian Language and Literature Education Study Program at Pasundan University. The data collection and analysis occurred during the odd semester of the 2022/2023 academic year. The research commenced with a pre-test, evaluating students' initial public speaking abilities. Subsequently, a collaborative learning model based on performance assessment was employed to enhance these skills. Practical assessments included assignments and observations during public speaking activities, aligning with predetermined competency targets. Collaborative assessments, conducted by both researchers and students, focused on evaluating participants' knowledge, skills, and attitudes using a predefined rubric. Product assessments encompassed the technical and aesthetic quality of planning materials and video recordings of students' public speaking practices. The collaborative evaluation of planning scripts, media, and video recordings involved both lecturers and students, employing a predefined rubric with established criteria.

Project assessment involves evaluating assignments that students must complete within a specified timeframe. These assignments encompass various stages, including planning, data collection, data analysis, data presentation, and reporting. For instance, in the context of public speaking activities, students are tasked with creating a plan, resulting in scripts and media for their presentations. During the execution phase, students produce and gather video recordings of their public speaking activities. Subsequently, collaborative assessments take place, where students provide feedback to each other, offering suggestions and criticism to enhance their performance in public speaking. The culmination of this process involves data analysis, data presentation, and reporting, manifested in the form of collaborative project assessment papers.

The enhancement of public speaking skills among students in the Indonesian Language and Literature Education Study Program at FKIP Pasundan University for the academic year 2022/2023 is evident before and after their exposure to a collaborative learning model centered on performance assessment. As delineated in the provided table, the average pre-test score of 2.45 experienced a notable increase to 3.65 post-treatment. Referring to the competency values established by FKIP Unpas, the post-treatment results fall within the "very good" category, a marked improvement from the pre-treatment level, which resided at the lower boundary of the "good" range. The pre-test scores ranged from 1.6 (poor criteria) to 3.00 (good criteria), while the post-test scores ranged from 3.39 (good criteria) to 3.86 (very good criteria). The assessment format adheres to the evaluation structure, conversion process, and criteria set forth at FKIP Pasundan University. Analysis of both pre-test and post-test data unequivocally demonstrates a discernible advancement in the public speaking skills of students within the Indonesian Language and Literature Education Study Program at FKIP Pasundan University following their engagement with a impactful collaborative learning model rooted in performance assessment.

**Table 1.** Normality Test Tests of Normality

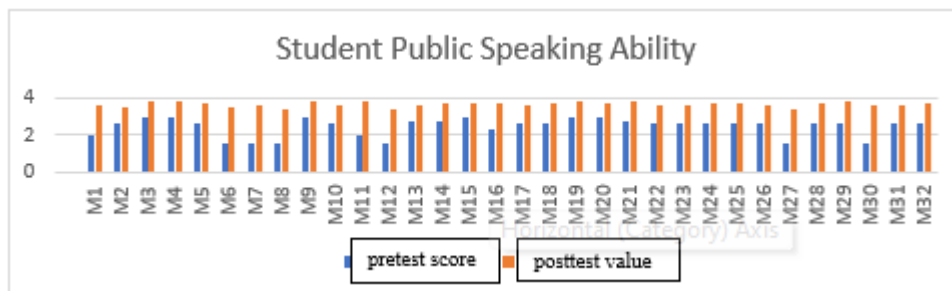
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest Score	.324	32	.100	.839	32	.100
Posttest Value	.088	32	.200*	.961	32	.290
This is a lower bound of the true significance.						
Lilliefors Significance Correction						

The normality of the data was assessed using the criteria that H0 assumes normal distribution, while H1 posits non-normal distribution. The test outcomes are interpreted as follows: if the significance (sig) value is greater than 0.05, H0 is accepted and H1 is rejected; if the sig value is less than 0.05, H0 is rejected, and H1 is accepted. The results of the normality tests, employing Kolmogorov-Smirnov and Shapiro-Wilk as indicated in Table 1, reveal that the significance of the pretest value is 0.100 (> 0.05), confirming the normal distribution of the data. Similarly, the significance values for the post-test are 0.200 and 0.290 (> 0.05), affirming the normal distribution of the data. Consequently, the parametric statistical test proceeds with a paired t-test for one sample (paired-sample t-test), as detailed in Table 2.

**Table 2.** Paired Samples Test

Paired Samples test									
		Mean	Std. Deviation	Std. Error Mean	95% confidence interval of the Difference		t	df	Sig. (2-tailed)
					lower	Upper			
Pair 1	Pre-test value – Post-test value	1.16375	.43317	.07657	-1.00758	1.00758	-15.198	31	.000

In hypothesis testing, the formulated hypotheses are as follows: H0 asserts that there is no difference in students' public speaking abilities before and after employing a collaboration model based on performance assessment, while H1 posits that there is a difference in students' public speaking abilities before and after utilizing a collaboration model based on performance assessment. The test outcome is interpreted as follows: if the significance (sig) value exceeds 0.05, H0 is accepted, and H1 is rejected; if the sig value is less than 0.05, H0 is rejected, and H1 is accepted. The paired-sample t-test, presented in the table above, yields a sig value of 0.000, which is less than 0.05. Consequently, H0 is rejected, signifying that there are discernible differences in students' public speaking abilities before and after implementing the performance assessment-based collaboration model (Figure 1).



**Figure 1.** Student Public Speaking Ability

The N-Gain formula, also known as Normalized Gain, is a mathematical expression used to assess the improvement or gain in learning or performance between two different points in time, typically before and after an intervention. It is commonly employed in educational research to measure the effectiveness of an instructional method or intervention. The formula is calculated using the following steps:

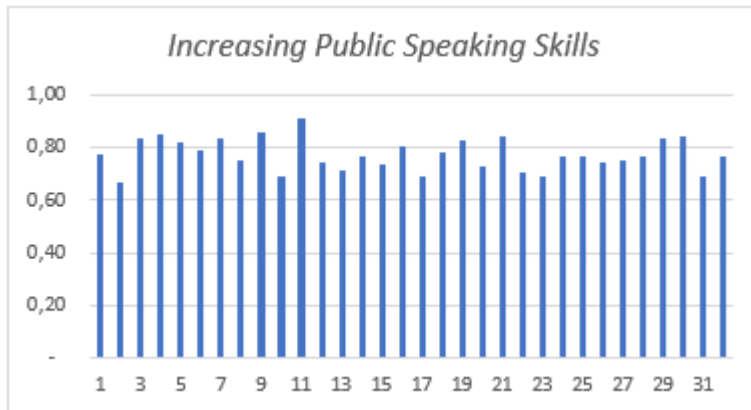
1. Calculate the Mean of the Pretest Scores ( $M_{pre}$ )
2. Calculate the Mean of the Posttest Scores ( $M_{post}$ )
3. Calculate the Gain ( $G$ ). This is to subtract the mean pretest score from the mean posttest score ( $G = M_{post} - M_{pre}$ ).
4. Calculate the Maximum Possible Gain ( $G_{max}$ ) to determine the highest possible gain by subtracting the lowest pretest score from the highest posttest score.
5. Calculate N-Gain by using the formula  $N\text{-Gain} = (G / G_{max}) * 100$ .

The N-Gain value is expressed as a percentage, representing the proportion of improvement relative to the maximum possible improvement. A higher N-Gain indicates a more significant positive impact of the intervention on the participants' learning or performance. Educational researchers and educators use the N-Gain formula to quantify the effectiveness of various educational interventions, teaching methods, or learning strategies. It provides a standardized measure that can be compared across different studies and interventions, offering insights into the magnitude of improvement achieved.

**Table 3.** Gain Score

Gain Score Distribution	
N-Gain Value	Category
$g > 0.7$	High
$0.3 \leq g \leq 0.7$	Medium
$g < 0.3$	Low

Source: Melzer in Syahfitri, 2008



**Figure 2.** Improvement of Public Speaking Skills

The mean N-gain value of 0.77 falls within the high gain classification (Table 3; Figure 2). This substantiates the enhanced public speaking skills of students enrolled in the Indonesian Language and Literature Education Study Program at FKIP Pasundan University for the academic year 2022/2023, both before and after engaging in the collaborative learning model founded on performance assessment, underscoring its efficacy in the learning process. Overall, the outcomes of the statistical analyses, particularly the normality tests and paired-sample t-tests, have provided significant insights into the effectiveness of the performance assessment-based collaboration model in enhancing students' public speaking abilities. The confirmation of normal data distribution indicates the appropriateness of employing parametric tests, and the paired t-test's rejection of the null hypothesis underscores the presence of substantial differences in students' public speaking skills before and after the intervention. This empirical evidence substantiates the positive impact of the collaboration model on students' oral communication proficiency.

The current study contributes to the existing literature on public speaking skills by aligning with the insights provided by various scholars. Abella and Cutamora (2019) explored the development of public speaking skills within an educational organization, employing a grounded theory approach. Apiola and Tedre (2013) emphasized the importance of deepening learning through learning-by-inventing. Beckstein (2021) discussed the potential benefits of American Indian leadership in global contexts, particularly in collectivist settings. Fuller et al. (2006) delved into the organizational identification process, shedding light on perceived external prestige and internal respect. Ilinawati (2021) investigated students' speaking performance in demonstrating product advertising. Le, Janssen, and Wubbels (2018) examined obstacles perceived by teachers and students in collaborative learning practices. Listyaningsih, Alrianingrum, and Sumarno (2021) focused on preparing an independent golden millennial generation through character education. Al-Tamimi and Attamimi (2014) evaluated the effectiveness of cooperative learning in enhancing speaking skills and attitudes towards learning English. Tang (2020) underscored the importance of soft skills acquisition by teachers in higher education institutions. Thornhill-Miller et al. (2023) delved into the assessment, certification, and promotion of 21st-century skills for the future of work and education, emphasizing creativity, critical thinking, communication, and

collaboration. This synthesis provides a comprehensive understanding of the multifaceted aspects of public speaking skills, drawing insights from diverse perspectives.

The implications of these findings extend to both academic and practical realms. Academically, the study reinforces the validity of the performance assessment-based collaboration model as a pedagogical approach to enhance public speaking skills. Educators and curriculum designers can consider integrating similar models into their teaching methodologies to foster effective communication competencies among students. Practically, the study suggests that interventions focused on collaboration and performance assessment positively contribute to skill development, aligning with the demands of contemporary education and professional arenas. This has implications for institutions aiming to equip students with versatile and sought-after skills for their future endeavors. This research makes notable contributions to the existing literature by empirically validating the effectiveness of the performance assessment-based collaboration model in the context of public speaking skills. The meticulous use of statistical tests, including normality assessments and paired t-tests, adds robustness to the study's conclusions. The categorization of the average N-gain value as high gain provides a quantitative measure of the intervention's impact, facilitating a nuanced understanding of the observed improvements. By establishing a connection between pedagogical strategies, collaboration, and skill enhancement, this research offers practical insights for educators and policymakers striving to enhance educational methodologies and outcomes.

#### **4. Conclusion**

Based on the outcomes of the normality test conducted using Kolmogorov-Smirnov and Shapiro-Wilk, the p-values for both pretest ( $0.100 > 0.05$ ) and post-test ( $0.200$  and  $0.290 > 0.05$ ) indicate that the data follows a normal distribution. Consequently, the parametric statistical test proceeded with a paired t-test for one sample (paired-sample t-test). The paired-sample t-test results, with a significance value (sig) of  $0.000 < 0.05$ , led to the rejection of the null hypothesis ( $H_0$ ), affirming differences in students' public speaking abilities before and after engaging with the performance assessment-based collaboration model. The calculated average N-gain value of  $0.77$  categorizes as high gain. Consequently, conclusions can be drawn regarding the research problem, asserting that students' public speaking abilities witnessed improvement after the intervention, establishing its success and effectiveness.

The study's positive outcomes have noteworthy theoretical implications, contributing to the methodological discourse in education and skill development. By affirming normal data distribution and employing parametric tests, particularly the paired t-test for one sample, the study strengthens the methodological foundation for assessing the impact of pedagogical interventions. The results validate theoretical frameworks emphasizing collaboration, performance assessment, and skill enhancement in educational contexts, providing empirical support to these concepts. This validation enhances the robustness of educational theory and provides researchers with a solid foundation for future investigations into collaborative learning and performance assessment models. Practically, the study offers actionable insights for educators and policymakers, advocating for the adoption of performance assessment-based collaboration models to enhance oral communication skills. However, it is crucial to acknowledge the study's limitations, such as

its focus on a specific context and population, potential biases in quantitative measures, and a lack of exploration into individual differences and external influences. Recognizing these limitations, future research should aim for comparative studies across diverse educational contexts, incorporating qualitative methodologies for a more nuanced understanding. Longitudinal studies can track the sustainability of improvements, and investigations into the transferability of skills to real-world scenarios would enrich practical implications, contributing to the continual improvement of collaborative, performance-based models in education.

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