

THE INTEGRATION OF PODCAST-ASSISTED MEDIA AND PROJECT-BASED LEARNING TO ENHANCE ENGLISH SPEAKING SKILLS OF STUDENTS AT UNIVERSITAS MUHAMMADIYAH ENREKANG

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ABSTRACT

Podcasts have gained popularity as a flexible medium for delivering information across diverse genres, including news, entertainment, personal development, and education. This study investigates the integration of podcast-assisted media and Project-Based Learning (PjBL) to enhance English-speaking skills among third-semester students enrolled in the Public Speaking and Presentation course at Universitas Muhammadiyah Enrekang. The research addresses challenges in traditional language instruction, such as limited speaking opportunities and student anxiety, by leveraging the flexibility and authenticity of podcasts. Employing a pre-experimental one-group pretest-posttest design, the study examines the impact of this method on students' speaking abilities. Data analysis was conducted using a paired sample t-test, revealing a significant improvement in speaking skills, as indicated by the pretest and posttest score comparison ($t = -34.997$, $p = 0.000$). The findings demonstrate that integrating podcast-assisted media with Project-Based Learning (PjBL) provides an effective approach to enhancing students' English-speaking skill, offering opportunities for active participation and authentic listening experiences.

Keywords: Podcast, Project Based Learning, Speaking Skill

INTRODUCTION

Speaking is a crucial human tool for interacting and communicating with other people (Bleakley et al., 2022; Khan et al., 2021). Persons must contribute necessary components to ensure a successful interaction (Blandford & Attfield, 2022). Speaking is a skill that is useful for communicating sentiments, opinions, and ideas since it is a competency to communicate an idea orally (Pratiwi & Rohmadi, 2021). Teachers must provide engaging and communicative activities in speaking classes by providing students with the necessary time, opportunities, and encouragement to practice the target language (Adem & Berkessa, 2022).

In recent years, there has been a growing interest in integrating technology into language learning, particularly in enhancing English-speaking skills (Rajendran & Yunus, 2021). Despite the availability of diverse methods to teach speaking skills, university students often face persistent challenges (Rahiem, 2021; Zou et al., 2021). Many struggle with anxiety, lack of confidence, and insufficient

practice opportunities in traditional classroom settings (Labicane, 2021). These issues, in turn, limit their ability to speak fluently in English, a problem that has been widely reported in studies on second language acquisition (Dilshad et al., 2022). Thus, there is a pressing need to explore innovative approaches to overcome these obstacles.

Podcast-based learning has emerged as a promising solution for students to practice language skills (Panagiotidis, 2021; Sotlikova & Haerazi, 2023). Podcasts provide rich, authentic input from native speakers and offer learners the chance to listen to real conversations in context (Kassaie et al., 2021). Although podcast-based learning has been extensively used for improving listening skills, its potential for enhancing speaking skill remains underexplored. This gap in the literature forms the basis for the current study, which aims to investigate how podcast-based learning influences English-speaking skill among university students.

A review of recent studies on podcast-based language learning reveals a research gap in its application to speaking skills. For instance, podcasts are effective in improving listening comprehension and vocabulary acquisition (Saeedakhtar et al., 2021). However, few studies have focused on how podcasts can be used to develop productive language skills, such as speaking. While podcasts provide substantial exposure to authentic language input, there is limited empirical evidence on whether this method can directly impact speaking fluency. This indicates a need for more focused research on how podcast-based learning can be structured to support spoken language development.

This research also responds to the call for more inclusive and technology-enhanced learning models in university education. By integrating podcast-based learning into the curriculum, universities may offer students more opportunities to practice and improve their speaking skill in a way that fits their schedules (Bettahar & Raba, 2022). Similarly, project-based learning (PjBL) is a student-centered approach that encourages learners to engage in meaningful projects, allowing them to actively use and develop their language skills (Fitriany, 2024). Studies have shown that integrating project-based learning in language education fosters critical thinking, creativity, and communication skills (Cosgun & Atay, 2021).

The combination of podcast-based and project-based learning presents a promising strategy for enhancing speaking skill among university students (Sotlikova & Haerazi, 2023). By integrating these approaches, students are exposed to structured yet flexible content delivery through podcasts while simultaneously engaging in interactive, real-world projects (Procel et al., 2024). This dual approach aims to bridge the gap between passive listening and active speaking, creating a comprehensive language learning experience. However, despite the theoretical potential of this combined strategy, empirical research examining its effectiveness remains limited.

Based on the results of observations that have been carried out at Universitas Muhammadiyah Enrekang, low student grades in speaking courses, opportunities for students to speak English actively are often limited, where English is not the main language. The researcher invited me to meet the new learning activity by using a combination of Podcast-Based and Project-Based Learning. By presenting a fun and easy learning model, it is hoped that it can help them improve their speaking skills significantly.

METHOD

This study used pre-experimental designs, a sort of experimental research. One Group Pretest-Posttest Design was employed in the study. The population for this research is third-semester students who are currently studying the course Public Speaking and Presentation at Universitas Muhammadiyah Enrekang. The sample selected through total sampling. This course is directly aligned with the objectives of the research, as it emphasizes the development of speaking skill, making these students an appropriate sample for the study. Podcast-Assisted Project-Based Learning (PjBL) involves the use of podcasts as the main teaching material to improve students' Speaking skills. The type of podcast that is used in this research is a solo podcast from YouTube. The speaking test used is a monologue text where students are given a topic and express their ideas related to the podcast. The rubric used is an adaptation of Latifa et al (2015). Researchers used SPSS v.25 to analyze data results. The research hypotheses are:

H_0 : The students do not perform better speaking ability after they are taught through podcasts with the PjBL method.

H₁ : The students perform better speaking ability after they are taught through podcasts with the PjBL method.

RESULTS

Test results were used to determine the study's conclusions in order to address the research questions. The effectiveness of using podcasts to help students become more proficient speakers was one of the research questions. The purpose of this study was to evaluate the effectiveness of using podcasts to help students become more proficient speakers. As shown in the table below, the frequency and percentage of the data were determined using the total score of the five aspects:

Table 1. Frequency of pre-test

Category Score	Scale	Frequency	Percentage
Very Good	> 81	0	0
Good	61-80	10	90.91%
Fair	41-60	1	9.09%
Poor	21-40	0	0
Very Poor	< 20	0	0
Total		11	100%

The pretest results that were conducted prior to the implementation of podcast-assisted media in project-based learning, provide a baseline for evaluating the students' initial English-speaking skills. Among the 11 participants, the majority were categorized as "Good". One student fell into the "Fair" category, while no students achieved a "Very Good" or fell into the "Poor" and "Very Poor". These results indicate that while most students had a foundational ability in English speaking, none demonstrated advanced proficiency, highlighting the need for targeted interventions. The absence of extremely low scores suggests that all participants had some level of competency to build upon, making them well-suited for the integration of podcast-assisted learning to potentially enhance their skills further.

Table 2. Frequency of post-test

Category Score	Scale	Frequency	Percentage
Very Good	> 81	10	90.91%
Good	61-80	1	9.09%
Fair	41-60	0	0
Poor	21-40	0	0
Very Poor	< 20	0	0
Total		11	100%

The posttest results that were conducted after implementing podcast-assisted media in project-based learning, demonstrate a significant improvement in students' English-speaking skills. Out of 11 participants, they achieved a "Very Good" score. This marks a substantial progression compared to the pretest results, where no students reached this category. One student remained in the "Good" category, while no participants were categorized as "Fair," "Poor," or "Very Poor." These findings highlight the effectiveness of podcast-assisted media in enhancing English speaking skill, as most students advanced to the highest level of performance. The shift from a "Good" majority in the pretest to a predominantly "Very Good" performance post-treatment underscores the transformative impact of this instructional approach, making it a promising tool for fostering advanced language skills.

To ensure the validity of the data analysis, a normality test was conducted to determine whether the pretest and posttest scores followed a normal distribution. The normality test is a crucial step in statistical analysis, as it determines the appropriate statistical tests to use for further hypothesis testing. The normality test was done using Shapiro Wilk. The test was analyzed using SPSS 25.00 for Windows. By analyzing the distribution of scores, the normality test helps establish whether the observed changes in students' English speaking skills after the implementation of podcast-assisted media can be attributed to the treatment under study. The results of the normality test are showed in the following table:

Table 3. Normality Test

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.182	11	.200 [*]	.966	11	.841
Posttest	.156	11	.200 [*]	.948	11	.623

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

The normality test showed the significance value for the pretest is 0.841, and for the posttest, it is 0.623. Both values are greater than the commonly used threshold of 0.05, suggesting that the data are normally distributed. This finding confirms that the data meets the assumption of normality, allowing for the use of parametric statistical tests to analyze the effectiveness of the podcast-assisted media in enhancing students' English-speaking skills.

Having established normality, the next step is to examine the homogeneity of variance between the pretest and posttest scores. The homogeneity test ensures that the variance of the two groups is equal, which is another critical assumption for parametric tests. The homogeneity test is showed in the following table.

Table 4. Homogeneity Test

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Nilai	Based on Mean	.333	1	20	.570
	Based on Median	.268	1	20	.610
	Based on Median and with adjusted df	.268	1	18.590	.611
	Based on trimmed mean	.347	1	20	.562

The results of the homogeneity test show a significance value of 0.570, which is greater than the threshold of 0.05. This indicates that the variances of the pretest and posttest scores are equal, fulfilling the assumption of homogeneity. Combined with the normality test results, these findings confirm that the data satisfies the key assumptions required for parametric statistical analysis. Therefore, it is appropriate to proceed with further testing to assess the effectiveness of the intervention.

To evaluate the extent of the difference observed between the pretest and posttest results, a paired t-test will be conducted. This test is particularly suitable for analyzing the impact of the podcast-assisted media, as it compares the same group of students before and after the treatment. The results of the paired t-test are presented in the following table.

Table 5. Paired Sample Test

Paired Samples Test									
		Paired Differences				T	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-19.036	1.804	.544	-20.248	-17.824	-34.997	10	.000

The analysis was initially conducted using a two-tailed paired sample t-test, which yielded a p-value of 0.000. However, as the hypothesis was directional, predicting that the posttest scores would be significantly higher than the pretest scores, a one-tailed test was more appropriate. To obtain the one-tailed p-value, the two-tailed p-value was divided by two, resulting in a one-tailed p-value of 0.000. The p-value (0.000) is less than 0.05, reinforcing the conclusion that the improvement in the posttest scores is not due to chance.

The paired t-test results demonstrate a t-value of -34.997. The critical t-value from the t-distribution table for a two-tailed test at a significance level of 0.05 with 10 degrees of freedom is approximately ± 2.228 . Since the absolute value of the calculated t-statistic (34.997) exceeds the critical threshold ($34.997 > 2.228$), this confirms that the variation between the pretest and posttest scores is statistically significant. The negative sign of the t-value further indicates that posttest scores are substantially higher than the pretest scores. These findings underscore the efficacy of podcast-assisted media in improving students' English-speaking abilities and provide compelling evidence to support its application in project-based learning settings.

DISCUSSION

The primary findings of this study demonstrate that the integration of podcast-assisted media in project-based learning significantly improves students' English-speaking skills. The posttest results show a notable increase in scores compared to the pretest, with a statistically significant difference ($p = 0.000$). This

outcome indicates that the treatment effectively addressed the students' challenges in speaking proficiency and facilitated measurable progress.

The validity of these observations is supported by a rigorous analysis of the data. Both normality and homogeneity tests confirmed that the data met the necessary assumptions for parametric statistical testing. The paired t-test further validated the significance of the improvement, with the calculated t-value far exceeding the critical value from the t-table. These results reinforce the reliability of the findings and the effectiveness of the intervention.

In comparison with existing literature, the findings align with studies such as Khotimah (2024) which emphasize the role of English Podcast on Students 'speaking Skill. Podcasts, as highlighted by prior research, provide authentic listening experiences and repeated exposure to spoken language, fostering improvements in pronunciation, vocabulary, and fluency. This study corroborates these insights, adding evidence for the efficacy of podcasts in real-world educational settings.

The use of project-based learning as the instructional framework further amplified the benefits of podcast-assisted media. By engaging students in collaborative, goal-oriented tasks, the approach promoted active learning and practical application of language skills. This is consistent with findings from by Ma'rufah et al (2024), which showed students responded enthusiastically and students' perceptions are equally favorable, as podcast-assisted media not only enhances their speaking abilities but also supports the improvement of other language competencies.

This study reinforces the importance of integrating podcast-based media into project-based learning to improve students' English-speaking skills. Unlike previous studies that tend to focus on improving listening and vocabulary skills through podcasts, this study uniquely explores the impact of this combination of strategies on productive speaking skills. With this approach, students not only receive authentic language input but also opportunities to apply their speaking skills through contextually relevant collaborative projects. The significant results in speaking skills suggest that this approach is able to address challenges such as student anxiety and limited speaking opportunities in traditional teaching. This

innovative approach has the potential to be a relevant long-term solution for educational institutions in creating a more inclusive and interactive learning environment.

Although this study showed significant results in improving English speaking skills through the integration of podcast-based media and project-based learning, there are several limitations that need to be considered. First, the design of this study used a pre-experimental method with one group without a control group, thus not allowing direct comparison between the tested method and other learning methods. Second, the relatively small and homogeneous sample size (third-semester students from one university) may limit the generalization of the findings to a wider population. Third, the limited duration of the intervention may not be sufficient to observe long-term impacts on students' speaking skills.

Future studies could build upon these findings by exploring the long-term effects of podcast-assisted media and its applicability to other language skills, such as listening and writing. Additionally, expanding the sample size and including diverse educational contexts would provide further insights into the generalizability of this method. Nevertheless, the present study underscores the transformative potential of combining innovative media with active learning strategies to enhance language proficiency.

CONCLUSION

The study concludes that integrating podcast-assisted media into Project-Based Learning (PjBL) is an effective approach to enhancing English-speaking skills among students. The significant improvement in students' speaking proficiency, as evidenced by the paired t-test results, highlights the potential of podcasts to provide authentic listening experiences and reduce challenges associated with traditional language instruction, such as limited speaking opportunities and anxiety. This innovative method fosters active engagement and creates a more dynamic and supportive learning environment.

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