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Enhancing Students Speaking Skills Through Small Group Discussion Supported by Chatgpt Voice at SMPN 4 Koto Baru

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Abstract

This study aimed to examine the effect of Small Group Discussion supported by ChatGPT Voice on student's speaking skills at SMPN 4 Koto Baru. A quantitative approach with a pre-experimental one-group pretest-posttest design was employed. The participants considered of 27 seventh-grade A student's selected through total sampling. Data were collected using speaking tests assessing pronunciation, fluency, vocabulary, and grammar. The data were analyzed using descriptive statistics, the Shapiro-Wilk normality test, and Wilcoxon Signed-Rank Test. The results showed that the students mean score increased from 34.81 in the pre-test and 44.44 in the post-test. The Wilcoxon Signed-Rank Test yielded a significance value of 0.000 ($p < 0.05$). Therefore, the null hypothesis (H_0) was rejected, and the alternative hypothesis (H_a) was accepted. Indicating that Small Group Discussion supported by ChatGPT Voice has a significant positive effect on students speaking skills. These findings suggest that integrating collaborative learning with AI-assisted speaking practice can serve as an effective strategy for improving students speaking skills.

Keywords: Small Group Discussion, ChatGPT Voice, Speaking Skills, Collaborative Learning, Artificial Intelligence.

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh Small Group Discussion *yang didukung oleh* ChatGPT Voice *terhadap keterampilan berbicara siswa SMPN 4 Koto Baru. Penelitian ini menggunakan pendekatan kuantitatif dengan desain* pre-experimental one-group pretest-posttest. *Sampel penelitian ini terdiri atas 27 siswa kelas VII A yang dipilih menggunakan teknik total sampling. Data dikumpulkan melalui tes berbicra yang menilai aspek palafalan, kelancaran, kosakata, dan tata bahasa. Analisis data dilakukan menggunkan statistik deskriptif, uji normalitas Shapiro-Wilk, dan uji Wilcoxon Signed-Rank. Hasil penelitian menunjukkan bahwa rata-rata nilai siswa meningkat dari 34.81 pada pre-test dan 44.44 pada post-test. Uji Wilcoxon Signed-Rank menghasilkan nilai signifikansi 0.000 ($p < 0.05$), sehingga hipotesis nol (H_0) ditolak dan hipotesis alternatif (H_a) diterima. Temuan ini menunjukkan bahwa penerapan* Small Group Discussion *yang didukung oleh* ChatGPT Voice *efektif dalam meningkatkan keterampilan berbicara siswa melalui pembelajaran kolaboratif dan dukungan berbasis kecerdasan buatan.*

Kata Kunci: **Small Group Discussion, ChatGPT Voice, *Keterampilan Berbicara, Pembelajaran Kolaboratif,* AI**

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Introduction

Speaking is one of the essential language skills in English learning, because it enables student's to express ideas, exchange information, and communicate effectively in both academic and real-life contexts (Bohari, 2019). In Indonesia, English is taught as a foreign language (EFL), where student's have limited opportunities to use English in daily communication. Consequently, many students still experience difficulties in developing their speaking ability despite learning English for several years. Speaking requires students to simultaneously master several components, including pronunciation, vocabulary, grammar, and fluency. Making it one of the most challenging language skills for EFL learners (Aditya et al., 2024).therefore, developing students speaking skills has become one of the primary objectives of English language teaching.

The important of speaking is also reflected in the implementation of *Kurikulum Merdeka*, which emphasizes students ability to communicate meaningfully in various situations (Alamsyah & Siti Saleha Gandana, 2023). In English learning, students are expected to express opinions, respond to information, participate in discussions, and deliver simple oral presentation (Widiantari & Mandarani, 2024). These learning outcomes indicate that speaking is not merely a supporting skill but an essential competency that students should develop throughout the learning process. Consequently, English Teachers are require to implement learning strategies that encourage students to actively participate in communicative activities rather than focusing solely on written exercises (Damayanti, 2025).

However, the reality in many Indonesian EFL classroom indicates that students speaking performance remains relatively low. Indonesian students frequently experience difficulties in expressing ideas orally because of limited vocabulary, inaccurate pronunciation, grammatical errors, lack of fluency, and low self-confidence (Aditya et al., 2024). In addition, classroom instruction often provides limited opportunities for authentic oral communication, causing students to become passive during speaking activities. As a result many students are unable to achieve the expected speaking competencies outlined in the curriculum.

These condition were identified during the researcher's teaching practice (*Pengenalan Lapangan persekolahan* or PLP II) at SMPN 4 Koto Baru. Classroom observations revealed that many seventh-grade A students hesitated to speak English because they were afraid of making mistakes and lacked sufficient vocabulary to express their ideas. Students also encountered difficulties in pronouncing English words correctly, constructing grammatically appropriate sentences, and maintaining speaking fluency. Furthermore, the formative assessment results showed that approximately 66.7% of students did not achieve the school's Criteria for Achieving Learning Objectives (KKTP) score of 70. Indicating that students require a learning strategy capable of increasing classroom participation while providing greater opportunities to practice speaking.

One instructional strategy that can facilitate students speaking practice is Small Group Discussion. This collaborative learning strategy encourages students to exchange ideas, negotiate meaning, and communicate effectively with their peers in a supportive learning environment (Hadijah & Musfirah, 2022). Compared with teacher-centered instruction, Small Group Discussion provides more opportunities for every students to participate in classroom interaction, thereby increasing speaking practice and reducing communication anxiety. The implementation of Small Group Discussion is also supported by Vygotsky's Sociocultural Theory, which emphasizes that language development occurs through meaningful social interaction and collaborative with others (Vygotsky, 1978). Through interaction within small groups, students are expected to construct knowledge collaboratively while improving their speaking ability.

Although Small Group Discussion provides meaningful opportunities for communication, some students still encounter difficulties because of limited vocabulary, uncertainly about pronouncing, and lack of confidence when expressing ideas. Therefore, additional instructional support is needed to assist student during speaking activities. One emerging technology that has attracted considerable attention in English language learning is ChatGPT Voice. As an AI-assisted speaking medium,

ChatGPT Voice enables students to engage in real-life spoken interaction, receive pronunciation models, obtain vocabulary assistance, and practice speaking in a supportive, low-anxiety environment (Aisyah, 2025). Unlike conventional translation tools that mainly provide direct translations, ChatGPT Voice facilitates interactive communication that encourages students to produce language more actively wile developing their speaking confidence (Shikun et al., 2024).

Several studies have demonstrated the effectiveness of AI-assisted speaking media in improving students oral communication. According to (Aisyah, 2025), who reported that ChatGPT Voice contributed positively to students pronunciation, fluency, vocabulary, and speaking confidence through interactive voice conversations. Similarly, (Waluyo, 2025) found that AI-Based conversational tools increased students willingness to communicate while reducing speaking anxiety because students could practice without fear of negative evaluation. On the other hand, previous studies have also confirmed that Small Group Discussion promotes active participation, collaborative learning, and speaking practice among EFL students (Anggrani & Soesatyo, 2015; Hadijah & Musfirah, 2022; Mosha & Ruíz, 2010). However, these studies generally investigated Small Group Discussion and ChatGPT Voice separately. Empirical studies examining the integration of Small Group Discussion supported by ChatGPT Voice, particularly in Indonesia junior secondary school contexts, remain limited.

Based on the research gap, this study investigate the effect of Small Group Discussion supported by ChatGPT Voice on students speaking skills at SMPN 4 Koto Baru. This study employed a quantitative approach using a pre-experimental one-group pretest-posttest design to determine whether integrating collaborative discussion with AI-assisted speaking support significantly imporves students speaking skills. The findings are expected to contribute to English language teaching by providing an alternative instructional strategy that combines collaborative learning and artificial intelligence to enhance students speaking performance.

Research Method

This study employed a quantitative approach using a pre-experimental one-group pretest-posttest design to examine the effect of Small Group Discussion supported by ChatGPT Voice on students speaking skills. This design selected because it enabled the researcher to compare students speaking performance before and after the implementation of the treatment within the same group. The research was conducted at SMPN 4 Koto Baru during the 2025/2026 academic year. The participants considered of 27 students from seventh-grade A class, who were selected using total sampling because the study involved only one intact class.

The research instrument was an individual speaking test administered as both a pre-test and a post-test. The speaking performance of the students was assessed using an analytical speaking rubric adapted from (Brown, 2004), covering four aspects: pronunciation, fluency, vocabulary, and grammar. The collected data were analyzed using descriptive and inferential statistical with IBM SPSS Statistics version 26. Descriptive statistics were used to 1qcalculated the mean, median, minimum score, maximum score, and standard deviation of bot the pre-test and post-test scores. Before hypothesis testing, the data were subjected to the Shapiro-Wilk normality test to determine whether they met the assumption of normal distribution. Since the significance values of both datasets were below 0.05, indicating that the data were not normally distributed, the Wilcoxon Signed-Rank Test was employed to examine whether there was a statistically significant difference between students pre-test and post-test speaking scores. The level of significance adopted in this study was 0.05.

Research Findings

This study aimed to examine the effect of Small Group Discussion supported by ChatGPT Voice on students speaking skills at SMPN 4 Koto Baru. The research findings were obtained from the pre-test and post-test speaking scores of 27 seventh-grade A students.

Table 1 Descriptive Statistics of Pre-Test and Post-test Scores

Test Group	Mean	Median	Standard deviation	Minimum	Maximum
Pre-Test	*34.81*	*30.00*	*15.841*	*20*	*75*
Post-Test	*44.44*	*40.00*	*18.310*	*20*	*85*

Source: Adapted from SPSS 26 2019

Based on Table 1, the descriptive statistics indicate that students speaking performance improved after the implementation of Small Group Discussion supported by ChatGPT Voice. The post-test score were higher than the pre-test scores, indicating that students demonstrated better speaking performance after receiving the treatment.

Before testing the research hypothesis, the data were analyzed using the Shapiro-Wilk normality test to determine whether they were normally distributed.

Table 2 Result of the Shapiro-Wilk Normality Test

Testing Group	Statistic	df	Sig.	Conclusion
Pre-Test	*0.852*	*27*	*0.001*	Not Normally Distributed ($p < 0.05$)
Post-Test	*0.889*	*27*	*0.007*	Not Normally Distributed ($p < 0.05$)

Source: Adapted from SPSS 26 2019

As presented in Table 2, the significance value of both the pre-test and post-test were lower than 0.05. therefore, the data were not normally distributed. Consequently, the Wilcoxon Signed-Rank Test was employed to test the research hypothesis.

Table 3 Wilcoxon Signed-Rank Test Ranks Outcome

Pre-Test – Post-Test	*N*	Means Rank	Sum of Ranks
Negative Ranks	*0*[a]	*.00*	*.00*
Positive Ranks	*24*[b]	*12.50*	*300.00*
Ties	*3*[c]		
Total	*27*		

Source: Adapted from SPSS 26 2019

Table 3 presents the result of the Wilcoxon Signed-Rank Test. The analysis showed that 24 students obtained higher scores in the post-test than in the pre-test (positive ranks), while no students experienced decrease in their speaking scores (negative ranks). In addition, three students obtained the same scores in both tests (ties). These result indicate that most students demonstrated improved speaking performance after participating in Small Group Discussion supported by ChatGPT Voice.

Table 4 Wilcoxon Signed-Rank Hypothesis Test Statistics

Test Comparison	*Z*-value	Asymp. Sig. (2-Tailed)
Pre-Test – Post-Test	*-4.346*[b]	.000

Source: Adapted from SPSS 26 2019

As presented in Table 4, the hypothesis test using the Wilcoxon Signed-Rank Test. The analysis yielded an Asymp. Sig. (2-Tailed) value of 0.000, which was lower than the significance level of 0.05. therefore, the null hypothesis (H_0) was rejected and the alternative hypothesis (Ha) was accepted. These findings indicate that Small Group Discussion supported by ChatGPT Voice has a statistically significant positive effect on students speaking skills at SMPN 4 Koto Baru.

Discussion

The result of this study indicate that the implementation of Small Group Discussion supported by ChatGPT Voice significantly improved students speaking skills. This improvement suggest that combining collaborative learning with AI-assisted speaking support created meaningful opportunities for students to practice speaking more actively. During the learning process, students were encouraged to express their ideas, exchange opinions, and communicate with their group members in English. As a result, they became more engaged in speaking activities and demonstrated better speaking performance after the treatment.

One more important factor contributing this improvement was the implementation of Small Group Discussion as the primary instructional strategy. Through discussion in small groups, students had more opportunities for participate actively in classroom interaction than conventional teacher-centered learning. They were able to exchange ideas, negotiate meaning, and learn from one another while completing the discussion tasks. This collaborative atmosphere also reduce student's fear of making mistakes because they practiced speaking within a smaller and more supportive group. These condition encouraged students to communicate more confidently and more frequently. This result is consistent with (Hadijah & Musfirah, 2022), who stated that Small Group Discussion promotes active participation, meaningful interaction, and improves students speaking ability through collaborative learning.

The effectiveness of this instructional strategy can also be explained through Vygotsky's Sociocultural Theory, which emphasizes that language learning develops through social interaction. According to (Vygotsky, 1978), students construct knowledge through collaboration with others and benefit from guidance provided by peers or more capable individuals. In this study, students worked together exchange information, and provided feedback during group discussions. Such interactions enables them to practice speaking in meaningful contexts while gradually developing their pronunciation, vocabulary, fluency, and grammar.

Another factor that may have contributed to the improvement was the use of ChatGPT Voice as a supplementary learning tool. During the discussion sessions, students used ChatGPT Voice only when they experienced difficulties in pronouncing unfamiliar words, recalling vocabulary, or expressing ideas in English (Hernandez-Vasquez et al., 2026). Instead of replacing peer interaction or the teacher's role, the technology functioned as additional support that helped students overcome linguistic challenges during the discussion process. Immediate pronunciation models and vocabulary assistance allowed students to continue communicating without prolonged hesitation, thereby increasing their confidence in participating in speaking activities (Muhtadi et al., 2025).

The result of tis stud are also in line with previous studies on AI-assisted language learning. According to (Aisyah, 2025), who reported that ChatGPT Voice contributed positively to students pronunciation, vocabulary development, fluency, and speaking confidence through interactive voice-based communication. Likewise, (Waluyo, 2025) found that AI-powered conversational tools create a low-anxiety learning environment that encourages students to practice speaking more frequently. However, unlike those previous studies, this study did not employ ChatGPT Voice as the primary learning medium. Instead, it was integrated into Small Group Discussion as a supporting media, allowing students to benefit from collaborative peer interaction while receiving immediate language assistance whenever necessary.

Unlike previous research that examined Small Group Discussion and ChatGPT Voice separately, this study integrated both approaches within a single instructional process. The findings demonstrate that collaborative discussion remained the central learning activity, whereas ChatGPT Voice served as complementary support to facilitate students speaking practice. This integration not only encouraged active participation but also helped students overcome linguistic barriers without reducing opportunities for authentic communication among peers (Carrera Nuñez et al., 2025).

Overall, the integrating of Small Group Discussion and ChatGPT Voice created an interactive and supportive learning environment that promoted meaningful speaking practice. Collaborative discussion

encouraged students to communicate actively, while AI-assisted support provided immediate help whenever students encountered difficulties in language use. Therefore, this instructional strategy can be considered and effective alternative for English Teachers, particularly at the junior secondary school level, who seek to integrate collaborative learning with artificial intelligence to improve students speaking skills.

Conclusion

The implementation of Small Group Discussion supported by ChatGPT Voice demonstrates that combining collaborative learning with AI-assisted language support can create a more meaningful environment for developing students speaking skills. The discussion activities encouraged students to participate actively, exchange ideas, and build confidence in using English, while ChatGPT Voice Complemented the learning process by providing immediate assistance with pronunciation, vocabulary, and language expression whenever students encountered difficulties. These findings indicate that artificial intelligence can serve as an effective supporting tool without reducing the importance of interaction between students and teachers.

This study contributes to English language teaching by highlighting the potential of integrating Small Group Discussion with AI-based technology to support speaking instruction in junior secondary schools. The findings provide practical implications for English teachers who wish to incorporate artificial intelligence into collaborative learning activities while maintaining meaningful classroom interaction. Future studies are recommended to involve larger samples, different educational levels, or experimental research design to further examine the effectiveness of this instructional approach in various learning contexts.

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