

The Effect of Cooperative Learning's Round Robin During English Lessons on Vocational High School Students' Listening Skills

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ABSTRACT

Cooperative learning has been widely recognized for promoting student engagement and collaborative learning across various language skills. However, limited research has examined the effectiveness of the Round Robin technique in teaching listening comprehension in vocational high schools, particularly by combining students' learning outcomes with their perceptions of the learning process. Therefore, this quasi-experimental study investigated the effectiveness of the Round Robin technique compared with conventional instruction and explored vocational students' perceptions of its implementation. The participants were 50 tenth-grade vocational high school students. Data were collected through pre-tests, post-tests, and a Likert-scale questionnaire to measure students' listening achievement and perceptions. The Mann-Whitney *U* test ($p = 0.154$) indicated no statistically significant difference between the experimental and control groups. Nevertheless, the experimental group demonstrated greater individual improvement, with 84% of students achieving higher post-test scores compared with 56% in the control group. Questionnaire findings also revealed positive perceptions, with an overall favorability rate of 71.84%. Students reported that the structured turn-taking encouraged equal participation, reduced passive learning, and increased classroom engagement despite challenges related to limited vocabulary and classroom conditions. These findings suggest that the Round Robin technique is a practical instructional strategy for promoting active participation, individual accountability, and positive learning experiences in vocational English listening classrooms.

Keywords: Round Robin Technique, Cooperative Learning, Listening Skills, Vocational High School, Student Perceptions

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INTRODUCTION

Vocational high schools (SMKs) are important for providing students with practical skills for the global labour market. However, English instruction in these settings often faces significant difficulties. Despite being recognized as the primary source of "comprehensible input" required for language acquisition, listening comprehension remains set aside and frequently overshadowed by a focus on speaking and grammar (Jermisittiparsert et al., 2021; Namaziandost et al., 2020). In the specific context of Indonesian vocational schools, students face distinct barriers to listening proficiency, including limited vocabulary, low motivation, and structural deficits such as inadequate or broken language laboratories. All of those contribute to poor communicative task performance (Sugiarto et al., 2024).

To address these challenges and move away from passive, teacher-centered instruction, Cooperative Learning (CL) provides a pedagogical framework based on Social Interdependence Theory and Vygotsky's Zone of Proximal Development. Research shows that incorporating positive interdependence and individual accountability in CL can transform listening from an individual task to a collaborative one where students actively process

auditory information to achieve group goals (Bećirović, 2023; Erbil, 2020). This collaborative environment not only minimizes the anxiety commonly associated with foreign language learning, but it also significantly improves academic achievement by forcing students to negotiate meaning and bridge information gaps with other students (Jermsittiparsert et al., 2021).

Despite the documented effectiveness of cooperative strategies, there is a significant gap in the empirical literature on their use in vocational education. A recent meta-analysis of CL in vocational schools revealed the prevalence of complex models such as Teams Games Tournament (TGT) and Student Teams-Achievement Divisions (STAD), as well as a lack of research on the Round Robin technique (Rahayu et al., 2025). While other methods are effective, they are prone to "free-riding," in which passive students allow others to dominate; in contrast, Round Robin employs a structured turn-taking mechanism that inherently enforces equal participation and individual accountability (Delina & Refelita, 2021; Tamimy et al., 2023; Yuniarti et al., 2023). This study aims to determine whether Round Robin CL technique has a significant effect on students' listening skills grades between students taught using Round Robin cooperative learning and those taught using teacher-fronted instruction methods and students' perceptions towards the Round Robin CL technique.

Listening is a fundamental language skill that enables learners to comprehend spoken messages and serves as the foundation for developing other language skills, including speaking, reading, and writing (Rost, 2016). However, listening comprehension is often challenging for EFL learners because it requires the simultaneous processing of vocabulary, grammar, pronunciation, speech rate, and contextual meaning. To address these challenges, cooperative learning has been widely recommended as a learner-centered instructional approach that promotes active participation, peer interaction, and shared responsibility for learning (Gillies, 2021; Johnson & Johnson, 2017). Through structured collaboration, students are encouraged to exchange ideas, negotiate meaning, and support one another in solving learning tasks, creating opportunities for deeper language processing and increased engagement. One cooperative learning strategy, Round Robin, ensures equal participation by requiring each group member to contribute in turn, thereby reducing passive learning and increasing individual accountability. Recent studies have shown that cooperative learning enhances students' motivation, classroom interaction, and language achievement in EFL settings (Gillies, 2021; Slavin, 2023). Nevertheless, evidence regarding the effectiveness of the Round Robin technique for developing listening skills, particularly in vocational high school contexts, remains limited, highlighting the need for further investigation.

Cooperative Learning in English Learning

CL is firmly rooted in constructivist theories, particularly Vygotsky's Zone of Proximal Development and Social Interdependence Theory, which suggests that students learn best through social interaction and mutual support rather than working alone (Erbil, 2020; Shinde & Shinde, 2022). Research shows that implementing beneficial collaboration, individual accountability, and promotive interaction in CL improves students' intrinsic motivation, cultural intelligence, and academic achievement (Bećirović, 2023; Tamimy et al., 2023). In vocational education, a recent meta-analysis found that CL models have a moderate-to-high positive effect on student learning outcomes when compared to traditional methods, also reducing the gap between theoretical knowledge and practical skill (Rahayu et al., 2025). In terms of specific English language skills, previous studies shows that CL strategies are extremely effective across a variety of domains. Speaking techniques such as Think-Pair-Share and Numbered Heads Together have been shown to improve fluency and reduce anxiety by creating a safe environment for interaction (Aprianti & Ayu, n.d.; Namaziandost et al., 2020). Similarly, the Student Teams-Achievement Divisions (STAD) method has proven to be more effective than direct instruction in improving students' comprehension of texts (Aslan Berzener & Deneme, 2021). While speaking and reading are frequently overshadowed, listening skills have benefited from CL; specifically, "information-gap" activities such as Round Robin, Jigsaw, and Learning Together effectively improve listening comprehension by

requiring students to process auditory input from peers in order to complete shared tasks (Jermsittiparsert et al., 2021).

Despite these positive findings, implementing CL in vocational high schools faces unique challenges, including low student motivation, limited vocabulary, and inadequate facilities such as broken language laboratories (Sugiarto et al., 2024). Furthermore, teachers frequently struggle with implementation fidelity, resulting in unstructured socializing or "free-riding" due to a lack of individual accountability (Tamimy et al., 2023). Notably, while techniques such as TGT, STAD, and Jigsaw are extensively researched in vocational settings, there is a distinct lack of empirical research on the Round Robin technique (Rahayu et al., 2025). This suggests a significant gap in the literature regarding how structured turn-taking strategies, such as Round Robin, can specifically address the listening deficits and participation inequalities that exist in vocational English classrooms.

Listening Skills in English Learning

Listening is fundamentally classified as a "receptive" skill alongside reading, unlike productive skills such as speaking and writing, and is recognized as the first language ability acquired by children, serving as the foundation for all subsequent cognitive growth and communication (Aprianti & Ayu, n.d.; Jermsittiparsert et al., 2021). Despite its fundamental role, listening is frequently described as the "Cinderella skill" in second language learning because it has historically been overlooked in favor of speaking; however, scholars emphasize that listening is critical for providing "comprehensible input," without which language learning cannot begin, and speaking itself fails to constitute valid communication if the message is not comprehended by the listener (Jermsittiparsert et al., 2021).

Students frequently face significant challenges in mastering listening skills in educational settings, particularly in vocational high schools in Indonesia, due to both internal factors, such as limited vocabulary and low motivation, and external structural barriers, such as large class sizes and inadequate facilities, including broken language laboratories or audio systems (Sugiarto et al., 2024; Tamimy et al., 2023). Furthermore, listening instruction is frequently underrepresented in cooperative learning implementation when compared to speaking tasks, as teachers may struggle to design group activities that effectively target aural comprehension or may be limited by curricula that prioritize other skills (Jermsittiparsert et al., 2021; Tamimy et al., 2023).

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Cooperative Learning for Listening Proficiency

CL is more effective than traditional methods for improving listening skills. Recent research has shown that using cooperative strategies such as Jigsaw and Missing Information activities results in a significant increase in EFL learners' listening comprehension scores when compared to control groups taught using traditional methods (Jermisittiparsert et al., 2021). These information-gap activities encourage students to actively participate in the learning process by sharing information to bridge knowledge gaps, which necessitates attentive listening to peers in order to complete tasks. A meta-analysis conducted on vocational education contexts confirms that cooperative learning consistently has a moderate to high positive impact (effect size of 0.545) on student learning outcomes, reinforcing its superiority over conventional learning models in improving academic achievement and engagement (Rahayu et al., 2025). Consequently, integrating these cooperative strategies allows students to move beyond passive reception into an active and interactional process of comprehending auditory input, which is fundamentally essential for developing their overall communicative competence (Each & Suppasetseree, 2021).

To address these weaknesses, CL reframes listening as an active, interpersonal skill essential for group success. Students must listen attentively to peers to negotiate meaning, ask for clarification, and resolve conflicts (Bećirović, 2023; Gillies, 2023). Empirical studies show that specific CL techniques, such as "Jigsaw" and "Missing Information," significantly improve listening comprehension by creating an information gap that forces students to actively process auditory input from their partners in order to bridge knowledge gaps and complete shared tasks (Jermisittiparsert et al., 2021).

The mechanism by which CL improves listening lies in the shift from passive to active engagement. Dialogic teaching within CL encourages students to listen to others, share thinking, and consider alternative perspectives, which is essential for productive scientific and linguistic discourse (Gillies, 2023). When students engage in cooperative tasks, they are required to ask for information, give information, and support each other's efforts, which inherently demands active listening skills (Shinde & Shinde, 2022). Furthermore, the reduction of anxiety in CL environments plays a crucial role such as students feel less nervous and freer to express doubts when evaluated by peers rather than solely by a teacher (Altun & Sabah, 2020). This supportive atmosphere motivates students to pay closer attention to their peers' input, thereby refining their listening comprehension and processing abilities.

Implementation and Challenges of Round Robin CL Technique

While the advantages and benefits are obvious, CL's effectiveness in improving listening and other skills is heavily dependent on the consistency of the implementation. According to research, CL is rarely implemented with high fidelity in classrooms due to barriers such as teacher knowledge, student unpreparedness, and curriculum constraints (Tamimy et al., 2023). To successfully improve listening outcomes, teachers must be adept at structuring positive interdependence and ensuring that tasks require listening to complete, rather than simply loose group interaction (Tamimy et al., 2023). Therefore, integrating CL into the curriculum requires careful planning to ensure students actively process auditory information through interaction.

To effectively implement CL, teachers must go beyond unstructured group work and combine five key elements: positive interdependence, individual accountability, promotional interaction, interpersonal skills, and group processing (Gillies, 2023; Namaziandost et al., 2020; Shinde & Shinde, 2022). Teachers serve as facilitators, structuring tasks so that students are interdependent, which mean they cannot succeed unless their groupmates succeed, while also ensuring each student is individually accountable for their contribution (Namaziandost et al., 2020; Shinde & Shinde, 2022). Successful implementation frequently involves a structured process, such as presenting the lesson, having students work in diverse teams to master the material, and administering individual quizzes to ensure that all members have learned the content, as seen in methods such as STAD (Aslan Berzener & Deneme, 2021; Erbil, 2020).

Teachers face numerous challenges that can interfere with the fidelity of CL implementation, primarily due to students' lack of preparedness, which frequently leads to task confusion, off-topic talk, and "free-riding," in which some members fail to contribute (Tamimy et al., 2023). In addition to behavioral issues, low levels of English proficiency pose a significant barrier, as students may struggle to participate in communicative tasks, leading to insecurity and a reluctance to speak in groups (Sugiarto et al., 2024; Tamimy et al., 2023). This linguistic limitation is frequently exacerbated by psychological factors; for example, shy students may fear peer judgment or intrusive error correction by more dominant group members, affecting the safe environment required for cooperation (Tamimy et al., 2023).

Institutional and structural factors are additionally significant barriers to the successful implementation of cooperative learning (Tamimy et al., 2023). Teachers frequently face heavy workloads and administrative burdens, which discourage them from implementing CL methods that require extensive preparation and active monitoring time (Sugiarto et al., 2024; Tamimy et al., 2023). Furthermore, the physical environment of the classroom, such as large class sizes and fixed seating arrangements, complicates group formation and can result in high noise levels that disrupt adjacent classes (Shinde & Shinde, 2022; Sugiarto et al., 2024; Tamimy et al., 2023). In specific contexts, such as vocational high schools, the lack of adequate facilities, such as functional language laboratories, appropriate audio-visual media, and reliable internet connections, further limits the implementation of technology-supported cooperative listening activities (Sugiarto et al., 2024). Finally, teacher-related barriers, such as a lack of proficiency in the target language or negative beliefs about the effectiveness of group work, can result in low implementation fidelity, with CL used primarily as unstructured group work rather than a pedagogical strategy (Sugiarto et al., 2024; Tamimy et al., 2023).

Research Gap

There is a distinct lack of empirical evidence supporting the use of the Round Robin technique, particularly in vocational high school settings. Lack of Round Robin in Vocational Contexts Despite CL's proven benefits, a recent meta-analysis of the impact of cooperative learning on vocational school student learning outcomes found that models such as Teams Games Tournament (TGT), Student Teams-Achievement Divisions (STAD), Numbered Heads Together (NHT), and Think-Pair-Share (TPS) were commonly used, but the Round Robin technique was not identified in the existing body of vocational research (Rahayu et al., 2025). While techniques such as Jigsaw and STAD have been extensively researched, they can be difficult to implement and may still suffer from "free-riding," in which passive students allow others to do the work (Rahayu et al., 2025; Tamimy et al., 2023). There is a need to investigate whether the round robin technique, with its structured turn-taking that inherently enforces individual accountability and equal participation, can effectively address the specific listening challenges faced by vocational students (Shinde & Shinde, 2022).

While cooperative learning has been extensively researched for improving speaking and reading comprehension, listening is still a "Cinderella skill" that is frequently overlooked in favor of speaking and writing (Aslan Berzener & Deneme, 2021; Jermsittiparsert et al., 2021; Namaziandost et al., 2020). According to research, listening is critical for providing the necessary input for language acquisition, but it is frequently overlooked in the classroom (Jermsittiparsert et al., 2021). Students in Indonesian vocational high schools face significant barriers to listening proficiency, including low motivation, lack of vocabulary, and inadequate school facilities such as broken language laboratories (Sugiarto et al., 2024). While one study found that the "Learning Together" technique could improve listening skills, there is little information on how a structured turn-taking technique like Round Robin affects the listening comprehension of vocational students who do not have adequate technological support (Rahayu et al., 2025).

Another empirical gap exists in comparing the feasibility and effectiveness of simplified cooperative structures to the complex methods that currently dominate the literature. While extensive research has validated multi-stage techniques such as Jigsaw, Student Teams-Achievement Divisions (STAD), and Teams Games Tournament (TGT) in

vocational settings, these methods frequently suffer from low implementation fidelity due to their complexity, requiring significant time for student training and resource preparation, which can be prohibitive in crowded vocational classrooms (Rahayu et al., 2025; Tamimy et al., 2023). Recent research suggests that when students are unprepared or confused by complex group protocols, the cooperative benefits are reduced, resulting in "pseudo-learning" or "simple gatherings" rather than genuine interdependence (Tamimy et al., 2023).

There is limited empirical data on the Round Robin technique, which uses a simple, sequential structure that may reduce cognitive load and help students focus on listening content. This study fills that gap by determining if this more effective, accountable strategy is more effective for lower-proficiency vocational students than the more sophisticated models employed in earlier studies.

METHOD

Respondents

Participants in this study were drawn from two intact classes of tenth-grade students at the Vocational High School, with Class X DKV 2 (Desain Komunikasi Visual) serving as the control group and Class X DKV 1 as the experimental group. This selection of existing classes was consistent with the quasi-experimental non-equivalent control group design, which is commonly used in educational research when randomizing individual students is not possible due to school scheduling constraints (Yuniarti et al., 2023).

Table.1 Participants

Class	Male	Female	Total
DKV 1 (Control)	15	10	25
DKV 2 (Experimental)	14	11	25
Total	29	21	50

Research Site

This research was conducted at a private vocational school during the author's teaching practicum program (LANTIP 6 UNNES), which was carried out from 12 September 2025 to 6 November 2025.

Instruments

The instruments used to collect the data in this study consisted of a pre-test and a post-test in the form of listening skill assessments (Each & Suppasetseree, 2021; Jermstittiparsert et al., 2021). Each test required students to complete a worksheet containing 20 multiple-choice questions Delina & Refelita (2021) based on descriptive texts (Harahap & Zulida, n.d.; Yuniarti et al., 2023). During the test administration, a projector and speakers were used to support the listening activities. Video-based materials were also incorporated to provide visual context that enhanced students' comprehension. Previous studies have shown that the integration of multimedia and technology can improve students' engagement and listening performance, particularly in vocational education settings (Each & Suppasetseree, 2021; Sugiarto et al., 2024). The scores obtained from the pre-test and post-test were analysed to determine whether the Round Robin technique resulted in better listening performance in the experimental group (X DKV 2) than in the control group (X DKV 1) (Yuniarti et al., 2023).

To examine students' perceptions of the cooperative learning intervention, a structured questionnaire was distributed through Google Forms (Al-Malki et al., 2022; Each & Suppasetseree, 2021). The online format simplified the data collection process while allowing students to respond conveniently and anonymously (Zheng & Zhou, 2022). The questionnaire employed a four-point Likert scale to measure students' attitudes, learning experiences, and perceptions of the effectiveness of the group activities in a clear and systematic manner (Al-Malki et al., 2022; Each & Suppasetseree, 2021). The questionnaire assessed students' perceptions of the Round Robin CL technique across four aspects: Understanding and Engagement, which measured students' comprehension and participation; Learning

Experience, which evaluated the perceived learning benefits; Interaction and Group Work, which examined collaboration and communication among peers; and Challenges, which identified the difficulties students encountered while using the technique.

Procedures

The data collection began with the administration of the pre-test to both the control and experimental classes on 1 October 2025. After the pre-test was conducted, this study implemented the Round Robin Cooperative Learning technique regularly during each instructional session in the experimental class (X DKV 2). Meanwhile, the control class (X DKV 1) was taught using a conventional teacher-centered method. The treatment began on 2 October 2025 for the control class and on 7 October 2025 for the experimental class. The post-test was administered to both classes on 28 October 2025. Following the completion of the treatment and post-test, a questionnaire was distributed via Google Forms to students in the experimental class to gather their responses and perceptions regarding the implementation of the Round Robin Cooperative Learning technique.

Data Analysis

To evaluate how well the intervention worked, we analysed the pre-test and post-test scores using SPSS (Namaziandost et al., 2020). A normality test showed that our data wasn't normally distributed, so we relied on non-parametric tests rather than the standard parametric ones (Jermsttiparsert et al., 2021). We ran a Wilcoxon Signed-Rank Test to check for meaningful changes between the pre- and post-test scores within each group. Next, we used a homogeneity test to ensure the variance between the experimental and control groups was comparable (Delina & Refelita, 2021; Yuniarti et al., 2023). Finally, we applied the Mann-Whitney U Test to compare both groups' final scores and see if there was a significant difference between them.

The questionnaire responses were also analysed using SPSS. Mean scores were calculated to examine students' overall perceptions of the Round Robin Cooperative Learning technique across the measured aspects, including Understanding and Participation, Learning Experience, Interaction and Group Work, and Challenges and Difficulties (Al-Malki et al., 2022).

FINDINGS AND DISCUSSION

Findings

The following section presents the findings of the research derived from the analysis of the pre-test and post-test scores of both the experimental and control classes. The purpose of the analysis is to determine whether the implementation of the Round Robin Cooperative Learning technique has a significant effect on students' listening skills. Before testing the hypotheses, the data were examined to assess their distribution and to ensure that the appropriate statistical procedures were applied. Since the data did not meet the assumption of normality, non-parametric statistical tests were used to analyse the differences within each group and between the two groups. The detailed results of these analyses are described below.

Table 2. Students Pre-test and Post-test Score

Student Number	Control Group		Experimental Group	
	Pre-Test	Post-Test	Pre-Test	Post-Test
1.	75	80	85	90
2.	80	80	70	90
3.	80	80	75	90
4.	85	85	70	80
5.	85	80	70	80
6.	80	90	70	80
7.	75	80	70	75
8.	80	90	75	80
9.	80	80	95	80

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10.	80	75	75	80
11.	75	85	75	85
12.	75	80	75	80
13.	80	75	75	85
14.	85	80	85	85
15.	75	85	75	80
16.	85	85	75	90
17.	80	90	75	75
18.	75	80	70	80
19.	80	85	70	75
20.	80	85	70	85
21.	80	80	70	80
22.	80	85	70	80
23.	85	90	75	80
24.	85	85	75	75
25.	85	90	70	75

The scores obtained from the pre-test and post-test were collected and tabulated for both the experimental and control classes. These scores were then analysed to see if there was an improvement in students' listening skills after the treatment, as well as any significant differences between the groups. The analysis was conducted using appropriate statistical procedures in order to test the research hypotheses and to measure the effect of the Round Robin CL technique.

Table 3. Test of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test Control Class	.242	25	.002	.813	25	.000
Post-Test Control Class	.240	25	.002	.873	25	.005
Pre-Test Experimental Class	.340	25	.000	.686	25	.000
Post-Test Experimental Class	.292	25	.000	.848	25	.002

Based on the data above, it can be observed that the significance values (Sig.) for all datasets in both the Kolmogorov-Smirnov and Shapiro-Wilk tests are less than 0.05. Therefore, it can be concluded that the research data are not normally distributed. Since the data do not meet the assumption of normality, the data analysis will employ non-parametric statistical tests (Wilcoxon Signed-Rank Test and the Mann-Whitney U Test).

Table 4. Wilcoxon Signed Ranks Test

			N	Mean Rank	Sum of Ranks
Post-Test Control Class - Pre-Test Control Class	Negative Ranks	4 ^a	7.00	28.00	
	Positive Ranks	14 ^b	10.21	143.00	
	Ties	7 ^c			
	Total	25			
Post-Test Experimental Class - Pre-Test Experimental Class	Negative Ranks	1 ^d	19.50	19.50	
	Positive Ranks	21 ^e	11.12	233.50	
	Ties	3 ^f			
	Total	25			

a. Post-Test Control Class < Pre-Test Control Class

b. Post-Test Control Class > Pre-Test Control Class

c. Post-Test Control Class = Pre-Test Control Class

d. Post-Test Experimental Class < Pre-Test Experimental Class

e. Post-Test Experimental Class > Pre-Test Experimental Class

f. Post-Test Experimental Class = Pre-Test Experimental Class

In the Wilcoxon Signed-Rank Test, the Negative Ranks (indicating negative differences) show that in the control class, 4 students experienced a decrease in their post-test scores compared to their pre-test scores, whereas 14 students demonstrated an improvement. Meanwhile, in the experimental class, only 1 student showed a decrease in score, while 21 students exhibited an increase in their post-test scores compared to the pre-test results.

Based on the output table above, there are 14 positive data points (N), which means that 14 students experienced an improvement in their learning outcomes from the pre-test to the post-test. The mean rank, or the average increase, is 10.21, while the sum of ranks is 143.00. While the experimental class showed that there are 21 positive data points (N), which means that 21 students experienced an improvement in their learning outcomes from the pre-test to the post-test. The mean rank, or the average increase, is 11.12, while the sum of ranks is 233.50.

Based on the output table above, in the control class there are 7 ties (N), which indicates that 7 students did not experience any change in their learning outcomes, as their post-test scores are equal to their pre-test scores. Meanwhile, in the experimental class, there are 3 ties (N), meaning that 3 students showed no difference between their pre-test and post-test scores. This indicates that fewer students in the experimental class maintained the same scores compared to the control class.

Table 5. Test Statistic

	Post-Test Control Clas - Pre-Test Control Class	Post-Test Experimental Clas - Pre-Test Experimental Class
Z	-2.627 ^b	-3.524 ^b
Asymp. Sig. (2-tailed)	.009	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks

Based on the "Test Statistics" output, it is known that the value of Asymp. Sig. (2-tailed) for the control class is 0.009. Since 0.009 is less than 0.05 ($0.009 < 0.05$), it can be concluded that the hypothesis is accepted. This means that there is a significant difference between the pre-test and post-test results in the control class.

In the experimental class, the value of Asymp. Sig. (2-tailed) is 0.000. Since 0.000 is less than 0.05 ($0.000 < 0.05$), the hypothesis is accepted. This indicates that there is a significant difference between the pre-test and post-test results in the experimental class. Therefore, it can also be concluded that there is an effect of using the Round Robin Cooperative Learning technique on the students' Listening skill at SMK Bina Nusantara Ungaran.

Table 6. Test of Homogeneity of Variance

	Levene Statistic	df1	df2	Sig.
Based on Mean	.002	1	48	.965
Based on Median	.175	1	48	.678
Based on Median and with adjusted df	.175	1	45.749	.678
Based on trimmed mean	.000	1	48	.990

Based on the output above, it is known that the significance value (Sig.) Based on Mean is $0.965 > 0.05$. Therefore, it can be concluded that the variance of the post-test data in the experimental class and the post-test data in the control class is equal or homogeneous.

Table 7. Test Statistic^a

	Result
Mann-Whitney U	243.000
Wilcoxon W	868.000
Z	-1.427
Asymp. Sig. (2-tailed)	.154

a. Grouping Variable: class

Based on the "Test Statistics" output, it showed that the Asymp. Sig. (2-tailed) value is $0.154 > 0.05$. Therefore, it can be concluded that the hypothesis is rejected. Thus, it can be stated that there is no difference in students' listening skills between the experimental class using the round robin CL technique and the control class (conventional method). Since there is no significant difference, it can be concluded that there is no effect of using the Round Robin CL Technique Method on students' listening skills.

The questionnaire has four aspects aimed to assess students' attitudes toward the Round Robin Cooperative Learning technique. The first dimension, Understanding and engagement (X1), assessed students' understanding of the Round Robin technique and engagement in the exercise. The second dimension, Learning Experience (X2), investigated students' perceptions of the learning gains obtained from Round Robin. The third dimension, Interaction and Group Work (X3), evaluated students' experiences cooperating and interacting with their peers. The fourth dimension, Challenges and challenges (X4), investigated the hurdles and challenges students encountered while using the technique.

Table 8. Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Total_X1	25	12	24	17.64	2.871
Total_X2	25	14	24	17.96	2.458
Total_X3	25	7	17	13.24	2.437
Total_X4	25	7	14	10.32	1.749
Valid N (listwise)	25				

The table showed that students' opinions of the Round Robin Cooperative Learning method were generally favourable. With a mean score of 17.96, representing 71.84% of the maximum possible score, the Learning Experience dimension had the highest mean score. According to this research, students indicated that the method helped them understand the lessons, learn from their classmates, and become more involved in the learning process. Students were also able to understand the procedure and actively participate in the activity, as evidenced by the positive results for the Understanding and Participation dimension ($M = 17.64$), which accounted for 70.56% of the maximum score. The Interaction and Group Work dimension received a mean score of 13.24, equivalent to 66.20% of the maximum score, demonstrating that students generally felt comfortable collaborating and interacting with their group members. Furthermore, the Challenges and Difficulties dimension obtained a mean score of 10.32, representing 34.40% of the maximum possible score. This comparatively low percentage suggests that students experienced few difficulties while participating in the Round Robin activities. Overall, the results indicate that students held favourable perceptions of the Round Robin Cooperative Learning technique and considered it an effective cooperative learning method.

Discussion

The primary finding of this study is that there was no significant difference in listening outcomes between students taught using the Round Robin technique and those taught through conventional teacher-fronted instruction. Although both the experimental and control groups improved from pre-test to post-test, the final comparison resulted in a significance value of 0.154, which is above the 0.05 threshold. This finding contrasts with previous research, such as the study by Jermisittiparsert et al. (2021), which suggested that cooperative learning strategies like Jigsaw and Missing Information are generally more effective than traditional methods in improving listening comprehension (Jermisittiparsert et al., 2021).

One possible explanation for this result is the contextual challenges found in vocational education (Sugiarto et al., 2024). Listening is often treated as a "Cinderella skill," receiving less attention than skills like speaking or grammar (Jermisittiparsert et al., 2021). Students in Indonesian SMKs often face internal difficulties such as limited vocabulary, low motivation, and anxiety when processing English input (Sugiarto et al., 2024). Although the Round Robin

technique was designed to ensure equal participation and reduce passive behaviour, these underlying issues may have limited students' ability to fully engage in the activity (Delina & Refelita, 2021; Tamimy et al., 2023; Yuniarti et al., 2023).

In addition, institutional and classroom conditions may have influenced the effectiveness of the method. Cooperative learning requires a supportive environment, but challenges such as large class sizes, fixed seating arrangements, and limited facilities, including poor audio systems or non-functional language labs, can make implementation difficult (Sugiarto et al., 2024; Tamimy et al., 2023). These constraints can reduce the quality of listening activities and limit the potential benefits of the Round Robin technique, making it no more effective than traditional teacher-centered instruction in this context (Sugiarto et al., 2024).

Despite the lack of statistical significance between the two groups, the improvement within the experimental group is still notable. In the experimental class, 21 out of 25 students improved their scores, compared to 14 in the control class. This suggests that the Round Robin technique may help engage more students in the learning process (Delina & Refelita, 2021; Yuniarti et al., 2023). This finding is also in line with Social Interdependence Theory and Vygotsky's Zone of Proximal Development, which emphasize the importance of interaction in supporting learning (Erbil, 2020). Although the technique did not significantly outperform the traditional method, it remains a useful approach for encouraging participation and reducing passive learning in the classroom (Delina & Refelita, 2021; Yuniarti et al., 2023).

According to the questionnaire's results, students had very positive opinions of the Round Robin Cooperative Learning method, especially with regard to its capacity to improve understanding and involvement. The Learning Experience dimension had the highest mean score (71.84%), closely followed by Understanding and Participation (70.56%), indicating that the method successfully assisted students in processing information and actively learning from their peers (Al-Malki et al., 2022; Each & Suppasetsee, 2021). Additionally, the Interaction and Group Work dimension's favourable response (66.20%) shows that students were at ease working together in a structured environment. Cooperative group work promotes mutual support and trust, leading to increased interpersonal skills, confidence, and decreased anxiety (Al-Malki et al., 2022; Bećirović et al., 2022).

In contrast, the lowest average score was observed in the Challenges and Difficulties category (34.40%), showing that students encountered few barriers when using the Round Robin approach. Tamimy et al. (2023) found that Round Robin's sequential structure effectively addresses implementation challenges in cooperative learning, including student confusion, task avoidance, and dominance by more proficient peers. This technique promotes individual accountability, equal participation, and prevents passive students from "free-riding" on group efforts (Delina & Refelita, 2021; Yuniarti et al., 2023). These results confirm that students see Round Robin as a useful, interesting, and highly advantageous teaching technique that fosters a positive learning environment (Al-Malki et al., 2022; Each & Suppasetsee, 2021).

CONCLUSIONS

This study found that both the Round Robin Cooperative Learning technique and conventional teacher-centered instruction improved vocational high school students' listening skills, although the difference between the two approaches was not statistically significant. However, students who participated in the Round Robin technique showed greater individual improvement and expressed positive perceptions toward the learning process. The structured turn-taking encouraged active participation, engagement, and individual accountability, making the technique a practical strategy for supporting listening instruction. Its implementation may be more effective when accompanied by appropriate scaffolding, such as pre-teaching essential vocabulary and providing suitable learning resources. The study also indicates that the success of cooperative learning can be influenced by contextual factors, including students' English proficiency, classroom management, and the availability of

instructional facilities. Nevertheless, the findings should be interpreted cautiously because the study involved a small sample from only two intact classes in one vocational high school. Future research should involve larger and more diverse samples and examine the long-term effectiveness of Round Robin across different language skills and educational contexts.

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