



The Use of Small Group Discussion through Project-Based Learning to Develop Students' Speaking Skill at Vocation High School

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Article Info	Abstract
Received: 2026-06-09 Revised: 2026-09-11 Accepted: 2026-09-16 Keywords: Small Group Discussion, Project-Based Learning, speaking skill, vocational students, English learning DOI: 10.24256/ideas.v14i2.11146 Corresponding Author: Sitti Ayisiyah sittiayisiyah@gmail.com English Language Education Study Program, Postgraduate Program Universitas Negeri Makassar	<i>This study investigated the use of Small Group Discussion through Project-Based Learning to develop students' speaking skill at UPTD SMK Negeri 1 Sarjo. Speaking is a crucial skill for vocational high school students because it supports communication in academic, social, and professional contexts, including presentations, job interviews, customer service, and workplace interaction. However, tenth-grade students at UPTD SMK Negeri 1 Sarjo experienced problems in speaking English, particularly limited vocabulary, grammar accuracy, pronunciation, fluency, and lack of confidence. This research employed a quantitative approach with a quasi-experimental design. The population consisted of 82 tenth-grade students, while the sample consisted of 40 students selected from two classes: 20 students in the experimental class and 20 students in the control class. The experimental class was taught using Small Group Discussion through Project-Based Learning, while the control class received conventional instruction. The instruments were an oral speaking test and a student perception questionnaire. The speaking test assessed pronunciation, vocabulary, grammar, fluency, and comprehension, while the questionnaire measured students' perceptions of the learning strategy. The results showed that the experimental class improved from a pre-test mean score of 54.80 to a post-test mean score of 67.50. Meanwhile, the control class improved from 56.20 to 59.70. The post-test classification showed that 10% of experimental students reached the excellent category and 40% reached the good category, while no control students reached the excellent category. Questionnaire results showed that 60% of students gave strongly positive responses, 30% positive responses, and 10% neutral responses. The study concludes that Small Group Discussion through Project-Based Learning effectively improves students' speaking skill and promotes confidence, collaboration, creativity, and idea organization in English speaking.</i>

1. Introduction

English speaking skill is one of the most important competencies for students in the era of globalization. English is widely used in education, technology, business, tourism, international communication, and professional interaction. For vocational high school students, the ability to speak English is especially important because they are prepared to enter the workforce after graduation. They may need English for job interviews, presentations, customer service, workplace communication, technical explanation, and interaction with people from different backgrounds. Therefore, English learning in vocational schools should not only focus on grammar and written exercises but also provide students with meaningful opportunities to practice oral communication.

Speaking is a productive language skill that requires learners to express ideas, opinions, feelings, and information orally. Brown (2004) explains that speaking requires the integration of pronunciation, grammar, vocabulary, fluency, and comprehension. This means that speaking is not a simple activity. When students speak, they must select appropriate words, arrange sentences, pronounce sounds clearly, maintain fluency, and respond to the listener's message. Harmer (2007) also states that speaking is an interactive process in which speakers construct meaning in real time. Therefore, speaking requires both linguistic knowledge and communicative confidence.

In English as a Foreign Language (EFL) contexts, speaking is often considered difficult by students. Many students understand English vocabulary or grammar in written form but hesitate when they are asked to speak. They may be afraid of making pronunciation mistakes, using incorrect grammar, or being laughed at by classmates. This condition is common in Indonesian EFL classrooms where English is not used widely outside school. Students may receive limited exposure to real oral communication, so classroom speaking practice becomes very important. If classroom instruction remains teacher-centered, students may not have enough time or confidence to practice speaking.

The problem was also found at UPTD SMK Negeri 1 Sarjo, Pasangkayu, West Sulawesi. The thesis data show that tenth-grade students had difficulty in speaking English. They lacked vocabulary, grammar mastery, pronunciation accuracy, and confidence. Many students were afraid of making mistakes and did not participate actively in speaking activities. English instruction was still often dominated by teacher explanation and written exercises, while students needed more speaking-oriented learning activities. This situation shows that students require a learning strategy that gives them more chances to speak, collaborate, share ideas, and practice English in meaningful contexts.

The Merdeka Curriculum for vocational high schools emphasizes that students should be able to use English to communicate with teachers, peers, and others in various situations and for different purposes. Students are expected to ask and answer questions, initiate and maintain conversations, participate in discussions, and communicate ideas in English. This curriculum orientation requires learning strategies that are communicative, student-centered, and relevant to real-life situations. Therefore, English teachers need to move beyond conventional teaching and create learning experiences that encourage students to use English actively.

One strategy that can support students' speaking development is Small Group Discussion. Small Group Discussion is a collaborative learning technique in which students work in small groups to discuss topics, share ideas, solve problems, and present conclusions. In small groups, students have more opportunities to speak than in whole-class instruction. They can practice expressing opinions, responding to peers, asking questions, and negotiating meaning. Small group work can reduce anxiety because students speak in a more supportive environment before performing in front of the whole class.

Vygotsky's (1978) sociocultural theory supports this approach because learning develops through social interaction, collaboration, and scaffolding.

Small Group Discussion is particularly useful for speaking instruction because it increases student talking time. In teacher-centered classrooms, the teacher often speaks more than the students. As a result, students become passive listeners. In small groups, however, students are expected to participate more actively. They can learn from peers, correct each other, and develop confidence through repeated interaction. Harmer (2007) notes that group work can promote learner autonomy and provide more opportunities for communicative practice. Therefore, Small Group Discussion can help students become more active and confident speakers.

Another relevant learning model is Project-Based Learning. Project-Based Learning is a student-centered approach in which learners investigate a topic, complete a meaningful task, produce a product, and present the result. Thomas (2000) describes Project-Based Learning as a model organized around projects that require students to solve problems and create meaningful outcomes. Bell (2010) argues that Project-Based Learning promotes active learning, collaboration, creativity, communication, and responsibility. In English learning, projects can provide authentic reasons for students to speak because they need to discuss plans, divide tasks, prepare products, and present their work.

Project-Based Learning is highly suitable for vocational school students because vocational education emphasizes practical skills, workplace readiness, collaboration, and real-life application. Students do not only need to understand language rules; they need to use English to complete tasks that resemble real communication. Through projects, students can create posters, role plays, presentations, videos, mini podcasts, campaign projects, or product descriptions. These activities encourage students to use English for meaningful purposes rather than merely answering textbook questions.

The integration of Small Group Discussion and Project-Based Learning offers a strong pedagogical model for developing speaking skills. Small Group Discussion provides the interactional space where students can practice speaking, while Project-Based Learning provides the meaningful task or product that gives direction to the discussion. When students work in small groups to complete a project, they must communicate, negotiate ideas, solve problems, organize content, and prepare oral presentations. This process helps develop pronunciation, vocabulary, grammar, fluency, and comprehension in a contextual way.

This integration is also supported by constructivist learning theory. Dewey (1938) emphasized that learning becomes meaningful when students learn through experience. In Project-Based Learning, students learn by doing, creating, reflecting, and presenting. Vygotsky (1978) also emphasized the role of social interaction in learning. Through small group discussion, students receive support from peers and teachers, allowing them to perform beyond their individual ability. Therefore, combining Small Group Discussion and Project-Based Learning creates a learning environment that is experiential, collaborative, and communicative.

Previous studies have shown that Small Group Discussion and Project-Based Learning can improve students' speaking skills. Research cited in the thesis indicates that Small Group Discussion helps students become more confident in expressing ideas, criticisms, and opinions. Other studies showed that group discussion contributes to language skill development because students are actively involved in interaction. Project-Based Learning has also been found to increase students' self-confidence, vocabulary, sentence structure, collaboration, and speaking achievement. However, many previous studies examined Small Group Discussion and Project-Based Learning separately. The novelty of the present study

lies in integrating both strategies into one instructional model, especially in the context of vocational English learning.

This study is important because vocational students need speaking activities that are active, collaborative, and relevant to real-life communication. At UPTD SMK Negeri 1 Sarjo, the school environment supported group-based and project-based activities. Students had access to classrooms, school facilities, and learning schedules that allowed discussion and project work. Therefore, Small Group Discussion through Project-Based Learning was considered appropriate for addressing students' speaking problems.

Based on the background above, this study aimed to investigate whether Small Group Discussion through Project-Based Learning had a significant effect on students' speaking skills at UPTD SMK Negeri 1 Sarjo and to identify students' perceptions of the use of this strategy in speaking learning. The findings are expected to contribute theoretically to the literature on collaborative and project-based speaking instruction and practically to English teachers, students, and future researchers.

2. Method

This study employed a quantitative approach with a quasi-experimental research design. A quasi-experimental design was selected because the researcher used existing classes and compared an experimental class and a control class. Creswell (2012) explains that quasi-experimental research is appropriate when researchers examine the effect of a treatment but cannot randomly assign individual participants into groups. In this study, the experimental class received the treatment of Small Group Discussion through Project-Based Learning, while the control class received conventional instruction.

The research was conducted at UPTD SMK Negeri 1 Sarjo, located on Trans Sulawesi Street, Sarjo District, Pasangkayu Regency, West Sulawesi Province. The research was conducted from February to April 2026. The research activities consisted of pre-test, six treatment sessions, post-test, and questionnaire completion.

The population consisted of all tenth-grade students at UPTD SMK Negeri 1 Sarjo in the 2025/2026 academic year. The population consisted of four classes with a total of 82 students: X TKJ A with 23 students, X TKJ B with 22 students, X TKR with 30 students, and X Busana with 7 students. The sample consisted of 40 students. Class X TKJ A was selected as the experimental class with 20 students, while class X TKJ B was selected as the control class with 20 students. The researcher used simple random sampling to determine the sample. Fraenkel, Wallen, and Hyun (2012) state that sampling is important in quantitative research because it helps researchers obtain representative data from a population.

The independent variable was Small Group Discussion through Project-Based Learning. Small Group Discussion refers to a learning technique in which students work in small groups to share ideas, solve problems, and practice communication. Project-Based Learning refers to a student-centered approach in which students plan, implement, and present a project based on real or meaningful tasks. The dependent variable was students' speaking skill, which refers to students' ability to express ideas orally in English using pronunciation, vocabulary, grammar, fluency, and comprehension.

Two instruments were used in this research: a speaking test and a questionnaire. The speaking test was used to measure students' speaking skill before and after the treatment. The test was conducted in the form of an oral speaking task about students' daily activities. Students' speaking performances were recorded and assessed using a scoring rubric adapted from Brown (2001). The rubric assessed five components of speaking: pronunciation, vocabulary, grammar, fluency, and comprehensibility. The scores were classified into five categories: excellent, good, fair, poor, and very poor.

The questionnaire was used to examine students' perceptions of Small Group Discussion through Project-Based Learning. The questionnaire consisted of ten items using a five-point Likert scale: strongly agree, agree, neutral, disagree, and strongly disagree. The total score ranged from 10 to 50 and was classified into five categories: very positive, positive, neutral, negative, and very negative. Likert-scale questionnaires are commonly used in educational research to measure students' perceptions, attitudes, and responses toward learning experiences (Creswell, 2012).

The data were analyzed using descriptive and inferential statistics with SPSS 29. Descriptive statistics were used to calculate mean scores, minimum scores, maximum scores, standard deviations, frequency, and percentage. Before hypothesis testing, prerequisite tests were conducted. The Shapiro-Wilk test was used to test normality because the sample size in each group was relatively small. Levene's test was used to test homogeneity of variance. After the data were confirmed to be normal and homogeneous, an independent sample t-test was used to examine whether there was a significant difference between the experimental and control classes. The significance level was 0.05. Cohen's d was also used to calculate the effect size, because effect size shows the magnitude of the treatment effect beyond statistical significance (Cohen, 1988).

3. Result

The findings are presented based on students' pre-test performance, post-test performance, normality and homogeneity tests, hypothesis testing, effect size, and students' perception questionnaire.

The pre-test was administered to both the experimental and control classes before treatment. The purpose was to identify students' initial speaking ability. The speaking test assessed five aspects: pronunciation, vocabulary, grammar, fluency, and comprehension. The results showed that students' speaking ability in both classes was still low before the treatment.

In the experimental class, the pre-test scores ranged from 42 to 68. The mean score was 54.80, with a standard deviation of approximately 7.70. In the control class, the pre-test scores ranged from 44 to 68. The mean score was 56.20, with a standard deviation of approximately 7.91. These results indicate that the control class had a slightly higher mean score than the experimental class before treatment. However, the difference was relatively small, suggesting that both classes had similar initial speaking ability.

The classification of pre-test results also showed that no students in either class reached the excellent or good category. In the experimental class, 5 students, or 25%, were in the fair category; 10 students, or 50%, were in the poor category; and 5 students, or 25%, were in the very poor category. In the control class, 6 students, or 30%, were in the fair category; 10 students, or 50%, were in the poor category; and 4 students, or 20%, were in the very poor category. These findings show that most students in both classes had weak speaking performance before the intervention.

After the pre-test, the experimental class received treatment using Small Group Discussion through Project-Based Learning. Students worked in small groups, discussed project topics, shared ideas, divided roles, practiced speaking, and presented their project results. This learning process gave students repeated opportunities to use English in collaborative situations. Meanwhile, the control class received conventional instruction, including teacher explanation and structured speaking practice.

The post-test results showed improvement in both classes, but the improvement in the experimental class was higher. In the experimental class, the post-test scores ranged from 50 to 82. The mean score increased to 67.50, with a standard deviation of 9.605. In the control class, the post-test scores ranged from 45 to 74. The mean score increased to 59.70,

with a standard deviation of 8.850. This shows that the experimental class achieved a higher average speaking score than the control class after the treatment.

The classification of post-test results further supports this improvement. In the experimental class, 2 students, or 10%, reached the excellent category, and 8 students, or 40%, reached the good category. Five students, or 25%, were in the fair category, and 5 students, or 25%, remained in the poor category. No students were in the very poor category. This indicates that the treatment helped move many students from lower categories to higher categories.

In contrast, the control class showed a more limited improvement. No students reached the excellent category. Four students, or 20%, reached the good category; 4 students, or 20%, were in the fair category; 9 students, or 45%, remained in the poor category; and 3 students, or 15%, remained in the very poor category. These results show that conventional instruction produced some improvement but did not shift students' speaking performance as strongly as the treatment in the experimental class.

The gain in mean scores also indicates the stronger effect of the treatment. The experimental class improved from 54.80 to 67.50, producing a gain of 12.70 points. The control class improved from 56.20 to 59.70, producing a gain of 3.50 points. The higher gain in the experimental class suggests that Small Group Discussion through Project-Based Learning provided more effective learning opportunities for speaking development.

Before hypothesis testing, the normality test was conducted using the Shapiro-Wilk test. The results showed that all data were normally distributed. In the experimental class, the significance value was 0.106 for the pre-test and 0.457 for the post-test. In the control class, the significance value was 0.072 for the pre-test and 0.342 for the post-test. Since all values were greater than 0.05, the data were considered normally distributed.

The homogeneity test was conducted using Levene's test. The significance value based on the mean was 0.635, while the other significance values based on the median and trimmed mean were also greater than 0.05. Therefore, the variances of the experimental and control classes were homogeneous. This means that the data met the assumptions for conducting the independent sample t-test.

The independent sample t-test was then used to test whether there was a significant difference between the post-test scores of the experimental and control classes. The t-test results showed that the experimental class obtained a higher post-test mean score than the control class. Since the data were normal and homogeneous, the difference between the two groups could be interpreted as the effect of the treatment. The results indicated that Small Group Discussion through Project-Based Learning had a significant effect on students' speaking skill.

The effect size was also calculated to determine the magnitude of the treatment effect. The effect size showed that the treatment had a meaningful impact on students' speaking improvement. This means that the difference between the experimental and control classes was not only statistically relevant but also practically important for English speaking instruction.

The second research finding concerns students' perceptions of the learning strategy. The questionnaire results showed that students had favorable perceptions toward Small Group Discussion through Project-Based Learning. Twelve students, or 60%, were categorized as strongly positive. Six students, or 30%, were categorized as positive. Two students, or 10%, were categorized as neutral. No students were categorized as negative or strongly negative. The overall questionnaire mean score was 41.10, which falls into the positive category.

The questionnaire findings indicate that students accepted the learning strategy well. Students felt that the strategy helped improve their self-confidence because they could practice speaking in a supportive group environment. They also developed better collaboration skills because they needed to share responsibilities, respect others' opinions, and work together to complete the project. In addition, students perceived the learning process as more meaningful because the projects were connected to real or contextual tasks. These findings suggest that Small Group Discussion through Project-Based Learning did not only improve speaking scores but also improved students' attitudes toward speaking activities.

Overall, the results show that Small Group Discussion through Project-Based Learning had a positive and significant effect on students' speaking skill. The experimental class achieved greater improvement, higher post-test scores, better classification movement, and positive perceptions compared to the control class. Therefore, the strategy can be considered effective for developing students' speaking skill at UPTD SMK Negeri 1 Sarjo.

4. Discussion

The findings of this study show that Small Group Discussion through Project-Based Learning significantly improved students' speaking skill at UPTD SMK Negeri 1 Sarjo. The experimental class improved from a pre-test mean score of 54.80 to a post-test mean score of 67.50, while the control class improved from 56.20 to 59.70. This difference indicates that students who learned through Small Group Discussion and Project-Based Learning experienced greater speaking development than students who learned through conventional instruction.

This improvement can be explained by the nature of Small Group Discussion. Speaking skill develops through practice, interaction, and feedback. In small groups, students had more opportunities to speak than in teacher-centered instruction. They could express ideas, ask questions, respond to classmates, negotiate meaning, and practice pronunciation and fluency in a less threatening environment. This finding supports Vygotsky's (1978) sociocultural theory, which emphasizes that learning occurs through interaction and scaffolding. In this study, peer discussion functioned as a social learning space where students supported one another in speaking English.

Small Group Discussion also helped reduce students' speaking anxiety. Before the treatment, many students were afraid of making mistakes in grammar, vocabulary, and pronunciation. In whole-class speaking activities, students may feel nervous because they are directly observed by the teacher and all classmates. However, in small groups, students can practice first with peers, making the learning atmosphere more supportive. This helps students build confidence before speaking in front of the class. Harmer (2007) argues that group work can increase learner participation and autonomy because students are given responsibility for communication.

The improvement was also influenced by Project-Based Learning. PjBL gave students a meaningful purpose for speaking. Instead of speaking only to answer teacher questions, students spoke to complete a project, organize ideas, and present the results. This aligns with Thomas (2000), who explains that Project-Based Learning is organized around meaningful projects that require students to investigate, collaborate, and produce outcomes. In this study, students practiced English through project-related discussion and presentation, which made speaking more contextual and purposeful.

Project-Based Learning is especially useful for vocational high school students because it reflects real-life and workplace-oriented learning. Vocational students need communication skills for future professional contexts. Through project work, students can practice collaboration, planning, decision-making, presentation, and problem-solving. Bell

(2010) states that PjBL supports twenty-first-century skills, including communication, collaboration, creativity, and responsibility. Therefore, the improvement in speaking skill found in this study is not surprising because the learning strategy gave students both language practice and project-based communication experience.

The integration of Small Group Discussion and PjBL created a strong learning structure. Small Group Discussion provided the process of interaction, while Project-Based Learning provided the task framework. Students discussed ideas in groups, prepared project outcomes, practiced speaking, and presented results. This process supported the development of the five speaking components assessed in the study: pronunciation, vocabulary, grammar, fluency, and comprehension. Students practiced pronunciation when they rehearsed speaking, expanded vocabulary when discussing topics, applied grammar when arranging sentences, improved fluency through repeated practice, and developed comprehension by responding to peers.

The post-test classification supports this interpretation. In the experimental class, 10% of students reached the excellent category and 40% reached the good category after the treatment. No student remained in the very poor category. This shows that the treatment helped many students move from lower performance categories to higher categories. Meanwhile, the control class still had 45% of students in the poor category and 15% in the very poor category. This indicates that conventional instruction was less effective in helping students develop speaking performance.

The findings are also consistent with previous research cited in the thesis. Studies on Small Group Discussion have shown that this technique improves students' speaking confidence and active participation. Other studies on Project-Based Learning have reported improvement in speaking skill, vocabulary, sentence structure, and self-confidence. The present study strengthens these findings by showing that the integration of both approaches can be effective in a vocational school context.

The students' positive perceptions also support the effectiveness of the strategy. The questionnaire results showed that 60% of students had strongly positive perceptions, 30% had positive perceptions, and 10% were neutral. No students had negative perceptions. This indicates that most students accepted the learning strategy and viewed it as helpful. Students' perceptions are important because positive attitudes toward learning activities can influence motivation, participation, and persistence. Slavin (2012) explains that students' perceptions of learning experiences affect their engagement and behavior in the classroom.

One important perception finding was the improvement in self-confidence. Students felt more confident because they could practice speaking in groups before presenting. This is important because confidence is a major factor in speaking performance. Students who are not confident may avoid speaking even when they know what to say. Small Group Discussion through PjBL helped reduce this barrier by giving students a safer and more collaborative environment. As students became more familiar with the task and received peer support, they became more willing to speak.

Another important finding was the improvement in collaboration skills. Students learned to share responsibilities, respect opinions, solve problems, and work together to complete projects. Collaboration is not only useful for project completion but also for speaking development because students must communicate during the process. Through collaboration, students practice real communication rather than isolated language drills. This supports the view that speaking instruction should provide meaningful interaction and not only controlled repetition.

The learning experience was also perceived as more meaningful. Students felt that project-based speaking activities were more relevant because they involved real or contextual tasks. This is important because students often lose interest when speaking activities are disconnected from their experiences. PjBL allows students to use English in purposeful contexts, which can increase motivation and engagement. Stoller (2006) explains that project work can enhance language learning because it integrates language skills with content, collaboration, and authentic communication.

The difference between the experimental and control classes also shows the limitation of conventional teaching in speaking instruction. In the control class, students received teacher explanation and structured dialogue practice. Although this helped students improve slightly, the improvement was not as strong as in the experimental class. Conventional instruction may provide language models, but it often gives fewer opportunities for student interaction, creativity, and independent speaking. Speaking skill requires active use, and students need repeated communicative practice to develop fluency and confidence.

The findings have several practical implications. First, English teachers should provide more small-group speaking activities to increase student talking time. Second, project-based tasks should be integrated into speaking instruction to make communication more meaningful. Third, teachers should design projects that are suitable for students' level, interests, and vocational context. Fourth, teachers should provide scaffolding, such as vocabulary lists, sentence patterns, pronunciation models, and feedback, so that students can participate more confidently. Fifth, teachers should monitor group work carefully to ensure that all students participate.

Although the strategy was effective, some students still remained in the poor category after the treatment. This indicates that not all students improved at the same rate. Some students may still need more time, more vocabulary support, and more speaking practice. Speaking development is gradual and cannot be achieved fully in a short treatment period. Therefore, Small Group Discussion through PjBL should be implemented consistently across multiple lessons or semesters.

In addition, group-based learning may have challenges. Some students may dominate the discussion, while others may become passive. Teachers need to assign roles, monitor participation, and provide clear instructions. Project work also requires time management because students must plan, discuss, create, rehearse, and present. Therefore, successful implementation depends on careful planning, classroom management, and teacher facilitation.

Overall, the discussion confirms that Small Group Discussion through Project-Based Learning is an effective instructional strategy for developing students' speaking skill. It improves speaking performance because it increases interaction, provides meaningful tasks, reduces anxiety, builds confidence, supports collaboration, and encourages students to organize and express ideas in English. The positive questionnaire results further show that students perceived the strategy as useful, enjoyable, and supportive for speaking development.

5. Conclusion

This study examined the use of Small Group Discussion through Project-Based Learning to develop students' speaking skill at UPTD SMK Negeri 1 Sarjo. Based on the findings, the strategy had a positive and significant effect on students' speaking skill. The experimental class improved from a pre-test mean score of 54.80 to a post-test mean score of 67.50, while the control class improved only from 56.20 to 59.70. The experimental class

also showed better post-test classification, with 10% of students in the excellent category and 40% in the good category.

The findings indicate that the integration of Small Group Discussion and Project-Based Learning provided students with more opportunities to practice speaking, collaborate with peers, organize ideas, and present project results. The strategy helped students improve pronunciation, vocabulary, grammar, fluency, and comprehension. It also reduced speaking anxiety and encouraged more active participation in English learning.

Students' perceptions of the strategy were also positive. The questionnaire results showed that 60% of students had strongly positive perceptions, 30% had positive perceptions, and 10% had neutral perceptions. No students showed negative perceptions. Students felt that the strategy improved their confidence, collaboration, creativity, and ability to express ideas in English.

In conclusion, Small Group Discussion through Project-Based Learning is an effective and appropriate strategy for developing speaking skill among vocational high school students. English teachers are encouraged to use this strategy to create more communicative, collaborative, and meaningful speaking activities. Future researchers may conduct similar studies with larger samples, longer treatment periods, different project types, or mixed-method designs to explore students' speaking development more deeply.

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