Integrated Talking Chips and Think-Pair-Share Strategies to Promote Speaking Achievement and Self-Efficacy

Ade Nurul Fadillah[1], Muhammad Sukirlan[2], Budi Kadaryanto[3]

[1]Master Student of English Education, Lampung University, Indonesia

[2,3]Lecturer, English Education Department, Lampung University, Indonesia

DOI: https://dx.doi.org/10.47772/IJRISS.2025.9020329

Received: 14 February 2025; Accepted: 19 February 2025; Published: 21 March 2025

ABSTRACT

Developing speaking skills is crucial for language learners, yet many struggle with low participation, confidence, and fluency. While previous studies have examined the Talking Chips and Think-Pair-Share strategies separately, limited research explores their combined impact on speaking achievement and self-efficacy. This study investigates the effects of integrating these strategies in an English as a Foreign Language (EFL) classroom. Using a pre-experimental design, the study collected both quantitative (pre-test and post-test scores) and qualitative (student perceptions) data. Results showed significant improvements in fluency, pronunciation, grammar, vocabulary, and comprehension. The mean speaking score increased from 59.42 (pre-test) to 65.75 (post-test), with $t = 4.014$, $p < 0.001$. Additionally, while most students exhibited moderate to high self-efficacy, some continued to struggle with speaking anxiety. These findings suggest that structured collaborative strategies promote active participation and speaking confidence, though targeted support is needed for students with persistent anxiety. This study underscores the potential of integrated learning techniques to enhance both speaking performance and self-efficacy in EFL contexts.

Keywords: integrated strategies, talking chips, think-pair-share, speaking, self-efficacy

INTRODUCTION

Speaking is a critical skill in mastering English as a Foreign Language (EFL), serving as a key medium for effective communication. In an EFL context, speaking reflects a learner's ability to convey thoughts, emotions, and information in real time (Safitri & Weda, 2022). Unlike writing, speaking offers no opportunity for editing or revising, making it a high-pressure skill that demands fluency, accuracy, and confidence (Brown, 2004). Among the four language skills, speaking is often regarded as the most challenging to develop because it involves both linguistic accuracy and interactive competence (Haryudin & Jamilah, 2018). Therefore, the mastery of speaking is not only a benchmark of language proficiency but also a crucial component for personal, academic, and professional success.

However, despite its importance, many EFL learners face persistent challenges in developing speaking proficiency. Internal factors, such as a lack of confidence, fear of making mistakes, and limited vocabulary, coupled with external factors, including unsupportive classroom environments and insufficient feedback, significantly hinder students' ability to communicate effectively (Krashen, 1982). In Indonesia, these challenges are particularly evident among vocational high school students, who are expected to acquire practical English skills for their future careers. Based on the researcher's preliminary research, at one of the Vocational Senior High School in Lampung, Indonesia, Office Administration students often struggle with speaking tasks due to poor pronunciation, fragmented ideas, and low self-efficacy, which affect their readiness for real-world communication.

Self-efficacy, defined as a person's belief in their ability to succeed (Bandura, 1995), plays a pivotal role in overcoming these barriers. Students with high self-efficacy are more likely to approach speaking tasks with confidence, persist through challenges, and achieve higher levels of proficiency. Conversely, those with low self-efficacy may avoid speaking tasks altogether, reinforcing a cycle of underachievement. Previous studies (Lisnawati et al., 2019; Mohammed, 2021) have highlighted the importance of self-efficacy in language

learning, showing that students' belief in their capabilities directly influences their motivation, effort, and performance. However, gaps remain in understanding how self-efficacy interacts with specific teaching strategies to improve speaking skills.

To address these challenges, innovative teaching strategies that foster active participation and confidence-building are essential. Cooperative learning approaches, such as Talking Chips and Think-Pair-Share, offer promising solutions. Talking Chips, introduced by Kagan & Kagan (2009), promotes equitable participation in group discussions by regulating turn-taking, ensuring that all students contribute to the conversation. On the other hand, Think-Pair-Share, developed by Lyman (1981), encourages critical thinking and collaborative learning through structured stages of individual reflection, paired discussion, and group sharing. Both strategies have been shown to enhance students' speaking abilities and confidence, but their combined implementation remains underexplored.

Several studies have explored the effectiveness of Talking Chips and Think-Pair-Share strategies individually. Jasim (2017) found that the Talking Chips strategy significantly improved students' speaking skills by fostering better interaction in group activities. Marhaeni et al. (2013) demonstrated that the Think-Pair-Share strategy enhanced students' self-confidence and speaking competency. Research has also highlighted the role of self-efficacy in language learning. Mohammed (2021) found a strong correlation between self-efficacy and speaking proficiency among Saudi EFL students.

Both strategies have been shown to enhance students' speaking abilities and confidence. However, while previous studies have examined them separately, little research has explored their combined implementation and its impact on both speaking achievement and self-efficacy. Therefore, this study investigates the integration of these strategies to determine their effectiveness in enhancing students' speaking skills and self-efficacy. By addressing both cognitive and affective dimensions of learning, this approach aims to create a supportive and inclusive classroom environment that enhances students' confidence, fluency, and accuracy. Furthermore, this study focuses on Office Administration students at one of Vocational Senior High School in Lampung, Indonesia, a population uniquely positioned to benefit from such interventions due to their vocational focus and career-oriented learning goals.

By exploring the effectiveness of integrating Talking Chips and Think-Pair-Share strategies, this research contributes to the growing body of knowledge on cooperative learning in EFL contexts. The findings are expected to provide valuable insights for educators seeking to improve speaking proficiency and self-efficacy among vocational high school students. Ultimately, this study underscores the importance of innovative, student-centered teaching methods in equipping learners with the skills and confidence needed for academic and professional success.

LITERATURE REVIEW

Concept of Speaking

Speaking is a crucial component of English as a Foreign Language (EFL) learning, serving as both a communicative tool and a measure of language proficiency. Brown (2004) defines speaking as an interactive process involving the construction and exchange of meaning through verbal communication. This skill requires learners to simultaneously utilize multiple linguistic and cognitive resources, including vocabulary, grammar, pronunciation, fluency, and comprehension. Speaking proficiency involves several key aspects: vocabulary, grammar, pronunciation, fluency, and comprehension. A robust vocabulary allows learners to express ideas clearly and effectively. Proper grammatical structures enable precise communication, while accurate pronunciation facilitates understanding by listeners. Fluency ensures natural communication through smooth and hesitation-free speech, and comprehension allows learners to understand and respond appropriately to spoken language (Brown, 2004). Among these aspects, fluency and accuracy are particularly challenging for learners as they require real-time processing of language (Haryudin & Jamilah, 2018). Additionally, speaking is inherently dynamic and interactive, making it one of the most demanding skills to master.

Learners face several obstacles in developing speaking skills, including inhibition, lack of content, limited participation, and reliance on their mother tongue (Ur, 2003). These challenges are often exacerbated in EFL

contexts where exposure to authentic speaking opportunities is limited. For vocational students, such as those at SMKN 1 Bandar Lampung, additional barriers include low confidence, poor pronunciation, and fragmented speech, which are tied to self-efficacy and external factors like insufficient practice and feedback (Krashen, 1982). Speaking is particularly important for vocational students in fields like Office Administration, where effective communication is a prerequisite for workplace readiness. Addressing these challenges requires innovative, student-centered teaching strategies that foster both linguistic competence and confidence.

Concept of Integrated Talking Chips Strategy with Think-Pair-Share Strategy

The Talking Chips strategy is a cooperative learning technique designed to promote balanced participation in group discussions. Each participant receives an equal number of tokens (or "chips") and must place a token into a designated space to speak. This system ensures equitable contributions and minimizes dominance by any single group member. Talking Chips encourages active participation and collaboration, promotes equal opportunities for all students to speak, and helps shy or reserved students build confidence (Kagan & Kagan, 2009). However, it also has weaknesses, such as disrupting the natural conversational flow due to regulated turn-taking and requiring intricate preparation and effective time management (Gray et al., 2010).

Developed by Lyman (1981), the Think-Pair-Share strategy involves three stages: individual thinking, paired discussion, and group sharing. This approach encourages critical thinking, collaboration, and active participation. It provides structured opportunities for reflection and discussion, fosters deeper engagement with the material, and builds confidence by allowing students to share ideas with a partner before presenting to a larger group (Lyman, 1981). Despite its strengths, Think-Pair-Share has limitations, such as challenges in achieving equal participation, difficulties with uneven participant numbers, and being time-consuming in large classes (Barkley et al., 2014). Combining these strategies offers a balanced approach to overcoming their individual limitations. While Talking Chips ensures structured participation, Think-Pair-Share introduces flexibility and promotes deeper thinking. This integration allows for balanced participation, enhanced collaboration, and improved time management. It addresses critical gaps in EFL teaching by fostering a supportive and inclusive classroom environment that enhances both speaking skills and self-efficacy.

Concept of Self-efficacy

Self-efficacy, as defined by Bandura (1995), refers to a person's belief in their ability to succeed in specific tasks. It is a key psychological construct that influences motivation, persistence, and performance, making it particularly relevant in the context of language learning. According to Bandura, self-efficacy determines whether an individual will engage in a task, how much effort they will exert, and how resilient they will be in the face of challenges. This construct is especially significant in EFL learning, where students often face unique difficulties such as real-time communication, limited vocabulary, and fear of making mistakes.

Bandura (1995) classifies self-efficacy into three dimensions: level, generality, and strength. The level dimension refers to the perceived difficulty of a task, where higher levels of self-efficacy enable learners to tackle more complex challenges. The generality dimension involves the transferability of confidence across different tasks or domains, suggesting that self-efficacy in speaking may influence performance in related areas like presentations or group discussions. The strength dimension relates to an individual's perseverance and determination to achieve their goals, even when faced with obstacles. These dimensions interact dynamically to shape a learner's overall confidence and performance.

In EFL contexts, self-efficacy plays a pivotal role in determining students' engagement and success in speaking tasks. Students with high self-efficacy are more likely to take risks, such as speaking in front of peers, experimenting with new vocabulary, or attempting complex grammatical structures. Such students tend to persist longer, recover quickly from setbacks, and demonstrate better overall performance (Mohammed, 2021). Conversely, students with low self-efficacy may avoid speaking tasks entirely, leading to limited practice opportunities and slower progress.

Measuring self-efficacy typically involves the use of validated questionnaires or scales that assess students' beliefs about their capabilities. For instance, Lisnawati et al. (2019) adapted Bandura's self-efficacy scale to evaluate students' confidence in speaking. Such tools enable researchers and educators to identify areas where

students may require additional support or intervention. By understanding and leveraging the concept of self-efficacy, educators can create more effective and inclusive learning experiences that empower students to achieve their full potential in speaking and other aspects of language learning.

METHOD

This study employs a one-group pre-test post-test design, categorized as a pre-experimental research design (Campbell & Stanley, 1963). This design was chosen to investigate the effectiveness of integrating the Talking Chips strategy with the Think-Pair-Share strategy in enhancing students' speaking achievement and self-efficacy. The participants consisted of 36 vocational high school students from Vocational Senior High School in Lampung, Indonesia, specifically from the Office Administration program. Purposive sampling was used to select students who required improved speaking skills for their future careers.

Two main instruments were used. First, a self-efficacy questionnaire adapted from Bandura's (1995) self-efficacy scale measured students' confidence in their speaking abilities. The questionnaire was validated through expert judgment and a pilot study, yielding a Cronbach's alpha of 0.80, indicating good reliability. Second, a speaking test required students to deliver a descriptive monologue, assessed by two independent raters using Brown's (2004) speaking rubric, which evaluates vocabulary, grammar, fluency, pronunciation, and comprehension.

The procedure consisted of five meetings. In Meeting 1 (pre-test), students completed a baseline speaking test to assess their initial speaking proficiency. Meetings 2-4 (treatments) involved implementing the Integrated Talking Chips + TPS strategy, where students participated in structured group discussions and turn-taking activities designed to improve their speaking skills. At the end of Meeting 3, students completed the self-efficacy questionnaire to measure their confidence after exposure to the intervention. Finally, in Meeting 5 (post-test), students took the speaking test again to evaluate their progress.

Data analysis was conducted using SPSS version 25, applying paired t-tests to assess improvements in students' speaking achievement and self-efficacy before and after the intervention. Additionally, descriptive statistics analysis was used to interpret self-efficacy questionnaire responses. All participants provided informed consent, and ethical approval was obtained from the school administration.

FINDING AND DISCUSSION

The research aimed to determine whether there was a significant improvement in students' speaking achievement after being taught using the Integrated Talking Chips strategy combined with the Think-Pair-Share strategy. It also sought to investigate how students' self-efficacy level in speaking developed after being taught using the integrated strategy. The results of the study are presented and discussed in the following sections:

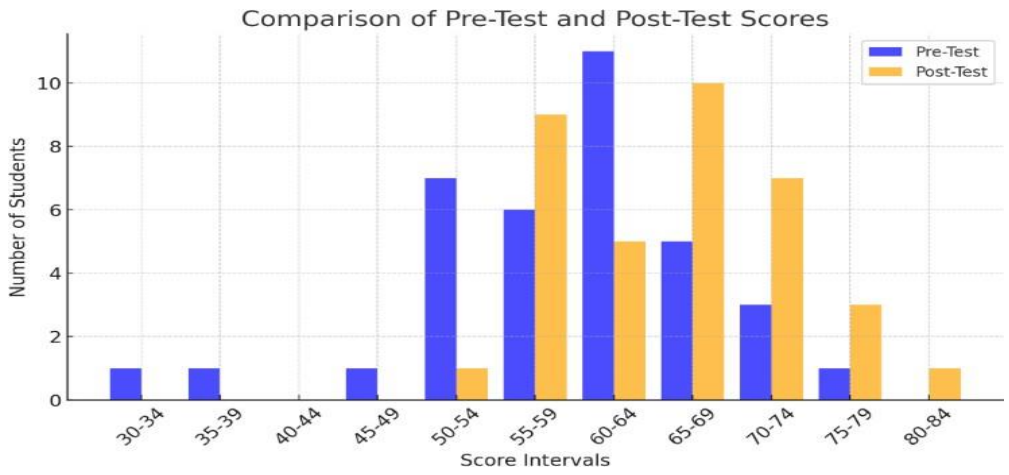

Fig 1. Students' Speaking Score

Figure 1 showed the speaking achievement class before and after the intervention. In the pre-test, most students scored between 50–64, with only a few reaching higher intervals. After implementing the Integrated Talking Chips with Think-Pair-Share strategy, the post-test results showed a clear improvement, with more students moving to higher score intervals (65–84) and no students remaining in the lowest ranges. This indicates that the strategy effectively enhanced students' speaking performance.

Table 1. Descriptive Statistic of Students' Speaking Score

	N	Min	Max	Mean	Std. Dev.
Pre-Test	36	33	78	59.42	9.080
Post-Test	36	52	80	65.75	7.625
Valid N	36				

It was based on the table of descriptive computation above; it can be seen that the mean score of post-test shows higher than the pre-test (80 > 70) and the mean score of post-test shows higher than the pre-test (65.75 > 59.42).

Table 2. Paired Sample T-test

	Mean	Std. Deviation	Std. Error mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1 PreTest-post-test	-6.333	9.466	1.578	-9.536	-3.131	-4.014	35	.000

The class had a pre-test mean of 59.42 and a post-test mean of 65.75, with a t-value of -4.014 and a p-value of 0.000, reflecting a significant improvement. In this case, the p-values was less than 0.05, confirming that the improvement in speaking scores are statistically significant. These integrated strategies had proven effective in enhancing speaking skills individually. However, combining these two strategies might offer even greater benefits. This study integrated the Talking Chips strategy with the Think-Pair-Share technique to create a more structured and collaborative speaking environment. The goal of this integration was to increase student participation, ensure more balanced speaking opportunities, and improve various aspects of speaking, including fluency, pronunciation, grammar, vocabulary, and comprehension.

Additionally, this combination was expected to enhance students' self-efficacy in speaking by providing an interactive and supportive learning experience that builds their confidence and reduces communication apprehension. While previous studies, such as those by Junaedi (2020) and Silvia et al. (2021), had demonstrated significant improvements in speaking abilities using the Talking Chips strategy, and research by Kusrini (2012) and Brillianzha (2020) had highlighted the benefits of Think-Pair-Share in enhancing speaking competence and confidence. The structured and collaborative environment fostered by these strategies likely encouraged more balanced participation, increased students' confidence, and provided meaningful opportunities for practice. These findings align with Ur's (2003) argument that such structured strategies help reduce speaking difficulties, including inhibition and limited participation. These findings confirmed that both the Talking Chips strategy and the Integrated Talking Chips with Think-Pair-Share strategy significantly improved students' speaking achievement.

Furthermore, the self-efficacy questionnaire was administered before the students' learning outcomes test to assess their self-perception across three key aspects: level, strength, and generality. Using a modified Likert scale with four response options—Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), and Strongly Agree (SA)—students indicated their agreement with each statement. The total score for each participant was

calculated by summing their responses, with scores for each aspect of self-efficacy being analyzed separately.

Table 3. Self-Efficacy Results

	N	Min	Max	Mean	Std. Deviation
Total Score	36	27	76	50.47	9.073
Percentage	36	33.75	95	63.09	11.34
Valid N	36				

The following section presents the results and analysis of these scores. The descriptive statistics of the self-efficacy scores from the questionnaire are presented in Table 3. The questionnaire consisted of 16 questions, with each question scored on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Therefore, the maximum possible score for each student was 80 (16 x 5). The results indicate that the total self-efficacy scores among 36 respondents ranged from 27 to 76, with a mean score of 50.47 and a standard deviation of 9.073. The percentage of self-efficacy scores ranged from 33.75% to 95%, with a mean percentage of 63.09% and a standard deviation of 11.34%.

These data reflect the overall distribution of self-efficacy levels within the student group, indicating variability in students' confidence and perceived abilities related to speaking tasks. The mean percentage suggests that, on average, students scored slightly above the midpoint, while the range of scores highlights both low and high levels of self-efficacy present in the sample.

Table 4. Categorized Self-Efficacy Level

		Freq.	%	Valid %	Cum. %
Valid	Very High	1	2.8	2.8	2.8
	High	19	52.8	52.8	55.6
	Moderate	14	38.9	38.9	94.4
	Low	2	5.6	5.6	100
	Total	36	100	100	

The results of the self-efficacy questionnaire distributed to the students before the learning outcomes test are summarized in Table 4 (Categorized Self-Efficacy Level). The findings indicated that out of 36 respondents, the majority of students, 19 students (52.8%), demonstrated a high level of self-efficacy. A significant portion, 14 students (38.9%), exhibited a moderate level of self-efficacy, while 2 students (5.6%) were categorized as having low self-efficacy. Only 1 student (2.8%) achieved a very high level of self-efficacy.

These data suggested that most students perceive themselves as capable in tasks related to speaking, although a notable number fall within the moderate to low self-efficacy range, indicating variations in confidence levels. This distribution provided a foundation for further analysis of how self-efficacy influences speaking performance. The results from the self-efficacy questionnaire revealed considerable variability in students' self-perception of their speaking abilities before the learning outcomes test. The total self-efficacy scores among the 36 respondents ranged from 27 to 76, with a mean score of 50.47, indicating an average level of self-efficacy.

The mean percentage score was 63.09%, suggesting that students, on average, believed they had moderate to

above-average capabilities in speaking tasks. In terms of categorization, 52.8% of students (19 out of 36) demonstrated a high level of self-efficacy, while 38.9% (14 students) exhibited a moderate level of self-efficacy. A smaller portion of the sample, 5.6% (2 students), had low self-efficacy, and only 2.8% (1 student) had very high self-efficacy. These findings highlighted that while the majority of students had high self-efficacy, a significant number still fell within the moderate to low self-efficacy range.

The findings indicated that while students' self-efficacy in speaking improved following the intervention, their actual speaking achievement did not fully align with their perceived confidence. The post-test results showed notable shifts, with fewer students in lower self-efficacy categories and more moving into higher ranges. However, despite this positive trend, many students still scored within moderate performance intervals, suggesting a gap between self-perception and actual ability.

One possible explanation was that some students may have overestimated their speaking proficiency. Bandura (1995) noted that while self-efficacy enhances motivation and effort, inflated confidence without corresponding skills can create a mismatch between perceived and actual performance. This might account for why some students with higher self-efficacy did not achieve top scores in the post-test. Another factor to consider is the impact of test anxiety or performance pressure. Although students felt more confident during class activities, the formal assessment setting may have induced stress, limiting their ability to fully demonstrate their speaking skills. Nisa et al. (2020) highlighted that external pressures can temporarily hinder students' performance, which may explain inconsistencies between their confidence levels and test results.

Additionally, the duration of the intervention might not have been sufficient for self-efficacy gains to fully translate into significant speaking improvements. While the integrated Talking Chips and Think-Pair-Share strategies fostered a supportive learning environment, longer exposure to these techniques may be necessary for sustained growth in both confidence and proficiency. Pramerta (2021) emphasized the importance of extended practice in ensuring long-term improvements in self-efficacy and speaking performance. Despite these considerations, the study reinforces the role of self-efficacy in encouraging students to engage in speaking tasks.

The increase in higher self-efficacy categories suggests that the integrated strategy created an interactive and motivating atmosphere. However, the gap between confidence and actual performance highlights the need for additional instructional support. Future interventions should aim to bridge this gap by incorporating extended practice, structured feedback, and targeted skill development. By addressing these areas, students can not only gain confidence in their speaking abilities but also achieve measurable improvements in their speaking performance.

CONCLUSION

The integration of the Talking Chips strategy with the Think-Pair-Share technique effectively enhanced students' speaking skills by fostering a structured and collaborative learning environment. This study confirmed that the Integrated Talking Chips with Think-Pair-Share strategy significantly improved students' comprehension, pronunciation, grammar, vocabulary, and fluency. Additionally, the integration positively influenced students' self-efficacy in speaking by creating an interactive and supportive setting that built confidence and reduced communication apprehension. While most students demonstrated moderate to high self-efficacy, some still faced challenges related to anxiety and lack of confidence. These findings underscore the need for targeted interventions to further reduce speaking anxiety and enhance self-confidence. Future research should explore self-efficacy levels more deeply through interviews and observations over a longer period to gain a more comprehensive understanding of students' confidence development and speaking challenges.

REFERENCES

1. Safitri, R., & Weda, S. (2022). Analysis of Verbal and Non-Verbal Communication in Barack Obama'S Farewell Address Speech. Journal of English Literature and Linguistic Studies, 1(1), 2022.

2. Brown, H. D. (2004). Language assessment: Principles and classroom practices. Longman, San Francisco
3. Haryudin, A., & Jamilah, S. A. (2018). Teacher ' S Difficulties in Teaching Speaking Using. Eltin, 6(2), 59–68.
4. Krashen, S. (1982). Principles and Practice in Second Language Acquisition. Pergamon Press, Oxford.
5. Bandura, A. (1995). Self-Efficacy in Changing Societies. Cambridge University Press, Cambridge.
6. Lisnawati, I., Yuniawati, Y., & Kartadireja, W. N. (2019). Student's Self-Efficacy in Speaking Learning. 306(Isseh 2018), 255–261. https://doi.org/10.2991/isseh-18.2019.59
7. Mohammed, A. (2021). Students' Speaking Proficiency and Self-efficacy Theory. Advances in Social Sciences Research Journal, 8(2), 318–325. https://doi.org/10.14738/assrj.82.9660
8. Kagan, S., & Kagan, M. (2009). Why Do We Need Cooperative Learning? In Kagan Cooperative Learning.
9. Lyman, F. (1981). The Responsive Classroom Discussion. College Park, MD: University of Maryland College of Education
10. Jasim, A. F. (2017). The Effect of Talking Chips Technique on Iraq EFL Students' Achievement in Speaking Skill. Journal of Misan Researches, 13(25), 295–329. https://www.iasj.net/iasj/download/a6a346b7801a8a3f
11. Marhaeni, I. M. P., Putra, A. A. I. N., & Jaya, I. N. A. (2013). The Effect of Think Pair Sahre Teacing Strategi to Student' Selft-Confidence and Speaking Competency of The Second Grade Students of SMPN 6 Singaraja. Program Pascasarjana Universitas Pendidikan Ganesha Program Studi Pendidikan Bahasa Inggris, 1
12. Ur, P. (2003). A Course in Language Teaching Practice and Theory. Cambridge University Press: Great Britains.
13. Gray, D., Brown, S., Macanufo, J. (2010). Game Storming. O'Reilly Media, Sebastopol.
14. Barkley, E. F., Major, C. H., & Cross, K. P. (2014). Collaborative learning techniques: A handbook for college faculty (1st ed.). Jossey-Bass, San Francisco.
15. Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. Houghton Mifflin.
16. Junaedi, A. (2020). The Use of Talking Chips Technique in Teaching Speaking Junaedi. ELITE Journal, 2(1), 9–22. https://www.elitejournal.org/index.php/ELITE
17. Silvia, M., Sunarmo, & Harimurti, E. R. (2021). The use of Talking Chips technique in teaching speaking skill. Proceedings of the National Seminar on Education STKIP Kusuma Negara III.
18. Kusrini, E. (2012). Teaching Speaking for Senior High School Students using Cooperative Learning "Think-Pair-Share." Jurnal Aktif, XVIII(3), 1–8.
19. Nisa, K., Raja, P., & Flora Nainggolan. (2015). the Use of Talking Chips Technique To Improve Students' Speaking Ability. UNILA Journal of English Teaching, 4(1), 1–13.
20. Pramerta, I. G. P. A. (2021). The impact of self-efficacy towards speaking performance. Journal of Psychology and Instruction, 5(3), 101–108. https://doi.org/10.23887/jpai.v5i2.