p-ISSN 2301-7554, e-ISSN 2541-3643
Volume 14, Issue 1, February 2026

ENGLISH REVIEW
Journal of English Education
Published by
English Language Study Program, Faculty of Teachers Training & Education, Universitas Kuningan, Indonesia in collaboration with AISEE (The Association of Indonesian Scholars of English Education)
AISEE

LANGUAGE LEARNING STRATEGIES AND EFL SPEAKING PERFORMANCE: THE MEDIATING ROLE OF SELF-REGULATION AMONG INDONESIAN UNIVERSITY STUDENTS

Finza Larasati[1]*, Hadiyanto[2], Urip Sulistiyo[3], Eddy Haryanto[4]

[1]*Universitas Muhammadiyah Palembang, Indonesia*
[2,3,4]*Universitas Jambi, Indonesia*

Corresponding author: finza_larasati@um-palembang.ac.id

APA Citation: Larasati, F., Hardiyanto, H., Sulistiyo, U., & Haryanto, E., (2026). Language learning strategies and EFL speaking performance: The mediating role of self-regulation among Indonesian university students. *English Review: Journal of English Education*, *14*(1), 55-66. https://doi.org/10.25134/d221a484

Received: 13-10-2025 Accepted: 23-12-2025 Published: 04-02-2026

Abstract: This study investigates the role of language learning strategies (LLS) in shaping Indonesian EFL learners' speaking performance by integrating quantitative and qualitative evidence in a mixed-methods design. Specifically, it aims to (1) describe learners' use of LLS, (2) examine the correlation between LLS and speaking performance, (3) identify the predictive contribution of LLS to speaking outcomes, and (4) explore learners' strategic experiences in speaking development through responses to open-ended questionnaire items. Eighty undergraduate EFL students participated in the study. Quantitative data were collected using the Strategy Inventory for Language Learning (SILL) and a speaking performance test, while qualitative data were obtained from learners' open-ended responses about how they used strategies in practice. The quantitative results revealed a very strong positive correlation between LLS and speaking performance ($r = .912$, $p < .001$), indicating that students who employed strategies more frequently tended to achieve higher speaking scores. Multiple regression analysis showed that no single LLS category uniquely predicted speaking performance due to severe multicollinearity among strategy types, suggesting that LLS operate as an integrated, interdependent system rather than isolated components. Descriptive results indicated that cognitive strategies were the most dominant, while qualitative evidence showed that learners actively combined cognitive, metacognitive, social, and affective strategies including repeated practice, imitation, planning, self-monitoring, and peer interaction. Learners demonstrated strong self-regulation in overcoming challenges and benefited from teacher feedback, peer support, and technological tools. Overall, the findings highlight that strategic behavior is crucial for enhancing speaking fluency, accuracy, and confidence, implying that EFL instruction should explicitly foster strategic awareness and provide supportive learning environments to optimize speaking development.
Keywords: *language learning strategies, speaking performance; EFL learners; mixed-methods; Indonesian university students.*

INTRODUCTION

Speaking performance is widely regarded as one of the most essential yet challenging skills for learners of English as a Foreign Language (EFL). As a productive skill, speaking requires learners to integrate linguistic knowledge, cognitive processing, and real-time communication abilities in order to convey meaning effectively (Minářová, 2022; Malini *et al.*, 2022; Thi and Que, 2025). In many EFL contexts, including Indonesia, learners often experience difficulties in achieving fluency, accuracy, and confidence in oral communication, despite having studied English for several years (Ernati & Merti, 2022; Normawati et al., 2023). This persistent gap between formal instruction and actual speaking competence highlights the need to examine factors that can facilitate learners' speaking development more effectively. Among the various factors influencing speaking performance, language learning strategies (LLS)

have received increasing attention in second language acquisition research (Gomathi *et al.*, 2023; Sulistyowati, 2023; Qassrawi *et al.*, 2024). Language learning strategies refer to the specific actions, behaviors, or techniques that learners use to enhance their language learning process, including cognitive, metacognitive, memory, compensation, affective, and social strategies (Ardiyansah & Auliya, 2023; Parhadjanovna, 2023; Saptiany & Prabowo, 2024). These strategies enable learners to become more autonomous, reflective, and efficient in managing their learning, particularly in complex productive skills such as speaking. Previous studies have shown that learners who actively employ appropriate strategies tend to demonstrate better speaking fluency, greater confidence, and higher levels of communicative engagement (Andriani et al., 2024; Fahmi et al., 2020; Jin, 2023). In the Indonesian EFL context, limited exposure to English outside the classroom, large class sizes, and a strong emphasis on grammatical accuracy often restrict learners' opportunities to practice speaking in authentic communicative situations (Mustamir, 2024; Saed et al., 2021; Rohmah & Mohammad Kurdi Wijaya, 2025). As a result, many learners struggle to express ideas fluently and hesitate to participate in oral activities. Under such conditions, the strategic use of language learning strategies becomes particularly important, as strategies such as planning, repeated practice, self-monitoring, and peer interaction can compensate for limited instructional time and environmental constraints (Kit et al., 2024; Muluk et al., 2025; Lin & Bollen, 2025). Empirical evidence has consistently demonstrated a positive relationship between LLS and speaking performance. Alfarisy, (2022) found that Indonesian EFL learners who employed compensation and social strategies showed noticeable improvements in fluency and confidence during speaking tasks. Similarly, Tans et al. (2025) reported that effective strategy use was associated with lower speaking anxiety and better task performance.

Despite growing interest in LLS, several gaps remain in the literature. First, most studies focus on LLS in relation to general proficiency or receptive skills, with fewer investigations specifically examining speaking performance as a distinct outcome. Second, research has often relied on purely quantitative designs, which overlook learners' subjective experiences and contextualized strategy use. Third, in the Indonesian higher education context, there is limited empirical evidence integrating both statistical relationships and learners' lived experiences of strategy use in speaking.

To address these gaps, the present study adopts a mixed-methods design guided by Self-Regulation Theory and Oxford's (1990) Strategic Self-Regulation (S^2R) Model, which emphasize the interaction of metacognition, motivation, and strategic action. By framing LLS through this lens, the study aims not only to examine the correlation between strategy use and speaking performance but also to explore the mechanisms of how and why learners apply strategies in real speaking situations. Specifically, this study aims to: (1) Describe learners' use of LLS; (2) Examine the correlation between LLS and speaking performance; (3) Identify the predictive contribution of LLS to speaking outcomes; (4) Explore learners' strategic experiences in developing their speaking skills through open-ended questionnaire responses.

By combining quantitative and qualitative data, this study seeks to provide a comprehensive understanding of how strategic behavior shapes EFL learners' speaking performance and to offer practical pedagogical insights for enhancing speaking instruction in Indonesian EFL classrooms.

Language learning strategies (LLS) have long been recognized as a crucial component in second and foreign language acquisition. Almusharraf (2021) defines LLS as specific actions, behaviors, or techniques that learners use to enhance their language learning, which include cognitive, metacognitive, memory, compensation, affective, and social strategies. These strategies help learners become more autonomous, reflective, and efficient in managing their learning process, particularly when dealing with complex productive skills such as speaking. Cognitive strategies involve mental processes used to manipulate or transform language input, such as repetition, summarizing, and practicing speaking patterns (Nobutoshi, 2023; Umami et al., 2023; Ardiyansah & Auliya, 2023). Metacognitive strategies refer to higher-order thinking skills that enable learners to plan, monitor, and evaluate their learning activities (Firmansyah, 2025; Ramadhanti & Yanda, 2021; Febriyanti, 2023). According to Muslimin et al. (2022), learners who actively apply metacognitive strategies, such as planning their speaking practice and evaluating their oral performance, tend to demonstrate better speaking outcomes. Memory strategies assist learners in storing and retrieving new language items, while compensation strategies

p-ISSN 2301-7554, e-ISSN 2541-3643
Volume 14, Issue 1, February 2026

help learners overcome gaps in linguistic knowledge by using paraphrasing or guessing meaning. Affective strategies involve managing emotions, motivation, and anxiety, whereas social strategies focus on interaction, cooperation, and seeking feedback from peers or teachers (Laia, 2023; Ditania, 2022; Oktari, 2024). The use of LLS is closely associated with learner autonomy and self-regulation. Strategic learners are more likely to take responsibility for their learning, seek opportunities to practice speaking, and persist in using English even when facing difficulties (Cui, 2025; Palah et al., 2022). This aligns with Self-Regulation Theory, which emphasizes learners' ability to manage their cognitive and emotional processes to achieve learning goals (Crompton et al., 2024; Zarazaga-Peláez et al., 2024; Su et al., 2023). Wijaya (2025) highlighted that activating self-regulation behaviors in EFL speaking contexts increases learners' confidence and improves speaking performance.

Speaking performance in English as a Foreign Language (EFL) contexts refers to learners' ability to communicate orally with fluency, accuracy, appropriate pronunciation, and comprehensibility (Areta & Purwanti, 2021; Fauziyah et al., 2023). It requires learners to integrate linguistic knowledge with real-time cognitive processing and social interaction skills. Ilham et al., (2024) emphasized that speaking performance involves multiple dimensions, including grammar, pronunciation, vocabulary, fluency, and comprehension, all of which should be assessed holistically to reflect learners' true communicative ability. In many EFL settings, speaking remains one of the most challenging skills to master. Indonesian EFL learners, in particular, often struggle with vocabulary limitations, pronunciation accuracy, hesitation, and low confidence when expressing ideas orally (Mustamir, 2024; Normawati et al., 2023). These difficulties are exacerbated by limited exposure to English outside the classroom and instructional practices that prioritize grammatical accuracy over communicative effectiveness (Saed et al., 2021). Consequently, learners frequently lack sufficient opportunities to develop fluency and to practice speaking in authentic communicative situations.

A growing body of research has demonstrated that the use of language learning strategies plays a significant role in enhancing EFL learners' speaking performance. Purnamaningwulan and Purwanto (2025) asserted that learners who use appropriate strategies effectively can improve their proficiency and self-confidence, especially in productive skills such as speaking. Strategies such as planning before speaking, repeated practice, self-monitoring, and seeking feedback have been shown to facilitate learners' fluency, accuracy, and confidence in oral communication. Empirical studies support this theoretical claim. Abdelrahman (2020) found that metacognitive strategies, particularly planning and evaluation, were strongly associated with improved speaking performance among EFL learners. Similarly, Solikhah (2023) reported that strategic learners were more willing to engage in classroom communication and take risks in using English, which are key components in developing speaking fluency. In the Indonesian context, Alfarisy (2022) revealed that learners who actively employed compensation and social strategies demonstrated noticeable improvements in fluency and confidence during speaking activities. In addition to cognitive and metacognitive strategies, affective and social strategies also contribute to speaking development. Tahang et al., (2019) found that successful EFL learners employed affective, metacognitive, and social strategies to manage anxiety, build confidence, and improve their speaking performance. Their findings suggest that effective strategy use helps learners regulate emotions and sustain engagement in oral communication. These findings indicate that LLS not only support cognitive processing but also function as tools for managing affective barriers and fostering communicative participation.

METHOD

This study used a mixed-methods design to investigate the relationship between language learning strategies (LLS) and speaking performance among Indonesian EFL learners. A mixed-methods approach was chosen to provide a more comprehensive understanding of the phenomenon by integrating quantitative and qualitative data (Creswell, 2022). The quantitative phase aimed to examine the correlation and predictive contribution of LLS to learners' speaking performance, while the qualitative phase sought to explore learners' strategic experiences in developing their speaking skills. This design enabled the researchers to capture both statistical patterns and contextualized insights into how strategies were used in speaking activities.

The participants were 80 undergraduate students enrolled in an English Education program at Universitas Muhammadiyah Palembang. They were selected using purposive sampling, as they had completed speaking courses

and possessed sufficient experience in using English for oral communication (Sugiyono, 2021). The participants represented mixed proficiency levels and had similar instructional backgrounds. Prior to data collection, informed consent was obtained, and participants were assured of confidentiality and voluntary participation (Anufia, 2019).

Table 1. *Demographic characteristics of the participants (N = 80)*

Academic Semester	Academic Level	Number of Students	Percentage
1st Semester	Beginner	15	18.75%
3rd Semester	Intermediate	21	26.25%
5th Semester	Upper-intermediate	16	20%
7th Semester	Advanced	28	35%
Total		80	100%

Language learning strategies were measured using a questionnaire adapted from Febriyanti (2023) Strategy Inventory for Language Learning (SILL). The instrument consisted of items covering six categories of strategies: memory, cognitive, compensation, metacognitive, affective, and social strategies (Alfarisy, 2022). Responses were rated on a five-point Likert scale ranging from 1 (never) to 5 (always) (Robinson, 2024). The reliability analysis indicated that the questionnaire was internally consistent, with a Cronbach's alpha coefficient exceeding the acceptable threshold ($\alpha > .70$), which meets the standard criterion for reliability (Hair et al., 2019).

Learners' speaking performance was assessed through a speaking test designed to elicit spontaneous oral production (Brown, 2019; Brown & Abeywickrama, 2019). Participants were asked to perform a short speaking task based on a given topic. Their performances were evaluated using an analytic speaking rubric adapted from the Common European Framework of Reference (CEFR) (Ahmad & Idris, 2025), which assessed five dimensions: grammar, vocabulary, pronunciation, fluency, and comprehension. Two independent raters scored the speaking performances, and inter-rater reliability analysis indicated a high level of agreement between the raters, which is essential to ensure scoring consistency in speaking assessment.

Quantitative data were collected through the administration of the LLS questionnaire and the speaking performance test (Neuman, 2019). The questionnaire was distributed to participants during class sessions, followed by the speaking test conducted individually (Dornyei & Taguchi, 2019; Miall & Kuiken, 2019). Qualitative data were obtained from open-ended questions embedded in the questionnaire, which invited participants to describe the strategies they used to improve their speaking skills (Patton, 2020; Tisdell et al., 2025). This combination of instruments enabled triangulation of data sources to enhance the credibility and trustworthiness of the findings, as triangulation involves the use of multiple methods to study the same phenomenon and to corroborate results across different data sources (Susanto et al., 2023; Mauliddiyah, 2021; Daruhadi & Sopiati, 2024).

Quantitative data were analyzed using descriptive and inferential statistics. Descriptive statistics, including mean, standard deviation, and frequency distribution, were used to describe learners' use of language learning strategies and their speaking performance levels (Field, 2024). Pearson's product–moment correlation analysis was conducted to examine the relationship between language learning strategies and speaking performance. In addition, multiple regression analysis was performed to determine the predictive contribution of language learning strategies to speaking performance. All quantitative analyses were carried out using SPSS. Qualitative data obtained from the open-ended questions were analyzed thematically following the procedures proposed by Braun and Clarke (2022). The responses were coded, categorized, and grouped into recurring themes representing learners' strategic behaviors in developing their speaking skills, such as planning, repeated practice, self-monitoring, and anxiety management. The qualitative findings were used to support and enrich the quantitative results.

RESULTS AND DISCUSSION

Quantitative findings: Descriptive analysis of language learning strategies

Language Learning Strategies (LLS) were measured using Alfarisy (2022) Strategy Inventory for Language Learning (SILL), which consists of six categories: memory, cognitive, compensation, metacognitive, affective, and

p-ISSN 2301-7554, e-ISSN 2541-3643
Volume 14, Issue 1, February 2026

social strategies. These categories were further grouped into direct strategies (memory, cognitive, compensation) and indirect strategies (metacognitive, affective, social). Table 1 presents the descriptive statistics of LLS scores among the 80 participants.

Table 2. *Descriptive statistics of language learning strategies (N = 80)*

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Language Learning Strategy	80	80.00	226.00	11537.00	144.2125	50.50672
Valid N (listwise)	80					

As shown in Table 2, students' LLS scores ranged from 80 to 226, with a mean of 144.21. This indicates that, on average, students employed a moderate to high number of strategies, although there was substantial variation, reflecting differences in both the frequency and type of strategies used. The distribution of students' dominant strategy categories is presented in Table 3.

Table 3. *Frequency distribution of language learning strategy categories*

LLS_Category					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cognitive	74	92.5	92.5	92.5
	Compensation	3	3.8	3.8	96.3
	Memory	3	3.8	3.8	100.0
	Total	80	100.0	100.0	

Descriptive analysis of speaking performance

Students' speaking performance was assessed through a monologue task, evaluated by three independent raters using a rubric covering fluency, pronunciation, grammar, vocabulary, and content. Table 3 presents the descriptive statistics of speaking performance.

Table 4. *Descriptive statistics of speaking performance*

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Speaking Performance	80	12.63	24.24	19.2919	2.71279
Valid N (listwise)	80				

The mean score of 19.29 indicates moderately strong speaking proficiency, while the standard deviation of 2.71 shows noticeable individual variation. Table 5 displays the distribution of speaking proficiency levels.

Table 5. *Frequency distribution of speaking performance levels*

Speaking Proficiency Level					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High (B2)	16	20.0	20.0	20.0
	Low (A2)	15	18.8	18.8	38.8
	Moderate	49	61.3	61.3	100.0
	Total	80	100.0	100.0	

The distribution indicates that while some students achieved high competence, the majority remained at a moderate proficiency level, and a minority were still developing foundational speaking skills.

Correlation between LLS and speaking performance

Pearson correlation analysis was conducted to examine the relationship between students' LLS use and their speaking performance. The results are presented in Table 6.

Table 5. *Frequency distribution of speaking performance levels*

Speaking Proficiency Level

		Language Learning Strategy	Speaking Performance
Language Learning Strategy	Pearson Correlation	1	.912**
	Sig. (2-tailed)		<,001
	N	80	80
Speaking Performance	Pearson Correlation	.912**	1
	Sig. (2-tailed)	<,001	
	N	80	80

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient of r = .912 (p < .001) indicates a very strong positive relationship. Students who reported frequent use of LLS tended to achieve higher speaking scores, suggesting that strategic behavior significantly supports fluency, accuracy, and confidence in oral communication. This finding aligns with previous research emphasizing the role of cognitive and metacognitive strategies in enhancing speaking outcomes (Suryana et al., 2020; Miftahul Jannah et al., 2025; Lo et al., 2025).

Predictive contribution of LLS categories

A multiple regression analysis was conducted to determine the predictive contribution of the six LLS categories to speaking performance. Table 6 summarizes the regression coefficients.

Table 6. *Multiple regression coefficients for LLS predicting speaking performance*

Strategy	B	Std. Error	Beta	t	Sig.
Memory	-0.837	25.279	-0.014	-0.033	.974
Cognitive Strategy	-33.695	22.253	-0.720	-1.514	.134
Compensation Strategy	-25.426	28.660	-0.232	-0.887	.378
Metacognitive Strategy	41.566	30.099	0.667	1.381	.172
Affective Strategy	-7.825	39.905	-0.072	-0.196	.845
Social Strategy	47.721	36.664	0.543	1.302	.197

None of the individual LLS categories showed a statistically significant unique contribution due to multicollinearity, with VIF values exceeding 10. However, metacognitive (β = 0.667) and social strategies (β = 0.543) had the strongest positive effects, indicating that planning, monitoring, and peer interaction slightly enhanced speaking performance. These results support the notion that LLS function holistically rather than as isolated components (Muslimin et al., 2022).

Qualitative findings: Learners' experiences with LLS

The qualitative findings from the open-ended items of the Language Learning Strategy (LLS) questionnaire provide detailed insights into how Indonesian EFL learners employ strategies to enhance their speaking performance, addressing the study's third research question: how learners use LLS to improve their oral English skills. In response to the first question, *"Which strategy helps you the most when trying to improve your English-speaking skills?"* students consistently reported using cognitive and social strategies. Cognitive strategies included practicing regularly, repeating vocabulary, imitating pronunciation from English movies, and listening to English songs. For example, one participant explained, *"I watch English movies and imitate the pronunciation,"* while another noted, *"I practice by repeating vocabulary or sentences every day.*" Social strategies were also frequently mentioned, with learners highlighting the benefits of speaking with peers to boost confidence, as one student stated, *"Speaking with my friends helps me improve my confidence."* These responses indicate that learners consider both structured self-practice and interactive communication essential in developing fluency and accuracy. When asked to describe situations where their strategies helped them speak more fluently or confidently, students provided concrete examples from classroom and real-life contexts. For instance, practicing presentations multiple times enabled learners to speak confidently in front of their classmates, while watching English videos helped them respond effectively during speaking exercises. Talking with friends reduced fear and hesitation, making classroom participation more comfortable. One participant shared, *"When I*

p-ISSN 2301-7554, e-ISSN 2541-3643
Volume 14, Issue 1, February 2026

practiced my presentation many times, I spoke more confidently in class," and another explained, *"Talking with my friends made me less afraid during English class."* These accounts demonstrate that deliberate application of strategies directly translates into improved speaking performance, particularly in managing fluency and anxiety. The learners were also asked about the difficulties they face when applying these strategies and how they overcome them. Common challenges included limited vocabulary, difficulty maintaining consistent practice, fear of making mistakes, and problems understanding English media content. Despite these obstacles, students reported employing effective self-regulation techniques. For example, learners overcame vocabulary gaps by reviewing words repeatedly or asking peers for help, and they managed comprehension difficulties by slowing down videos or practicing pronunciation more carefully. A student stated, *"Sometimes I forget the vocabulary I learned, but I review it regularly,"* while another explained, *"It's difficult to practice every day because I'm busy, but I try to set aside time whenever I can."* These responses indicate that learners not only identify obstacles but also actively apply coping strategies to maintain progress in speaking development. Regarding preparation for speaking tasks, participants described metacognitive strategies such as planning, rehearsal, and self-monitoring. In response to the question, *"How do you usually prepare yourself when you know you will need to speak English, either in class or outside of it?"* learners mentioned practices such as searching for relevant vocabulary, rehearsing sentences aloud, watching English speeches online, and practicing pronunciation. For example, one participant stated, *"I practice my sentences before speaking in front of the class,*" and another said, *"I watch examples of English speeches on YouTube to improve my delivery."* These preparations demonstrate that learners consciously plan and monitor their learning process to reduce anxiety and increase performance effectiveness during speaking tasks. Finally, in response to the question about the kind of support that helps them apply their strategies effectively, learners identified feedback from teachers, encouragement from peers, and access to digital tools as critical factors. Many students emphasized that teacher feedback helped correct mistakes and refine language use, while peer support created a safe environment for practicing English without fear of judgment. Technology, such as YouTube, Google Translate, or language apps, enabled learners to practice anytime and access additional learning resources. One participant noted, "My lecturer's feedback helps me correct my mistakes," while another shared, *"Using apps like YouTube helps me practice anywhere and anytime."* These findings indicate that learners' strategic behavior is not only a personal effort but is strengthened by supportive social and technological environments, which enhance the overall effectiveness of LLS in improving speaking performance. In summary, the qualitative findings reveal that Indonesian EFL learners actively employ cognitive, metacognitive, social, and affective strategies to enhance their speaking skills. Their responses show that strategies such as repeated practice, imitation, planning, self-monitoring, and peer interaction play a crucial role in improving fluency, accuracy, and confidence. The learners also demonstrate strong self-regulation skills in overcoming challenges and using available support effectively. These findings complement the quantitative results by explaining why frequent use of LLS is strongly associated with better speaking performance.

This study investigated the role of language learning strategies (LLS) in shaping Indonesian EFL learners' speaking performance. While the results provide rich quantitative and qualitative data, a more interpretive analysis reveals several overarching themes that advance understanding beyond simple description.

Beyond isolated strategies: The synergistic system

The very strong correlation (r = .912) and the non-significant regression coefficients due to multicollinearity indicate that LLS do not operate in isolation. Instead, learners frequently combine cognitive, metacognitive, social, and affective strategies, creating a synergistic system in which strategies reinforce one another. Qualitative evidence supports this, showing learners simultaneously engage in repetition, peer practice, planning, and self-monitoring. For instance, one learner noted, "I watch English movies and imitate the pronunciation," while another explained, "Speaking with my friends helps me improve my confidence." Together, these findings suggest that strategic behavior functions holistically, with multiple strategies integrated to meet the complex demands of speaking tasks, rather than as separate, independent tools.

Centrality of metacognition and social interaction

Although no single strategy category significantly

predicted speaking performance in regression analysis, metacognitive strategies (planning, self-monitoring) and social strategies (peer interaction) consistently exhibited the strongest positive Beta values. This underscores the central role of self-regulation and social engagement in supporting speaking development. Qualitative accounts further illustrate this: learners described how rehearsing presentations, reviewing vocabulary, and practicing with peers not only improved fluency and accuracy but also reduced anxiety and enhanced confidence. These findings indicate that effective speaking relies on learners' ability to plan, monitor, and adjust their learning, as well as the benefits derived from collaborative practice and social scaffolding.

Explaining the paradox: High strategy Use but Moderate Proficiency

Despite high reported use of strategies, many participants achieved only moderate speaking proficiency. This paradox highlights that frequent strategy use alone is insufficient; factors such as strategy quality, appropriateness, and contextual constraints (limited exposure to English outside class, large class sizes, and emphasis on grammatical accuracy) affect outcomes. Qualitative findings reinforce this interpretation: learners mentioned challenges such as limited vocabulary, inconsistent practice, and difficulty understanding English media, which they mitigated through strategies like vocabulary review, slowing down videos, and peer assistance. This demonstrates that strategic behavior is necessary but must be supported by high-quality practice, adequate resources, and contextual opportunities to translate into higher proficiency.

Implications for pedagogy

The integration of quantitative and qualitative findings highlights that effective speaking instruction should go beyond teaching isolated strategies. Educators are encouraged to embed explicit strategy instruction, focusing on metacognitive planning, social interaction, affective regulation, and the use of digital tools to provide supportive learning environments. By cultivating both strategic competence and self-regulation, teachers can help learners overcome affective barriers, maximize practice opportunities, and achieve meaningful improvements in speaking proficiency (Hoesny et al., 2024; Lo et al., 2025; Dash, 2022).

In summary, the discussion emphasizes three key points: (1) LLS function as a holistic, interdependent system rather than isolated components. (2) Metacognition and social interaction are central levers in developing speaking skills. (3) High strategy use must be paired with appropriate practice and supportive contexts to realize full proficiency gains.

CONCLUSION

This study examined the relationship between language learning strategies (LLS) and Indonesian EFL learners' speaking performance, providing integrated quantitative and qualitative evidence on how strategic behavior supports oral proficiency. The findings indicate that learners actively employ a range of strategies, with cognitive strategies (repetition, imitation, vocabulary practice) being the most frequently used, complemented by metacognitive strategies (planning and self-monitoring), social strategies (peer interaction), and affective strategies (managing anxiety). Quantitative analysis revealed a very strong positive correlation between LLS and speaking performance, while regression results showed that metacognitive and social strategies contributed most strongly, emphasizing the importance of planning, self-regulation, and collaborative engagement in speaking development.

Learners' experiences further illustrated that repeated practice, deliberate preparation, and peer support enhanced fluency and confidence, while challenges such as limited vocabulary, fear of mistakes, and inconsistent practice were mitigated through self-regulation and external scaffolds. Teacher feedback, peer encouragement, and digital tools (e.g., videos, pronunciation apps, online speaking platforms) strengthened learners' strategic behavior, highlighting that effective speaking development relies on both individual effort and supportive learning environments.

These findings suggest that EFL instruction should move beyond isolated strategy teaching and adopt an integrated strategy instruction approach. Specifically, educators are encouraged to: (1) Design integrated strategy learning packages that combine metacognitive planning (goal-setting, monitoring, reflection) with social practice opportunities (collaborative speaking tasks, peer feedback, and discussion activities). (2) Provide structured opportunities for repeated practice in authentic speaking contexts, including presentations, dialogues, and interactive exercises. (3) Create a supportive classroom atmosphere that reduces anxiety, encourages risk-taking, and fosters learner autonomy. (4) Leverage digital

p-ISSN 2301-7554, e-ISSN 2541-3643
Volume 14, Issue 1, February 2026

tools such as language apps, videos, and online speaking resources to supplement classroom instruction and enable independent, self-regulated practice. (5) Embed explicit strategy instruction across the curriculum, highlighting how cognitive, metacognitive, social, and affective strategies can be combined to address real-world speaking challenges.

By fostering strategic competence alongside linguistic knowledge, educators can help learners develop confidence, fluency, and accuracy, ensuring that strategy use translates into meaningful improvements in EFL speaking performance. These actionable recommendations provide a framework for holistic, strategy-informed speaking instruction that aligns with learners' needs and contextual constraints.

REFERENCES

Abdelrahman, R. M. (2020). Metacognitive awareness and academic motivation and their impact on academic achievement of Ajman University students. *Heliyon*, *6*(9), Article e04192. https://doi.org/10.1016/j.heliyon.2020.e04192

Ahdhianto, E., Marsigit, M., Haryanto, H., & Santi, N. N. (2020). The effect of metacognitive-based contextual learning model on fifth-grade students' problem-solving and mathematical communication skills. *European Journal of Educational Research*, *9*(2), 753–764. https://doi.org/10.12973/eu-jer.9.2.753

Ahmad, K. A., & Idris, I. (2025). A CEFR-informed English test: How content validity index and content validity ratio are used for content validation. *EDUCATUM Journal of Social Sciences*, *11*(11), 68–76. https://doi.org/10.37134/ejoss.vol11.1.7.2025

Alfarisy, F. (2022). The use of SILL Oxford on understanding the speaking learning strategies. *International Journal of Linguistics, Literature and Translation*, *5*(6), 92–98. https://doi.org/10.32996/ijllt.2022.5.6.11

Almusharraf, N. (2021). Perceptions and application of learner autonomy for vocabulary development in Saudi EFL classrooms. *International Journal of Education and Practice*, *9*(1), 13–36. https://doi.org/10.18488/journal.61.2021.91.13.36

Andriani, A., Abdullah, F., Hidayati, A. N., & Syafira, N. A. N. (2024). Teaching speaking in Kampung Inggris: The tutors' challenges and solutions. *Journal of Education and Learning*, *18*(1), 253–260. https://doi.org/10.11591/edulearn.v18i1.21175

Anufia, B., & Al-Anwari, T. (2019). *Resume: Instrumen pengumpulan data* [Laporan Penelitian, Sekolah Tinggi Agama Islam Negeri (STAIN) Sorong]. OSF Preprints. [suspicious link removed]

Ardiyansah, T. Y., & Auliya, P. K. (2023). English education department students' speaking anxiety in classroom activities at Universitas Muhammadiyah Gresik. *Tell-Us Journal*, *9*(3), 590–601. https://doi.org/10.22202/tus.2023.v9i3.7283

Areta, D. P., & Purwanti, I. T. (2021). Factors contributing to EFL learners' speaking performance. *International Journal of Educational Best Practices*, *5*(1), 60–78. https://doi.org/10.31258/ijebp.v5n1.p60-78

Bahufite, E., Kasonde-Ng'andu, S., & Akakandelwa, A. (2023). The relationships between learners' academic achievement due to the use of constructivist methods in physical science and their self-esteem in Zambian secondary schools. *Social Sciences and Humanities Open*, *8*(1), Article 100632. https://doi.org/10.1016/j.ssaho.2023.100632

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, *9*(1), 3–26. https://doi.org/10.1037/qup0000196

Brown, H. D., & Abeywickrama, P. (2019). *Language assessment: Principles and classroom practices* (3rd ed.). Pearson Education.

Brown, J. D. (2019). *The elements of language curriculum: A systematic approach to program development*. Heinle & Heinle.

Creswell, J. W., & Guetterman, T. C. (2022). *A concise introduction to mixed methods research* (2nd ed.). SAGE Publications.

Crompton, H., Edmett, A., Ichaporia, N., & Burke, D. (2024). AI and English language teaching: Affordances and challenges. *British Journal of Educational Technology*, *55*(6), 2503–2529. https://doi.org/10.1111/bjet.13460

Cui, Y. (2025). Using strategic translation to empower meaningful language learning: A translanguaging perspective. *Language Awareness*, 1–21. https://doi.org/10.1080/09658416.2025.2527309

Daruhadi, G., & Sopiati, P. (2024). Pengumpulan data penelitian. *J-Ceki: Jurnal Cendekia Ilmiah*, *3*(5), 5423–5443. https://doi.org/10.56799/jceki.v3i5.5181

Dash, B. B. (2022). Digital tools for teaching and learning English language in 21st century. *International Journal of English and Studies*, *4*(2), 8–13. https://doi.org/10.47311/IJOES.2022.4202

Diaz, D. G., Parra, J. A., Leyva, N. L., Herrera, E. M., & Zambrano, L. D. (2023). The impact of task-based language teaching on English as a EFL learners' speaking proficiency and motivation. *Ciencia Latina Revista Científica Multidisciplinar*, *7*(3), 3796–3810. https://doi.org/10.37811/cl_rcm.v7i3.6443

Ditania, S. (2022). *An analysis on students' problem in*

speaking skill faced by the eleventh grade of social science of SMA Negeri 3 Pekanbaru in academic year 2019/2020 [Skripsi, Universitas Islam Riau]. Repositori UIR. https://repository.uir.ac.id/11477/

Dörnyei, Z., & Taguchi, T. (2019). *Questionnaires in second language research: Construction, administration, and processing* (2nd ed.). Routledge. https://doi.org/10.4324/9780203864739

Ernati, E., & Merti, L. (2022). Students' speaking performance analysis after learning using Google Meet at pandemic (Covid-19) era. *English Language Education and Current Trends (ELECT)*, *1*(1), 1–10. https://doi.org/10.37301/elect.v1i1.34

Fahmi, R., Migdadi, A. S., & Al-Alawneh, M. K. (2020). Does Web 2.0-supported project-based instruction improve Jordanian EFL learners' English proficiency? *Teaching English with Technology*, *20*(3), 25–39.

Fauziyah, H., Gozali, A., & Degeng, P. D. D. (2023). Teacher's perspective towards EFL students' speaking performance in post Covid-19 pandemic era. *Journal of Languages and Language Teaching*, *11*(2), 312–323. https://doi.org/10.33394/jollt.v11i2.7497

Febriyanti, E. R. (2023). Language learning strategies of ESP learners: A comparison between during and post-pandemic situation. *Premise: Journal of English Education*, *12*(3), 986–1004. https://doi.org/10.24127/pj.v12i3.8163

Field, A. (2024). *Discovering statistics using IBM SPSS statistics* (6th ed.). SAGE Publications.

Firmansyah, A. M. (2025). The relationship between self-efficacy and metacognitive learning strategies in improving student academic achievement. *Educational Praxis Journal*, *1*(11), 25–35. https://doi.org/10.32529/epj.v1i1.3859

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, *34*(10), 906–911. https://doi.org/10.1037/0003-066X.34.10.906

Gomathi, R., Maheswaran, S., Mythili, M., Nandita, S., Sathesh, S., Murugesan, G., & Duraisamy, P. (2023). The exploitation of artificial intelligence in developing English language learner's communication skills. *2023 14th International Conference on Computing Communication and Networking Technologies (ICCCNT)*, 1–6. https://doi.org/10.1109/ICCCNT56998.2023.10307203

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.

Hoesny, M. U., Setyosari, P., Praherdhiono, H., & Suryati, N. (2024). Integrating digital technology into project-based learning: Its impact on speaking performance. *Mextesol Journal*, *48*(3), 1–12. https://doi.org/10.61871/mj.v48n3-4

Ilham, M., Nurwati, A., & Helingo, A. (2024). A closer look at five components of speaking performance in Indonesian EFL students. *Journal of Social Science Research*, *4*(6), 6685–6697.

Jin, S. (2023). Speaking proficiency and affective effects in EFL: Vlogging as a social media-integrated activity. *British Journal of Educational Technology*, *55*(2), 586–604. https://doi.org/10.1111/bjet.13381

Kit, O., Kilag, T., Uy, F. T., Macapobre, K. A., Canonigo, K., Anrev, J., Pansacala, A., Flordelis, M., Cabaluna, R., & Calunsag, J. E. (2024). Exploring the impact of language exposure on students' English comprehension. *International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE)*, *1*(7), 85–91. https://doi.org/10.5281/zenodo.12614542

Laia, I. F. (2023). Students' anxiety in speaking English at eighth grade students of SMP Negeri 3 Dharma Caraka Telukdalam. *Research on English Language Education*, *4*(2), 30–39. https://doi.org/10.57094/relation.v4i2.681

Lin, S., & Bollen, D. H. (2025). From anxiety to engagement: Transforming an English for specific purposes classroom through digital storytelling. *Studies in English Language and Education*, *12*(2), 579–593. https://doi.org/10.24815/siele.v12i2.40286

Lo, Y. Y., Shah, S. S. A., Hasim, Z., Senom, F., Saad, M. R. M., & Thienpermpool, P. (2025). Thai EFL university students' views on the effectiveness of Duolingo for enhancing listening and speaking skills. *Studies in English Language and Education*, *12*(1), 154–171. https://doi.org/10.24815/siele.v12i1.40517

Malini, N. L. N. S., Sukarini, N. W., Yadnya, I. B. P., & Maharani, S. A. I. (2022). Exploring needs analysis of English language training: An evidence from small hotel and restaurant employees in Nusa Lembongan, Bali, Indonesia. *Indonesian Journal of Applied Linguistics*, *12*(1), 212–223. https://doi.org/10.17509/ijal.v12i1.46437

Mauliddiyah, N. L. (2021). *Metode pengumpulan data dan instrumen penelitian* [Laporan Penelitian, UIN Alauddin Makassar]. OSF Preprints. https://doi.org/10.31219/osf.io/svu73

Miall, D. S., & Kuiken, D. (1995). Aspects of literary response: A new questionnaire. *Research in the Teaching of English*, *29*(1), 37–58. https://doi.org/10.58680/rte199515356

Jannah, D. M., Nuraisyah, D., Sumarni, S., Liswati, H. R., & Qamariah, Z. (2025). Innovative teaching with TELL: Enhancing speaking skills through digital applications. *Journal Innovation in*

p-ISSN 2301-7554, e-ISSN 2541-3643
Volume 14, Issue 1, February 2026

Education, *3*(1), 138–146. https://doi.org/10.59841/inoved.v3i1.2143

Minářová, M. (2022). *The influence of online education on the language skills of students of English for Business Administration* [Master's thesis, Tomas Bata University in Zlín]. Digilib UTB.

Muluk, S., Habiburrahim, Dahliana, S., Zakaria, F., Azizah, & Safrul, M. S. (2025). The impact of synchronous virtual flipped classroom on EFL students' speaking skill. *Studies in English Language and Education*, *12*(1), 362–379. https://doi.org/10.24815/siele.v12i1.34814

Muslimin, N. I., Suriaman, A., Marhum, M., Kamaruddin, A., & Rita, F. (2022). Investigating EFL learners' learning strategies in speaking skill. *Exposure: Jurnal Pendidikan Bahasa Inggris*, *11*(2), 379–391. https://doi.org/10.26618/exposure.v11i2.7714

Mustamir, M. (2024). Indonesian EFL learners and speaking anxiety: Insights from a meta-synthetic analysis. *English Review: Journal of English Education*, *12*(2), 509–518. https://doi.org/10.25134/erjee.v12i2.9950

W., N. W. S. C. (2021). Speaking anxiety in the second language classroom: Learners' perspective. *SSRN Electronic Journal*, 1–10. https://doi.org/10.2139/ssrn.3808930

Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Pearson.

Nobutoshi, M. (2023). Metacognition and reflective teaching: A synergistic approach to fostering critical thinking skills. *Research and Advances in Education*, *2*(9), 1–14. https://doi.org/10.56397/rae.2023.09.01

Normawati, A., Nugrahaeni, D. A., Manggolo, N. S. K. H., & Susanto, A. I. F. (2023). EFL learners' difficulties in speaking English. *English Language and Education Spectrum*, *1*(1), 1–9. https://doi.org/10.53416/electrum.v1i1.116

Oktari, N. F. (2024). *Investigating EFL students' strategies to overcome barriers in improving speaking skills through English club* [Skripsi, Universitas Islam Negeri Ar-Raniry Banda Aceh]. Repositori Ar-Raniry. https://repository.ar-raniry.ac.id/id/eprint/34541/

Palah, S., Wasliman, I., Sauri, S., & Gaffar, M. A. (2022). Principal strategic management in improving the quality of education. *International Journal of Educational Research & Social Sciences*, *3*(5), 2041–2051. https://doi.org/10.51601/ijersc.v3i5.497

Parhadjanovna, S. S. (2023). Teaching foreign languages in the context of sustainable development: Best practices, problems and opportunities. *International Scientific and Current Research Conferences*, 482–485.

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE Publications.

Purnamaningwulan, R. A., & Purwanto, A. R. (2025). Differentiated instruction strategies to enhance EFL learning in a mixed-proficiency seventh-grade classroom. *Journal of English Language Studies*, *7*(1), 1–22. https://doi.org/10.31849/elsya.v7i1.22076

Qassrawi, R. M., ElMashharawi, A., Itmeizeh, M., & Tamimi, M. H. M. (2024). AI-powered applications for improving EFL students' speaking proficiency in higher education. *Forum for Linguistic Studies*, *6*(5), 535–549. https://doi.org/10.30564/fls.v6i5.6966

Ramadhanti, D., & Yanda, D. P. (2021). Students' metacognitive awareness and its impact on writing skill. *International Journal of Language Education*, *5*(3), 193–206. https://doi.org/10.26858/ijole.v5i3.18978

Robinson, J. (2024). Likert scale. Dalam *Encyclopedia of quality of life and well-being research*. Springer. https://doi.org/10.1007/978-3-031-17299-1_1654

Rohmah, F., & Wijaya, M. K. (2025). A case study of students' speaking anxiety in learning English in the classroom. *SELL (Scope of English Language Teaching, Linguistics, and Literature) Journal*, *10*(1), 1–20. https://doi.org/10.31597/sl.v10i1.1207

Saed, H. A., Haider, A. S., Al-Salman, S., & Hussein, R. F. (2021). The use of YouTube in developing the speaking skills of Jordanian EFL university students. *Heliyon*, *7*(7), Article e07543. https://doi.org/10.1016/j.heliyon.2021.e07543

Salehi, H., Keshtiarast, B., & Rahimi, M. A. (2023). Relationship between Iranian intermediate EFL learners' interpersonal and intrapersonal intelligences and their speaking skill. *Journal of Practical Studies in Education*, *5*(1), 7–16. https://doi.org/10.46809/jpse.v5i1.79

Saptiany, S. G., & Prabowo, B. A. (2024). Speaking proficiency among English specific purpose students: A literature review on assessment and pedagogical approaches. *LITERACY: International Scientific Journals of Social, Education, Humanities*, *3*(1), 36–48. https://doi.org/10.56910/literacy.v3i1.1392

Solikhah, N. A. (2023). Impact of technology in teaching and learning English as foreign language: TESOL context. *Journal Corner of Education, Linguistics, and Literature*, *3*(1), 83–91. https://doi.org/10.54012/jcell.v3i1.194

Su, Y., Liang, J.-C., Zheng, C., & Zheng, C. (2023). Co-regulation strategies and their associations with writing self-efficacy in a computer-mediated collaborative writing setting. *Journal of Second Language Writing*, *59*, Article 100972. https://doi.org/10.1016/j.jslw.2023.100972

Sugiyono. (2021). *Metode penelitian kualitatif dan*

metode penelitian kuantitatif (A. Rachman & H. Purnomo, Eds.; edisi ke-2). CV Saba Jaya Publisher.

Sulistyowati, T. (2023). Factors causing English speaking anxiety (ESA) in EFL context: A case study among post-graduate students in Indonesia. *Applied Research on English Education (AREE)*, *1*(1), 37–47. https://doi.org/10.26714/aree.1.1.2023.37-47

Suryana, I., Hidantikarnillah, V., & Oktavianti, I. N. (2020). Enhancing students' English speaking skills through web-based teaching. *Eduvelop*, *3*(2), 90–104. https://doi.org/10.31605/eduvelop.v3i2.601

Susanto, D., Risnita, R., & Jailani, M. S. (2023). Teknik pemeriksaan keabsahan data dalam penelitian ilmiah. *Jurnal QOSIM Jurnal Pendidikan Sosial & Humaniora*, *1*(1), 53–61. https://doi.org/10.61104/jq.v1i1.60

Tahang, H., Sarmin, S., Yuliana, Y., & Taslim, T. (2019). Language learning strategies employed by successful students in developing English-speaking performance. *Qalam: Jurnal Ilmu Kependidikan*, *7*(1), 20–30. https://doi.org/10.33506/jq.v7i1.354

Tans, F., Fernandez, S., & Cendana, U. N. (2025). An analysis of English speaking anxiety of English department students of Tribuana. *Academic Journal of Educational Sciences*, *9*(1), 26–43.

Thi, P., & Que, H. (2025). Enhancing students' English oral communication skills through role-play activities: A case study at Hanoi University of Natural Resources and Environment. *Journal of Knowledge Learning and Science Technology*, *4*(3), 119–127.

Tisdell, E. J., Merriam, S. B., & Stuckey, H. L. (2025). *Qualitative research: A guide to design and implementation* (5th ed.). John Wiley & Sons.

Umami, R., Madlazim, M., & Indana, S. (2023). Profile of student's critical thinking skills and the effectiveness of problem-based learning models assisted by digital worksheet in science learning on motion and force materials. *IJORER: International Journal of Recent Educational Research*, *4*(4), 481–496. https://doi.org/10.46245/ijorer.v4i4.291

Wahyuni, S., & Stracke, E. (2015). Strategi pembelajaran keterampilan berbicara dalam bahasa Inggris sebagai bahasa asing pada mahasiswa Indonesia. *METAFORA*, *2*(1), 19–37. https://doi.org/10.30595/mtf.v2i1.291

Wijaya, K. F. (2025). The benefits of activating self-regulation behavior in worldwide EFL speaking-focused learning contexts. *Journal of English Language Teaching and Applied Linguistics*, *6*(1), 31–42. https://doi.org/10.21460/saga.2025.61.205

Zarazaga-Peláez, J., Barrachina, V., Gutiérrez-Logroño, A., Villanueva-Guerrero, O., Roso-Moliner, A., & Mainer-Pardos, E. (2024). Impact of extracurricular physical activity on achievement of the sustainable development goals and academic performance: Mediating cognitive, psychological, and social factors. *Sustainability*, *16*(16), Article 7238. https://doi.org/10.3390/su16167238