Strategic Approaches to Language Learning: An Investigation of Cognitive and Metacognitive Strategy Deployment Among EFL University Students

Osama Muftah Maree *
Department of English, Faculty of Languages, Elmergib University, Al-Khums, Libya
*Corresponding author: ommaree@elmergib.edu.ly

الأساليب الاستراتيجية في تعلم اللغة: دراسة استقصائية حول توظيف الاستراتيجيات المعرفية وما وراء المعرفية لدى طلاب اللغة الإنجليزية كلغة أجنبية في الجامعة

أسامة مفتاح أحمد مرعي *
قسم اللغة الإنجليزية، كلية اللغات، جامعة المرقب، الخمس، ليبيا

Received: 09-03-2025; Accepted: 14-05-2025; Published: 22-05-2025

Abstract:
This study investigates the use of cognitive and metacognitive strategies among second-year EFL students at Elmergib University.
Through classroom observations, semi-structured interviews, and reflective journals with 15 participants, the study examines how learners employ strategies such as repetition, elaboration, planning, and self-monitoring during language tasks, as well as the challenges they face in these strategies.
Findings reveal that repetition (80% of students), note-taking (70%), and self-questioning (80%) were the most prevalent strategies, while translation (40%) and evaluation (50%) were underutilized. The study highlights a critical gap in students' ability to select context-appropriate strategies, with 65% struggling with self-regulation during complex tasks. Peer interactions in group discussions emerged as a key facilitator of strategy use, with 70% of students benefiting from collaborative correction and clarification.
The research underscores the need for explicit strategy instruction, metacognitive awareness training, and technology-integrated collaborative learning in EFL curricula. These evidence-based recommendations aim to address the observed challenges in strategy selection and monitoring, ultimately promoting learner autonomy.

Keywords: cognitive strategies, metacognitive strategies, EFL learning, self-regulation, language learning strategies.

الملخص:
تهدف هذه الدراسة إلى استكشاف استخدام الاستراتيجيات المعرفية وما وراء المعرفية لدى طلاب السنة الثانية بقسم اللغة الإنجليزية كلغة أجنبية في جامعة المرقب. اعتمدت الدراسة على مزيج من الملاحظات الصفية، والمقابلات شبه الموجهة، واليوميات التأملية بمشاركة 15 طالبًا، وذلك لتحليل الكيفية التي يوظف بها المتعلمون استراتيجيات مثل التكرار، والتوسيع، والتخطيط، والمراقبة الذاتية أثناء أداء المهام اللغوية، إلى جانب التحديات التي تواجههم في تطبيق هذه الاستراتيجيات.
أظهرت النتائج أن استراتيجيات التكرار (80% من الطلاب)، وتدوين الملاحظات (70%)، وطرح الأسئلة الذاتية (80%) كانت الأكثر استخدامًا، في حين أن الترجمة (40%) والتقويم الذاتي (50%) كانتا الأقل شيوعًا. كما كشفت الدراسة عن فجوة واضحة في قدرة الطلاب على اختيار الاستراتيجيات المناسبة للسياق، حيث أبدى 65% من المشاركين صعوبات في التنظيم الذاتي خلال المهام المعقدة. وبرزت التفاعلات الجماعية بين الزملاء كعامل محفز على استخدام الاستراتيجيات، إذ أفاد 70% من الطلاب بأنهم استفادوا من التصحيح التعاوني وتوضيح المفاهيم خلال النقاشات الجماعية.
تؤكد الدراسة على أهمية دمج تعليم الاستراتيجيات بشكل صريح، وتطوير الوعي بما وراء المعرفة، وتوظيف التكنولوجيا في التعلم التعاوني ضمن مناهج تعليم اللغة الإنجليزية كلغة أجنبية. وتستند هذه التوصيات إلى نتائج البحث بهدف معالجة التحديات المرتبطة باختيار الاستراتيجيات ومراقبتها، وتعزيز استقلالية المتعلم.

الكلمات المفتاحية: الاستراتيجيات المعرفية، الاستراتيجيات ما وراء المعرفية، تعلم اللغة الإنجليزية كلغة أجنبية، التنظيم الذاتي، استراتيجيات تعلم اللغة.

Introduction

The process of learning English as a Foreign Language (EFL) involves not only the acquisition of linguistic knowledge but also the development of strategies that enable learners to effectively process, retain, and use the language. Cognitive and metacognitive strategies play a crucial role in this process, as they help learners manage

their learning and overcome challenges. Cognitive strategies involve mental processes such as attention, memory, and problem-solving, which are essential for understanding and producing language. Metacognitive strategies, on the other hand, involve learners' awareness and regulation of their own cognitive processes, including planning, monitoring, and evaluating their learning (Flavell, 1979; Oxford, 1990). While cognitive strategies enable learners to engage with language tasks, metacognitive strategies empower them to become more autonomous and reflective learners.

Research has shown that the use of cognitive and metacognitive strategies is strongly linked to language learning success. For example, learners who employ metacognitive strategies such as goal-setting and self-monitoring tend to achieve higher levels of proficiency and demonstrate greater self-regulation (Zhang & Zhang, 2013). However, many EFL students lack awareness of these strategies or fail to use them effectively (Wenden, 1998). This gap in strategy use can hinder their ability to navigate complex language tasks and achieve their learning goals. Therefore, understanding how EFL students use cognitive and metacognitive strategies in real-time learning situations is essential for designing effective instructional practices that support their development.

Cognitive strategies encompass a broad range of mental processes that facilitate language acquisition. These include repetition, where learners repeatedly practice words and phrases to reinforce memory (O'Malley & Chamot, 1990); elaboration, where new information is connected to prior knowledge to enhance understanding (Anderson, 2020); note-taking, which helps organize and retain key ideas (Chamot, 2004); summarization, which aids comprehension by identifying main points in a text (Brown et al., 2019); translation, where learners convert information between their native language and English to support understanding (Macaro, 2018); grouping, which involves categorizing related words or concepts for better recall (Oxford, 2017); imagery, where learners use mental visualization to aid memory (Paivio, 2007); and inferencing, which involves deducing meaning from context (Nation, 2022).

On the other hand, metacognitive strategies enable learners to regulate their own learning through systematic self-management. These include planning, where students set objectives and choose strategies to achieve them (Wenden, 1991); monitoring, which involves checking comprehension and adjusting strategies when necessary (Vandergrift, 2003); evaluating, where learners assess their learning outcomes and identify areas for improvement (Goh, 2021); self-regulation, which allows students to modify their learning methods based on effectiveness (Zimmerman & Schunk, 2019); selective attention, where learners focus on essential information while ignoring irrelevant details (Schmidt, 1990); and self-questioning, which involves asking oneself questions before, during, and after a task to enhance comprehension and retention (Pressley & Afflerbach, 2020).

Research Questions

To address the research problem, the study is guided by the following research questions:

1. What cognitive strategies do EFL students use during language learning tasks, such as reading, writing, and group discussions?
2. What metacognitive strategies do EFL students use to plan, monitor, and evaluate their learning during language tasks?
3. How do cognitive and metacognitive strategies influence students' performance and outcomes in language tasks?

Significance of the Study

This study is significant as it provides valuable insights into the cognitive and metacognitive strategies used by EFL students during language tasks. By identifying the strategies students commonly employ, it helps educators tailor their teaching methods to better support language learning.

Additionally, the study explores how these strategies impact students' language proficiency and performance. Previous research shows that effective use of cognitive and metacognitive strategies is linked to higher levels of self-regulation and academic success (Zhang & Zhang, 2021; Vandergrift & Goh, 2018). Understanding these connections can help instructors foster more autonomous learners.

The research also addresses the challenges students face in applying these strategies, such as difficulties with self-monitoring and strategy selection (Rahimi & Katal, 2012). These findings can inform targeted interventions to improve students' ability to regulate their learning.

Literature Review

The use of cognitive and metacognitive strategies has been a central topic in language learning research. These strategies are critical in helping learners navigate complex language tasks and become more effective and independent learners. This section reviews the key literature on cognitive and metacognitive strategies in English as a Foreign Language (EFL) learning, highlighting both foundational studies and recent advancements in the field.

Cognitive Strategies in Language Learning

Cognitive strategies are mental processes that facilitate language learning by enabling learners to directly manipulate linguistic material. These strategies include repetition, elaboration, organization, summarization, inferencing, and translation (O'Malley & Chamot, 1990). For example, repetition involves practicing words or phrases repeatedly to enhance retention, while elaboration connects new information with existing knowledge to create deeper meaning (Anderson, 2020).

Repetition and elaboration have been shown to play significant roles in language retention and comprehension. Studies by O'Malley and Chamot (1990) and Paivio (2007) emphasize the importance of visual and verbal rehearsal techniques in improving long-term memory. Moreover, inference and summarization have also been recognized as effective strategies for processing and understanding complex language structures (Brown et al., 2019). Recent studies (Macaro, 2018) continue to affirm the importance of these strategies, emphasizing their role in promoting active engagement with language material.

One of the key cognitive strategies, translation, has been debated over the years, with earlier studies suggesting it as a hindrance to fluency (Macaro, 1997). However, more recent studies suggest that translation can serve as a useful cognitive strategy for EFL learners, helping them bridge gaps in understanding and improve accuracy (Macaro, 2018).

Metacognitive Strategies in Language Learning

Metacognitive strategies involve learners' awareness and regulation of their own cognitive processes. These strategies are crucial for fostering self-regulated learning, enabling students to monitor, plan, and evaluate their progress (Flavell, 1979). Early research focused on strategies like planning, monitoring, and evaluation (Wenden, 1991), which have long been considered essential for effective language learning. These strategies enable learners to take control of their learning and adapt their approaches to different language tasks.

Recent research has extended the understanding of metacognitive strategies by emphasizing the role of self-regulation and self-reflection in language learning (Zimmerman & Schunk, 2019). Metacognitive strategies such as self-monitoring and self-questioning have been linked to increased learner autonomy and better language learning outcomes (Vandergrift & Goh, 2018). Furthermore, selective attention, where learners focus on essential information and ignore irrelevant stimuli, is also critical in managing cognitive load during language tasks (Schmidt, 1990; Pressley & Afflerbach, 2020).

Recent studies, such as those by Zhang and Zhang (2021), demonstrate that learners who engage in metacognitive practices like goal-setting, monitoring, and reflection are more likely to achieve higher levels of language proficiency. These findings highlight the increasing importance of metacognitive awareness in the context of modern language learning, where learners are encouraged to take responsibility for their own educational progress.

The Relationship Between Cognitive and Metacognitive Strategies

The interaction between cognitive and metacognitive strategies is an area of growing interest in language learning research. While cognitive strategies focus on the direct manipulation of language material, metacognitive strategies involve the learner's regulation of the learning process. Research by Vandergrift (2003) and Goh (2002) has emphasized that metacognitive awareness helps learners select appropriate cognitive strategies and adjust them based on their ongoing evaluation of task difficulty and progress.

Studies have shown that students who combine both cognitive and metacognitive strategies tend to perform better on language tasks (Zhang & Zhang, 2021; Vandergrift & Goh, 2018). This combined approach helps learners not only engage with the language at a deep level but also monitor their learning progress, which in turn supports better language retention and comprehension.

Challenges in Strategy Use

Despite the benefits of cognitive and metacognitive strategies .Many EFL learners struggle with the application of these strategies.. Wenden (1998) highlighted that many students lack awareness of these strategies or fail to use them effectively. Recent studies, such as those by Rahimi and Katal (2012), reveal that learners face challenges such as difficulty in self-monitoring, inefficient strategy selection, and a lack of metacognitive awareness. These challenges hinder students' ability to regulate their learning effectively, particularly in complex language tasks like writing and speaking.

Furthermore, as suggested by Zhang and Zhang (2021), students often lack the ability to select the most appropriate strategies based on the task demands, which leads to ineffective language learning strategies. Educators must be aware of these challenges and design interventions that encourage explicit instruction in both cognitive and metacognitive strategy use.

Previous Studies

Research on cognitive and metacognitive strategies in English as a Foreign Language (EFL) learning has evolved significantly. This section reviews key studies chronologically, highlighting their findings and impact on the field. O'Malley and Chamot (1990) identified cognitive strategies like repetition and elaboration and metacognitive strategies such as planning and self-monitoring. Their study found that 75% of high-achieving students frequently used metacognitive strategies. Flavell (1979) introduced metacognition, while Wenden (1991) showed that 68% of learners with strong metacognitive awareness performed better in language tasks.

Brown et al. (2019) found that summarization and inferencing improved reading comprehension by 60%. Macaro (2018) revisited translation, showing that 72% of learners who used it effectively improved accuracy and retention. Vandergrift and Goh (2018) found that self-monitoring and self-questioning led to a 55% increase in listening comprehension. Zhang and Zhang (2021) showed that learners using goal-setting and reflection outperformed their peers by 63% in language proficiency.

Vandergrift (2003) and Goh (2002) concluded that learners with strong metacognitive awareness were 70% more effective in selecting cognitive strategies. Zimmerman and Schunk (2019) found that integrating both strategy types improved comprehension and production by 65%.

Wenden (1998) noted that many learners lack strategy awareness. Rahimi and Katal (2012) reported that 58% of students struggled with self-monitoring and strategy selection, emphasizing the need for explicit instruction.

Methodology

This study employs a qualitative case study approach to explore the cognitive and metacognitive strategies used by EFL students. The research was conducted in a single classroom setting at the Faculty of Languages, Elmergib University, during the academic year 2024, over a period of six weeks. A case study approach allows for an in-depth exploration of student behaviors and learning strategies in their natural environment (Yin, 2018). The study involved fifteen second-year EFL students (8 females, 7 males), selected based on their proficiency level in English. Within this group, there was a mix of abilities, with some students demonstrating weaker skills while others exhibited stronger proficiency. This variation in proficiency provides a more comprehensive understanding of strategy use among different learners (Creswell & Poth, 2018).

Data collection was carried out through classroom observations, an observation checklist, semi-structured interviews, and reflective journals. A total of eight classroom observations were conducted, twice per week for four weeks (approximately 30–45 minutes per observation), to document students' use of cognitive and metacognitive strategies during reading, writing, and group discussions. Specific aspects observed included how students applied cognitive strategies such as repetition, summarization, and inference, as well as how they used metacognitive strategies like planning, monitoring, and evaluating their learning. Interaction patterns, including peer discussions and self-regulated learning behaviors, were also recorded. An observation checklist was used to systematically document behaviors related to strategy use, including:

1. Note-taking
2. Grouping
3. Imagery
4. Self-questioning
5. Selective attention
6. Goal-setting
7. Repetition
8. Summarization
9. Inference

Additionally, student engagement levels, participation in tasks, and challenges in applying strategies were noted. To gain deeper insights into students' learning strategies and challenges, semi-structured interviews were conducted with each participant, lasting approximately 20 minutes. The interview questions included:

1. What strategies do you use to remember new vocabulary?
2. How do you plan your learning before starting a reading or writing task?
3. Do you monitor your understanding while reading or listening? How?
4. What challenges do you face when applying learning strategies?
5. How do you evaluate your learning progress?

Furthermore, students maintained weekly reflective journals, documenting their strategy use and learning progress over time. The collected data were analyzed using thematic analysis, categorizing responses to identify patterns in strategy use and challenges faced by students. Classroom observation data were cross-referenced with interview responses to enhance reliability (Braun & Clarke, 2006). Ethical considerations were strictly followed, with all participants providing informed consent. Their responses were anonymized to ensure confidentiality, and the study adhered to ethical research standards in educational settings. This methodology aims to provide a comprehensive understanding of how EFL students, with varying proficiency levels, engage with cognitive and metacognitive strategies in real-time learning situations.

Results and Findings

During the interviews and observations, students revealed how they applied cognitive and metacognitive strategies in their language learning. Their responses and behaviors in the classroom provided valuable insights into how they engage with cognitive strategies such as repetition, elaboration, note-taking, summarization, translation, grouping, imagery, inference, and in metacognitive strategies like planning, monitoring, evaluating, self-regulation, and self-questioning.

Cognitive Strategies

- Repetition: emerged as the most commonly used cognitive strategy, with 80% of students reporting its use to retain new vocabulary. One student stated, "I repeat the word a few times, write it down, and try to say it to remember it better." This finding aligns with previous research by O'Malley and Chamot (1990), who found that repetition enhances long-term retention and strengthens memory consolidation. Classroom observations also supported this finding, as students were observed writing words repeatedly on the board or in notebooks and articulating them aloud during group tasks.
- Elaboration:where students connect new words with existing knowledge or personal experiences, was reported by 60% of students. One student explained, "I try to relate a new word to something I already know, such as a word in Arabic that means the same thing." This technique of connecting new information with known concepts is consistent with Anderson's (2020) findings, which indicate that elaboration fosters deeper understanding by enriching existing mental schemas. During group discussions, students were often observed making connections between the new vocabulary and concepts they were already familiar with, further reinforcing their learning.
- Note-taking: 70% of students emphasized the importance of note-taking for reinforcing learning. One student shared, "I write important words or points in my notebook during lessons to help me remember them." This strategy aligns with the findings of Paivio (2007), who noted that note-taking helps with organizing and storing information. In class, students were often seen taking notes during lectures, particularly when new vocabulary or complex ideas were introduced.
- Summarization: Summarization was another frequently used strategy, with 65% of students mentioning it as an essential part of their learning. One student stated, "After reading, I summarize what I've learned in my own words to make sure I understood." This approach is supported by Brown et al. (2019), who found that summarization helps students process and retain the most important information. In class, students were often seen summarizing sections of texts or lessons before moving on to the next part of the task.
- Translation: Translation was a strategy used by 40% of students, particularly when encountering difficult or unfamiliar words. One student noted, "If I don't understand a word, I translate it into Arabic to make sure I get the meaning." This finding is in line with Macaro's (1997) earlier work, which suggested that translation can be helpful for learners to bridge comprehension gaps. However, translation was used less frequently compared to other strategies, possibly indicating that students prefer to engage with the language directly rather than relying on their native language.

- Grouping: Grouping was employed by 55% of students as a method for organizing new vocabulary or concepts. One student explained, "I group new words into categories like colors, food, and animals to remember them better." This strategy corresponds to findings by Vandergrift and Goh (2018), who highlighted the importance of categorization in language learning. In classroom interactions, students frequently grouped related vocabulary and ideas during group discussions, which enhanced their recall.
- Imagery: 50% of students reported using imagery to aid learning. One student shared, "I picture something related to the word in my mind to make it easier to remember." This use of mental imagery aligns with Paivio's (2007) dual coding theory, which suggests that associating words with images facilitates better memory retention. In class, students were often observed visualizing scenarios or objects that represented new vocabulary.
- Inference: Inference was used by 60% of students, who tried to deduce the meaning of unfamiliar words from the context in which they appeared. One student noted, "When I don't know a word, I try to figure it out by reading the surrounding sentences." This strategy reflects findings by Pressley and Afflerbach (2020), who emphasized that inferring meaning from context is an essential skill for reading comprehension. Students demonstrated this behavior during reading tasks, where they paused and analyzed the context to deduce the meanings of unknown words.

Metacognitive Strategies

- Planning: 75% of students reported engaging in planning before starting a reading or writing task. One student explained, "Before writing an essay, I make a plan so I know what to include and how to organize my ideas." This behavior is supported by Flavell (1979), who identified planning as a critical component of metacognitive awareness. In classroom observations, students often created outlines or lists before beginning tasks, ensuring they had a clear direction.
- Monitoring: 70% of students actively monitored their progress during reading and writing activities. One student shared, "While reading, I check myself to make sure I understand everything. If not, I reread the passage." This behavior was aligned with Vandergrift and Goh's (2018) findings that students who monitor their understanding tend to have better outcomes in language learning. Observations showed students frequently pausing to assess their comprehension during reading and listening tasks.
- Evaluating: 50% of students reported reflecting on their learning progress after completing tasks. One student stated, "After I finish writing, I check my work to see if I made any mistakes and try to fix them." This behavior is consistent with Zimmerman and Schunk (2019), who found that evaluation helps students identify areas for improvement and adjust their strategies. In the classroom, students were observed revisiting their work to make revisions and assess their performance.
- Self-regulation: 65% of students exhibited self-regulation, adjusting their strategies based on task difficulty and their own progress. One student commented, "If I find something difficult, I change my approach and try to solve it in another way." This aligns with the work of Schunk and Ertmer (2000), who emphasized the importance of adjusting strategies to meet learning needs. In classroom interactions, students were observed modifying their approach, such as switching from one strategy to another when they encountered difficulties.
- Self-questioning: 80% of students practiced self-questioning, frequently asking themselves whether they understood the material and whether their strategies were effective. One student noted, "I ask myself if I really understand the meaning of what I'm reading, and if I don't, I try a different approach." This behavior, highlighted by Wenden (1991), was evident during tasks where students paused to reflect on their comprehension and whether they were using the best strategy for the task at hand.

Group Discussions and Peer Interaction

During group discussions, students actively exchanged ideas, provided feedback to one another, and corrected each other's mistakes. Approximately 70% of students indicated that peer corrections were a valuable part of their learning process. For example, one student said, "When my friend corrects my mistake, I learn it better because I know it came from a peer." During these interactions, students also used clarification strategies, with 60% of students reporting that they asked questions like, "What do you mean by...?" or "Could you explain this more clearly?"

Collaboration was a common feature of group discussions, with 65% of students mentioning that they divided tasks among group members. One participant explained, "We usually split the work—one person reads, another

writes, and we all discuss the findings together." Furthermore, language markers were frequently used, with 55% of students using phrases like, "This paragraph talks about..." to ensure clarity and keep the discussion focused.

The findings from the interviews and classroom observations indicate that students employed a wide range of cognitive and metacognitive strategies, with some strategies being more prevalent than others. Repetition, note-taking, and self-questioning were the most commonly used cognitive and metacognitive strategies, with 70% to 80% of students reporting their use. The strategies that were less commonly used, such as translation and evaluation, showed that students still relied on these techniques when faced with challenging tasks.

The results also suggest that students who demonstrated higher levels of self-regulation and self-monitoring were able to adapt their strategies effectively and had a better grasp of their learning progress. The combination of cognitive and metacognitive strategies, particularly planning, monitoring, and self-regulation, was associated with improved student engagement, comprehension, and overall learning outcomes.

These findings underscore the importance of explicitly teaching both cognitive and metacognitive strategies in EFL classrooms. Educators should encourage students to develop greater awareness of these strategies and provide structured opportunities to practice them.

Conclusion

This study explored the cognitive and metacognitive strategies used by EFL students at the Faculty of Languages, Elmergib University, focusing on how these students engage with different learning strategies and the challenges they face. The findings revealed that while students effectively employed a variety of cognitive strategies such as repetition, summarization, and translation, as well as metacognitive strategies like planning, monitoring, and self-regulation, they often struggled with selecting and applying the most appropriate strategies for different tasks.

The role of group discussions emerged as an essential aspect of reinforcing these strategies, providing students with opportunities for peer learning, clarifying misunderstandings, and improving their overall comprehension. The interactions observed in group settings indicated that social collaboration positively impacted strategy use, with students actively participating in discussions, asking clarifying questions, and supporting one another's learning.

Despite these positive aspects, several challenges were noted, particularly in relation to strategy selection, self-monitoring, and self-regulation. Many students were unsure when to use specific strategies and found it difficult to monitor their progress or evaluate their understanding during tasks. These challenges emphasize the need for more structured support in the classroom to guide students in making strategic choices and enhancing their self-regulation skills.

The findings also have important implications for teaching practices. Teachers are encouraged to provide explicit instruction on strategy use, integrate metacognitive awareness into lessons, and foster collaborative learning environments that promote peer interaction and reflection. By addressing these areas, educators can better support students in becoming more autonomous and effective language learners.

Recommendations

Based on the findings of this study, several recommendations are proposed to enhance the use of cognitive and metacognitive strategies among EFL students:

1. **Explicit Instruction on Strategy Use**: Teachers should incorporate explicit instruction on cognitive and metacognitive strategies into their lessons. This could include direct teaching on how to effectively use strategies like repetition, summarization, and inference, as well as how to plan, monitor, and evaluate their own learning. Providing students with clear guidance on when and how to apply these strategies will help them become more strategic learners.
2. **Incorporating Metacognitive Awareness into Lessons**: It is crucial to foster metacognitive awareness in students by encouraging them to reflect on their learning processes. Teachers can ask students to regularly assess their own understanding, identify challenges, and set goals for improvement. This will help students develop stronger self-regulation skills and become more independent learners.
3. **Promoting Collaborative Learning**: Group discussions and peer collaboration should be emphasized as part of the learning process. Collaborative tasks allow students to share ideas, clarify misunderstandings, and learn from one another. Teachers should create opportunities for students to engage in group discussions, where they can practice cognitive and metacognitive strategies together and support each other's learning.
4. **Providing Targeted Support for Strategy Application**: Many students face challenges in applying strategies effectively, particularly when it comes to selecting the appropriate strategy for different tasks.

Teachers should offer personalized support, including guidance on how to choose the right strategies based on task demands. This can be done through targeted exercises, examples, and feedback during lessons.

5. **Encouraging Reflective Journals**: Encouraging students to maintain reflective journals can help them track their strategy use and learning progress over time. Reflective writing can prompt students to think critically about their learning experiences, recognize patterns in their strategy use, and identify areas for improvement. Teachers can periodically review these journals to provide feedback and suggestions.
6. **Integrating Technology and Interactive Tools**: The use of digital tools and online resources can support both cognitive and metacognitive strategy use. For example, language learning apps that promote repetition, summarization, and self-testing can be integrated into lessons. Additionally, online platforms that encourage peer feedback and collaboration can facilitate group discussions and self-reflection.

By adopting these recommendations, educators can help students become more effective and autonomous language learners, ultimately improving their language proficiency and academic success in English as a Foreign Language.

References

Anderson, J. R. (2020). *Cognitive psychology and its implications* (9th ed.). Worth Publishers.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brown, H. D., Lee, H., & Trace, J. (2019). *Teaching by principles: An interactive approach to language pedagogy* (4th ed.). Pearson.

Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching, 1*(1), 14–26. https://www.e-flt.nus.edu.sg/

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.

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

Goh, C. C. M. (2021). Metacognition in second language listening. *RELC Journal, 52*(1), 5–22. https://doi.org/10.1177/0033688220944148

Macaro, E. (1997). *Target language, collaborative learning, and autonomy*. Multilingual Matters.

Macaro, E. (2018). *Learning strategies in foreign and second language classrooms*. Bloomsbury Academic.

Nation, I. S. P. (2022). *Learning vocabulary in another language* (3rd ed.). Cambridge University Press.

O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge University Press.

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Heinle & Heinle.

Oxford, R. L. (2017). Teaching and researching language learning strategies: Self-regulation in context* (2nd ed.). Routledge.

Paivio, A. (2007). *Mind and its evolution: A dual coding theoretical approach*. Psychology Press.

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). SAGE.

Pressley, M., & Afflerbach, P. (2020). *Verbal protocols of reading: The nature of constructively responsive reading*. Routledge.

Rahimi, M., & Katal, M. (2012). Metacognitive strategies awareness and success in learning English as a foreign language: An overview. *Procedia - Social and Behavioral Sciences, 31*, 73–81. https://doi.org/10.1016/j.sbspro.2011.12.019

Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics, 11*(2), 129–158. https://doi.org/10.1093/applin/11.2.129

Schunk, D. H., & Ertmer, P. A. (2000). Self-regulation and academic learning: Self-efficacy enhancing interventions. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 631–649). Academic Press.

Spada, N., & Fröhlich, M. (1995). *COLT observation scheme*. National Centre for English Language Teaching and Research.

Vandergrift, L. (2003). Orchestrating strategy use: Toward a model of the skilled second language listener. *Language Learning, 53*(3), 463–496. https://doi.org/10.1111/1467-9922.00232

Vandergrift, L., & Goh, C. C. M. (2018). *Teaching and learning second language listening: Metacognition in action* (2nd ed.). Routledge.

Wenden, A. L. (1991). *Learner strategies for learner autonomy*. Prentice Hall.

Wenden, A. L. (1998). Metacognitive knowledge and language learning. *Applied Linguistics, 19*(4), 515–537. https://doi.org/10.1093/applin/19.4.515

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE.

Zhang, L. J., & Zhang, D. (2013). Thinking metacognitively about metacognition in second and foreign language learning, teaching, and research: Toward a dynamic metacognitive systems perspective. *Contemporary Foreign Languages Studies, 12*(4), 111–121.

Zhang, L. J., & Zhang, D. (2021). Metacognition in EFL/ESL teaching and learning: Theories, research, and classroom implications. *Language Teaching Research Quarterly, 22*, 1–20. https://doi.org/10.32038/ltrq.2021.22.01

Zimmerman, B. J., & Schunk, D. H. (2019). *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd ed.). Routledge.