
Investigating the Use of Metacognitive Strategy in Vocabulary Retention Among Indonesian EFL Learners

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Abstract

This study aims to explore Indonesian EFL learners' perceptions of the use of metacognitive strategies—specifically planning, monitoring, and evaluating—in vocabulary retention. Using a qualitative approach, data were collected from 31 tenth-grade students at a public high school in Tasikmalaya via a structured questionnaire and five purposive semi-structured interviews. Thematic analysis showed that monitoring strategies (e.g., context guessing, self-testing, repetition) were most frequently used, while planning tended to be spontaneous or tool-driven (e.g., dictionaries/apps) and explicit goal-setting was uncommon. Evaluation was often surface-level and rarely resulted in systematic strategy revision. Although most students perceived these strategies as helpful and reported some improvement in classroom performance, only a minority consistently adapted their methods. The study recommends short, classroom-friendly interventions—explicit goal-setting routines, embedded micro self-tests, and a simple evaluative checklist—to promote deeper metacognitive regulation and better long-term vocabulary retention.

Keywords: EFL Learners, evaluating, metacognitive strategies, monitoring, planning, vocabulary retention

INTRODUCTION

Vocabulary learning lies at the heart of second language acquisition. A sufficiently large and well- retained lexicon enables learners to comprehend texts, express ideas accurately, and participate effectively in communication. However, in English as a Foreign Language (EFL) contexts such as Indonesia, vocabulary retention is one of the most persistent challenges. Learners often memorize word lists or rely heavily on translation-based activities that produce short-term recall rather than long-term retention. Furthermore, the limited exposure to English outside the classroom and the test-oriented nature of formal education constrain students' opportunities to recycle and internalize new vocabulary (Nation, 2013; Schmitt, 2020). As a result, many Indonesian students report difficulties remembering words after only a few days or weeks, despite repeated instruction in school settings.

Recent discussions in applied linguistics have emphasized the need to move beyond teacher-centered vocabulary instruction toward a focus on learner autonomy and self-regulated learning (Oxford, 2017). Within this shift, metacognitive strategies (planning, monitoring, and evaluating) one's learning have gained attention as critical components of effective vocabulary retention (Anderson, 2002; Wenden, 1998). Metacognitive awareness allows learners to plan their study routines (e.g., goal setting, selecting materials), monitor progress during learning (e.g., self-testing, guessing meaning from context), and evaluate outcomes (e.g., reflecting on successful methods and revising ineffective ones). These strategies enable students to control their learning processes consciously and adaptively, which is essential for sustaining vocabulary growth over time.

Empirical studies in various EFL settings have confirmed that metacognitive training can significantly improve vocabulary retention (e.g., Zhang & Goh, 2006; Tavakoli & Koosha, 2016). However, many of these studies employ quantitative designs that focus on measurable gains after explicit instruction, providing limited insights into how learners actually perceive, select, and adapt strategies in authentic classroom conditions. Moreover, the majority of research in the Indonesian context still emphasizes general language learning strategies (e.g., memory, cognitive, affective strategies) rather than specifically addressing the metacognitive dimension in vocabulary learning (Astuti, 2016). Consequently, little is known about how Indonesian high school students themselves experience and interpret the use of metacognitive strategies in retaining vocabulary and what challenges they face in applying them effectively.

This gap is particularly relevant as the current Kurikulum Merdeka framework encourages student-centered, reflective, and independent learning. Yet, in many classrooms, the implementation of metacognitive principles remains minimal, and teachers rarely provide structured guidance on planning, monitoring, or evaluating vocabulary learning. Without explicit scaffolding, students may use digital tools such as online dictionaries or language-learning apps without clear goals or systematic follow-up, resulting in fragmented and superficial learning habits.

Therefore, this study explores Indonesian EFL learners' perceptions of metacognitive strategies specifically planning, monitoring, and evaluating in vocabulary retention. Using a qualitative approach, data were collected from thirty-one tenth-grade students at a public high

school in Tasikmalaya through a structured questionnaire and five purposive semi-structured interviews. The research question was formulated as follows:

1. How are metacognitive strategies used by Indonesian tenth-grade EFL learners to support vocabulary retention?

By centering learners' voices, this research aims to contribute a contextualized understanding of how metacognitive regulation operates in Indonesian EFL classrooms. The findings are expected to provide practical insights for teachers seeking to design classroom-friendly interventions such as goal-setting routines, embedded micro self-tests, and evaluative checklists that can cultivate deeper learner autonomy and long-term vocabulary retention.

METHOD

This study employed a qualitative descriptive design to explore EFL learners' perceptions of metacognitive strategies (planning, monitoring, and evaluating) in vocabulary retention. A qualitative approach was chosen to capture participants' subjective experiences, beliefs, and reflective insights that cannot be adequately measured through numerical data (Creswell & Poth, 2018). The design aligns with the study's interpretive orientation, emphasizing meaning-making and context rather than causal relationships or intervention outcomes.

Participants were 31 tenth-grade students (aged 15–16) from a public senior high school in Tasikmalaya, West Java, Indonesia. The school was chosen purposively because it represents a typical Indonesian EFL environment with a teacher-centered classroom culture and limited exposure to English outside school. Students had received at least four years of formal English instruction prior to the study. From these 31 students, five participants were selected for follow-up semi-structured interviews using purposive sampling to ensure representation of varying proficiency levels and engagement patterns reported in the questionnaire.

This study used two instruments: a structured questionnaire and semi-structured interviews. The questionnaire contained both closed and open-ended items adapted from previous studies on metacognitive strategies (O'Malley & Chamot, 1990; Oxford, 2017). It aimed to identify students' use and perceptions of planning, monitoring, and evaluating strategies in learning and retaining vocabulary. The questionnaire was distributed to 31 tenth-grade students to obtain an overview of their metacognitive strategy use.

After analyzing the questionnaire results, five students were purposively selected to participate in semi-structured interviews. The interviews explored their experiences and reflections on how they applied metacognitive strategies in vocabulary learning. Each session lasted about 20–30 minutes and was conducted in Indonesian to ensure clarity.

Data were analyzed using thematic analysis following Braun and Clarke's (2006) six-step framework: familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Responses from the questionnaire and interview transcripts were coded inductively to allow themes to emerge naturally from the data rather than imposing predetermined categories. To enhance interpretive accuracy, cross-validation was performed by comparing themes across instruments and by re-examining representative quotes for each major category (planning, monitoring, evaluating).

Following Lincoln and Guba's (1985) criteria, credibility was maintained through data triangulation and peer debriefing with a research supervisor. Transferability was supported by detailed contextual descriptions, dependability through systematic documentation of coding, and confirmability through reflective memoing and record keeping.

FINDINGS AND DISCUSSION

The analysis of questionnaires and interviews revealed that the majority of students employed all three metacognitive strategies (planning, monitoring, and evaluating) to some extent in their vocabulary learning. However, these strategies varied in frequency, depth, and intentionality. Among the three categories, monitoring strategies were the most dominant, followed by planning and evaluating strategies. This pattern indicates that students were more comfortable with strategies involving active engagement during learning rather than pre-learning preparation or post-learning reflection.

Students reported frequent use of monitoring strategies, such as guessing word meaning from context, repetition, and self-testing. Many of them mentioned that repeating vocabulary and testing themselves helped reinforce memory. These strategies reflect an awareness of progress and a desire to check comprehension. However, the monitoring practices tended to be surface-level, focusing mainly on remembering word forms rather than integrating words into broader contexts.

This finding aligns with previous studies suggesting that EFL learners often rely on repetition and context-based guessing as immediate forms of monitoring (Schmitt, 2020).

Nevertheless, without structured reflection, such practices may not guarantee long-term retention (Nation, 2013). The frequent use of these strategies shows that learners recognize their usefulness, yet they require explicit guidance to develop deeper, more systematic self-monitoring habits.

While students acknowledged the importance of planning their learning, most of their planning behaviors were spontaneous. Many reported depending on digital tools such as online dictionaries or mobile applications rather than setting clear learning objectives or study schedules. Only a few participants mentioned specific goal-setting, such as learning a certain number of new words per week.

This tendency reflects what Wenden (1998) terms “reactive planning,” where learners respond to immediate learning needs rather than proactively organizing their study. The limited use of explicit planning might result from the absence of classroom routines that encourage goal setting or reflection before starting vocabulary tasks. Hence, while learners demonstrate basic awareness of planning, their metacognitive control remains limited.

The least frequently applied strategy was evaluation. Most participants admitted that they seldom reviewed their learning outcomes or modified their methods. Evaluation, when it occurred, was typically limited to checking test scores or recalling how many words they remembered. Very few learners reflected on *why* certain strategies worked better than others or how to improve their approach.

This finding resonates with previous research (e.g., Zhang & Goh, 2006), which found that many EFL learners struggle with self-evaluation due to lack of guidance and reflection models. Without explicit instruction in evaluative practices such as using checklists or journals, students may not develop the ability to monitor progress effectively or make informed adjustments to their learning strategies.

Despite the uneven application of strategies, most students expressed positive perceptions toward metacognitive strategies. They believed that planning, monitoring, and evaluating could help them remember vocabulary better and improve classroom performance. However, only a minority reported using these strategies consistently. This gap between awareness and practice suggests that learners understand *what* strategies are beneficial but not *how* to apply them effectively and regularly.

This pattern supports Oxford’s (2017) argument that metacognitive awareness does not automatically translate into strategic behavior. It also highlights the need for teachers to integrate

metacognitive training into classroom activities, enabling students to move from passive awareness to active regulation of learning.

The findings suggest that teachers should incorporate explicit metacognitive instruction into vocabulary lessons. Simple, classroom-friendly interventions such as short goal-setting tasks, embedded self-tests, and reflective checklists can help students plan, monitor, and evaluate more effectively. Encouraging students to articulate their learning goals and reflect on outcomes could promote deeper self-regulation and improve vocabulary retention.

CONCLUSION

This study explored tenth-grade Indonesian EFL learners' perceptions and reported use of metacognitive strategies (planning, monitoring, and evaluating) for vocabulary retention. Thematic analysis of questionnaire data ($n = 31$) and five semi-structured interviews showed that learners most frequently employed monitoring strategies (e.g., contextual guessing, repetition, self-testing), while planning tended to be spontaneous and tool-driven (e.g., dictionaries, apps) rather than goal-oriented, and evaluative practices were relatively underdeveloped and often superficial. Although students generally perceived metacognitive strategies as beneficial, a notable awareness–action gap persisted: many knew *that* strategies were useful but few applied them consistently or reflectively.

Pedagogically, the findings point to low-cost, classroom-friendly measures that can convert informal habits into deliberate self-regulation. Short, routineized goal-setting prompts at the start of lessons, embedded micro self-tests (retrieval practice) after exposure, and a simple evaluative checklist for post-task reflection are practical interventions that teachers can adopt immediately. Teacher modelling and scaffolded practice are essential to help learners move from reactive tool use to proactive planning and from surface monitoring to meaningful evaluation. Such approaches align well with Indonesia's recent curricular emphasis on learner autonomy and reflective practice.

The study has several limitations. The sample was drawn from a single public high school and relied primarily on self-reports, limiting generalizability and raising potential social-desirability bias. Future research should test the recommended interventions using experimental or longitudinal designs, include classroom observations and teacher perspectives, and examine diverse educational contexts (e.g., urban vs. rural, different grade levels) to assess scalability and long-term effects on vocabulary retention. In sum, fostering deliberate metacognitive regulation

by teaching simple, repeatable planning, monitoring, and evaluation routines offers a realistic route to improve long-term vocabulary retention in Indonesian EFL classrooms.

REFERENCES

- Anderson, N. J. (2002). The role of metacognition in second language teaching and learning. ERIC Digest.
- Asyiah, D. N. (2017). The vocabulary teaching and vocabulary learning: Perception, strategies, and influences on students' vocabulary mastery. *Jurnal Bahasa Lingua Scientia*, 9(2), 293-318. <https://www.researchgate.net/publication/322611270>
- Ayana H, Mereba T and Alemu A (2024) Effect of vocabulary learning strategies on students' vocabulary knowledge achievement and motivation: the case of grade 11 high school students. *Front. Educ.* 9:1399350. doi: 10.3389/feduc.2024.1399350
- Baddeley, A. D. (1997). *Human memory: Theory and practice* (Revised ed.). Psychology Press.
- Boulware-Gooden, R., Carreker, S., Thornhill, A., & Joshi, R. M. (2007). Instruction of metacognitive strategies enhances reading comprehension and vocabulary achievement of third-grade students. *Reading Rockets*. <https://www.readingrockets.org/topics/comprehension/articles>
- Brown, A. (2007). *Principles of language learning and teaching* (5th ed.). Pearson Education.
- Chamot, A. U. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics*, 25(1), 112–130. <https://doi.org/10.1017/S0267190505000061>
- Chinpakdee, C., & Gu, P. Y. (2021). The impact of explicit strategy instruction on EFL secondary school learners' reading. *Language Teaching Research*, 25(3), 341–362. <https://doi.org/10.1177/1362168821994157>
- Chiu, T. K. F. (2021). Student engagement in K-12 online learning amid COVID-19: A qualitative approach from a self-determination theory perspective. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2021.1926289>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. SAGE Publications. ISBN: 978-1483344379.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

- Demera Macías, A. G., & Fajardo Dack, T. (2023). The impact of reflective journals on the writing skills of EFL sophomore students. *Runas*, 4(7), e230100. <https://doi.org/10.46652/runas.v4i7.100>
- Diaz, I. (2015). Training in metacognitive strategies for students' vocabulary improvement by using learning journals. *PROFILE Issues in Teachers' Professional Development*, 17(1), 87-102. <https://doi.org/10.15446/profile.v17n1.41632>
- Ebbinghaus, H. (1885). *Memory: A contribution to experimental psychology*. Dover Publications.
- 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>
- Gattegno, C. (1976). *The common sense of teaching foreign languages*. New York, NY: EducationalSolutions. <https://archive.org/details/commonsenseoftea0000gatt/page/n5/mode/2up>
- Karuniawati, M. (2017). Correlation between self-regulation strategy and receptive vocabulary size of English department students at Universitas Brawijaya. Universitas Brawijaya.
- Khairati, K., Feranie, S., & Karim, M. (2016). The effect of metacognitive strategies in cooperative learning on students' metacognitive awareness and achievement. *Jurnal Pendidikan Fisika Indonesia*, 12(1), 45-52. <https://journal.unj.ac.id/unj/index.php/jpppf/article/view/119>
- Lou, M., Azar, A. S., & Keat, O. B. (2024). The effects of EFL classroom environment, collaborative learning, students' motivation in learning, and EFL teachers' support on students' performance: An empirical literature review. *International Theory and Practice in Humanities and Social Sciences*, 1(1), 270–283. Retrieved from <https://www.researchgate.net/publication/387721326>
- Mascolo, M. F. (2009). *Beyond student-centered and teacher-centered pedagogy: Teaching and learning as guided participation*. ScholarWorks at Merrimack College. <https://scholarworks.merrimack.edu>
- Masrai, A. (2019). Vocabulary and reading comprehension revisited: Evidence for high-, mid-, and low-frequency vocabulary knowledge. *Sage Open*, 9(2). <https://doi.org/10.1177/2158244019845182>

- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge University Press.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Heinle & Heinle.
- Oxford, R. L. (2016). *Teaching and researching language learning strategies: Self-regulation in context*. Routledge. DOI: <https://doi.org/10.4324/9781315719146>
- Pintrich, P. R. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory Into Practice*, 41(4), 219–225. https://doi.org/10.1207/s15430421tip4104_3
- Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge University Press.
- Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional Science*, 26(1–2), 113–125. <https://doi.org/10.1023/A:1003044231033>
- Schraw, G., & Moshman, D. (1995). Metacognitive theories. *Educational Psychology Review*, 7(4), 351–371
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (3rd ed.). Teachers College Press.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. SAGE Publications. DOI: <https://doi.org/10.4135/9781452230153>
- Tanaka, M. (2017). Examining EFL vocabulary learning motivation in a demotivating learning environment. *Language Education in Asia*, 8(1), 38–50.
- Vandergrift, L., & Goh, C. C. M. (2012). *Teaching and learning second language listening: Metacognition in action*. Routledge. DOI: <https://doi.org/10.4324/9780203843376>
- Veenman, M. V. J., Van Hout-Wolters, B. H. A. M., & Afflerbach, P. (2006). Metacognition and learning: Conceptual and methodological considerations. *Metacognition and Learning*, 1(1), 3–14. <https://doi.org/10.1007/s11409-006-6893-0>
- Wenden, A. (1998). Metacognitive knowledge and language learning. *Applied Linguistics*, 19(4), 515–537.
- Zhang, W., et al. (2022). Understanding individual differences in metacognitive strategy use, task demand, and performance in integrated L2 speaking assessment tasks. *TESOL Encyclopedia*.
- Zimmerman, B. J. (2002). *Becoming a self-regulated learner: An overview*. *Theory Into Practice*,

41(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2

Zohar, A., & Dori, Y. J. (2003). Higher order thinking skills and low-achieving students: Are they mutually exclusive? *The Journal of the Learning Sciences*, 12(2), 145–181.

Zuhairi, A., & Mistar, J. (2023). *Vocabulary learning strategies and vocabulary mastery by Indonesian EFL learners*. *World Journal of English Language*, 13(8), 453-469. <https://doi.org/10.5430/wjel.v13n8p453>