English Education &
Applied Linguistics
Journal

The Correlation between Learning Strategy and Reading Strategy Used by Student at Vocational High School NU Simo Karanggeneng

Litwyn Mega[1], Syifa' Khuriyatuz Zahro[1], Daniar Sofeny[1]

Department of English Education, Faculty of Teacher Training and Education, Universitas Islam Darul 'Ulum, Lamongan, East Java, Indonesia

Email:
litwyn.2022@mhs.unisda.ac.id[1]

Article History
Submitted May 23rd, 2026
Revised June 27th, 2026
Published August 30th, 2026

Abstract.
Reading constitutes a fundamental receptive skill crucial for vocational secondary language acquisition and technical comprehension. Gap in literature or discrepancies between theories and practices: While previous research has detailed individual literacy traits, a notable empirical gap persists regarding how structured behavioral sub-dimensions directly align within the specialized vocational domain rather than focusing merely on final academic scores. Purpose of study: This study aims to analyze the direct correlation between general language learning strategies and academic reading strategies among tenth-grade students at SMK NU Simo Karanggeneng during the 2025/2026 academic year. Method: Employing a quantitative correlational framework, data were gathered from 30 female tenth-grade students specializing in Banking and Accounting services at SMK NU Simo Karanggeneng using the Strategy Inventory for Language Learning (SILL) and the Survey of Reading Strategies (SORS). Main findings: Descriptive analysis indicated that cognitive strategies were the most prominent learning modalities utilized by participants (M = 44.20), whereas global reading strategies dominated text processing behavior (M = 48.06). Pearson Product-Moment correlation analysis revealed a robust, positive, and statistically significant relationship between general learning strategies and academic reading strategies ($r = 0.751,\ p < 0.001$), with the independent variable explaining 56.5% of total reading strategy variance. Conclusion: Broad cognitive frameworks fundamentally operationalize micro-level reading mechanisms. Pedagogical implications recommend a curricular shift toward explicit, strategy-focused instruction tailored for specialized vocational literacy.

Keywords: *Cognitive strategies; global reading strategies; learning strategy; reading strategy; vocational education*

INTRODUCTION

Reading constitutes a fundamental receptive skill crucial for secondary language acquisition Reading comprehension is widely recognized as one of the most fundamental competencies in English as a Foreign Language (EFL) learning because it enables learners to acquire knowledge, construct meaning, and participate effectively in academic communication. In contemporary education, reading is no longer viewed merely as the ability to decode written symbols; rather, it involves integrating linguistic knowledge with higher-order cognitive processes, including inference making, critical evaluation, information synthesis, and self-monitoring during reading. Consequently, reading has become a key competence for lifelong

learning and academic achievement in increasingly digital and information-rich educational environments (Coiro, 2021; Grabe & Stoller, 2020).

For vocational high school students, reading competence is particularly important because they are frequently required to comprehend authentic English materials such as technical manuals, standard operating procedures, safety regulations, and workplace documentation. These texts demand not only adequate vocabulary knowledge but also strategic reading behaviors that enable learners to identify relevant information, monitor comprehension, and solve comprehension difficulties independently. Therefore, successful reading among vocational students depends on the interaction between linguistic competence and strategic learning behaviors rather than language knowledge alone (Grabe & Stoller, 2020; Ghimire & Mokhtari, 2025).

Recent studies consistently demonstrate that reading strategies play a significant role in improving learners' reading comprehension. Reading strategies refer to conscious cognitive and metacognitive actions that readers employ before, during, and after reading to facilitate comprehension, regulate understanding, and achieve reading goals (Coiro, 2021; Teng & Zhang, 2021). Learners who actively activate prior knowledge, monitor comprehension, identify main ideas, and evaluate textual information generally achieve higher levels of comprehension than those who employ passive reading approaches. Similarly, empirical evidence indicates that metacognitive reading strategies significantly predict students' academic reading performance across diverse educational settings (Ghimire & Mokhtari, 2025).

Beyond reading-specific strategies, language learning strategies constitute a broader framework through which learners regulate the entire language learning process. According to Oxford (2022), language learning strategies are deliberate and goal-oriented actions that facilitate language acquisition by enhancing learners' cognitive, metacognitive, affective, and social engagement. Likewise, Dörnyei and Ryan (2023) argue that strategic learning behaviors contribute substantially to learner autonomy, motivation, and successful language development. Because reading represents one of the primary language learning activities, students' overall language learning strategies are theoretically expected to influence the specific strategies they employ while comprehending academic texts.

Previous empirical studies have primarily focused on examining the effectiveness of reading strategy instruction in improving reading comprehension. For example, Fitria et al. (2024) reported that explicit reading strategy instruction enhanced students' engagement and comprehension during English reading activities. Similarly, Teng and Zhang (2021) demonstrated that metacognitive strategy instruction significantly improved learners' reading performance, while Ghimire and Mokhtari (2025) confirmed that metacognitive reading strategies were strong predictors of reading achievement across different educational contexts. Other studies conducted in Indonesian EFL classrooms also reported positive relationships between strategic reading behaviors and reading comprehension outcomes (Kubela et al., 2022; Tumanduk et al., 2025).

Nevertheless, several important gaps remain in the existing literature. First, previous studies have predominantly investigated the effectiveness of reading strategy instruction or the contribution of metacognitive strategies to reading achievement, whereas relatively little attention has been devoted to examining how students' general language learning strategies relate to their academic reading strategies. Second, most existing research has been conducted in general secondary schools or university settings, leaving vocational high schools comparatively underrepresented despite their distinctive literacy demands. Third, studies involving Indonesian vocational EFL learners remain limited, particularly those that investigate strategic learning behaviors rather than instructional interventions or academic achievement. These limitations indicate the necessity for further research that explains how broader language learning strategies are associated with academic reading strategies within vocational education.

Therefore, this study aims to examine the relationship between language learning strategies and academic reading strategies among tenth-grade students at SMK NU Simo Karanggeneng during the 2025/2026 academic year. By focusing on vocational high school students, this study extends previous research beyond instructional effectiveness and contributes empirical evidence regarding the strategic learning behaviors that support academic reading in vocational EFL contexts.

LITERATURE REVIEW

Self-Regulated Learning as the Foundation of Strategic Learning

Self-regulated learning (SRL) is a dominant framework in contemporary educational psychology that conceptualizes learning as an active, goal-directed process in which learners regulate cognitive, metacognitive, motivational, affective, and behavioral processes to achieve desired learning outcomes (Zimmerman & Schunk, 2023). Through iterative cycles of planning, monitoring, evaluation, and adaptation, self-regulated learners strategically respond to changing task demands, resulting in higher academic achievement, stronger learner autonomy, greater motivation, and more effective strategy use across educational contexts (Panadero, 2022; Theobald, 2021; de Boer et al., 2023). Accumulating meta-analytic and review evidence further identifies SRL as a multidimensional construct in which these regulatory processes interact dynamically to support sustained learning and academic success (Theobald, 2021; de Boer et al., 2023).

In second and foreign language education, SRL has reframed language learning from the application of isolated techniques to a dynamic process of strategic regulation. Contemporary research conceptualizes successful language learning as learners' ability to intentionally coordinate and adapt cognitive, metacognitive, motivational, and behavioral strategies in response to learning goals and contextual demands, rather than relying solely on linguistic knowledge (Rose et al., 2018; Oxford, 2017; Teng & Zhang, 2022; Zhang & Zou, 2022). Consequently, SRL provides the overarching theoretical foundation for explaining strategic behavior in EFL learning, where learners must continuously regulate comprehension, vocabulary acquisition, language production, and academic literacy while engaging with increasingly complex learning tasks (Oxford, 2017; Teng & Zhang, 2022).

Language Learning Strategies within the Strategic Self-Regulation Framework

Language Learning Strategies (LLS) have evolved from a taxonomy of discrete cognitive, metacognitive, memory, compensation, affective, and social strategies (Oxford, 1990) toward a self-regulatory perspective that conceptualizes strategic learning as a dynamic, goal-directed, and context-dependent process (Oxford, 2017; Rose et al., 2018). Rather than focusing on individual strategy types, contemporary research emphasizes learners' capacity to intentionally select, coordinate, monitor, evaluate, and adapt strategic behaviors in response to task demands, learning goals, and contextual conditions (Teng & Zhang, 2022; Zhang & Zou, 2022). This theoretical shift reflects the growing consensus that successful language learning depends less on the quantity of strategies employed than on learners' ability to regulate their strategic behavior effectively (Dörnyei & Ryan, 2023; Teng & Zhang, 2022).

Oxford's Strategic Self-Regulation (S^2R) Model provides one of the most comprehensive frameworks for explaining this perspective by integrating cognitive, metacognitive, affective, motivational, and sociocultural regulation within a unified self-regulatory system (Oxford, 2017). Consistent with Self-Regulated Learning theory, the model conceptualizes language learning strategies as adaptive regulatory actions through which learners plan, monitor, evaluate, and modify their learning in response to changing instructional and contextual demands (Zimmerman & Schunk, 2023; Oxford, 2017). Recent systematic reviews further confirm that LLS research has shifted from identifying *which* strategies learners use to explaining *how* learners regulate strategic behavior across diverse learning environments, highlighting strategic competence as a multidimensional construct shaped by learner

characteristics, task complexity, instructional support, and sociocultural contexts (Rose et al., 2018; Zhang & Zou, 2022; Teng & Zhang, 2022).

Academic Reading Strategies in EFL Contexts

Reading is increasingly conceptualized as a strategic, self-regulated process in which readers actively construct meaning by integrating textual information, prior knowledge, and metacognitive regulation. Contemporary reading theories extend beyond decoding to emphasize planning, monitoring, inferencing, evaluating, and repairing comprehension, particularly when learners engage with complex academic texts requiring critical evaluation, multiple-text integration, and knowledge application (Coiro, 2021; Grabe & Stoller, 2020; Koda, 2021; Cervetti & Wright, 2020).

In EFL contexts, academic reading strategies constitute domain-specific manifestations of self-regulated learning, enabling learners to set reading goals, monitor comprehension, generate inferences, and adapt strategic actions in response to comprehension difficulties. Accumulating evidence consistently identifies metacognitive awareness and strategic regulation as robust predictors of reading comprehension because they facilitate the coordination of cognitive processes before, during, and after reading, particularly when learners encounter linguistic and cognitive challenges (Teng & Zhang, 2021; Mokhtari & Reichard, 2023; Ghimire & Mokhtari, 2025).

The increasing demands of twenty-first-century literacy further require learners to navigate digital, multimodal, and information-rich environments by evaluating source credibility, synthesizing information across multiple texts, and regulating reading behaviors according to disciplinary and academic purposes (Afflerbach et al., 2020; Coiro, 2021; OECD, 2021). These competencies are especially critical in vocational education, where students must comprehend authentic technical manuals, workplace procedures, operational guidelines, and professional documents in English. Consequently, effective academic reading extends beyond linguistic knowledge to encompass strategic and metacognitive regulation that supports accurate interpretation and application of information in professional contexts (Grabe & Stoller, 2020; Koda, 2021; Teng & Zhang, 2021).

Theoretical Relationship between Language Learning Strategies and Academic Reading Strategies

The relationship between Language Learning Strategies (LLS) and Academic Reading Strategies (ARS) can be explained through the framework of Self-Regulated Learning (SRL), which conceptualizes learning as a dynamic process in which learners regulate cognitive, metacognitive, motivational, and behavioral resources to achieve learning goals (Zimmerman & Schunk, 2023; Panadero, 2022). Within this perspective, language learning strategies represent domain-general self-regulatory behaviors, whereas academic reading strategies constitute domain-specific applications of these regulatory processes during reading tasks. Oxford's Strategic Self-Regulation (S^2R) model further reinforces this relationship by positioning cognitive, metacognitive, affective, and sociocultural strategies as integrated mechanisms through which learners plan, monitor, evaluate, and adapt their language learning according to contextual demands (Oxford, 2017). Accordingly, learners with stronger language learning strategies are theoretically expected to employ more effective academic reading strategies when constructing meaning from increasingly complex texts (Teng & Zhang, 2022; Zhang & Zou, 2022).

This theoretical proposition is supported by growing empirical evidence demonstrating that self-regulated learners exhibit higher metacognitive awareness, more strategic reading behaviors, and superior reading comprehension outcomes (Teng & Zhang, 2021; Ghimire & Mokhtari, 2025; Mokhtari & Reichard, 2023). Systematic reviews further indicate that strategic regulation facilitates learners' ability to coordinate cognitive and metacognitive processes across multiple language skills, including academic reading, suggesting that reading strategies should be understood as manifestations of broader strategic competence rather

than isolated instructional techniques (Rose et al., 2018; Zhang & Zou, 2022). Nevertheless, previous studies have predominantly examined the effects of reading strategy instruction or metacognitive awareness on reading achievement, while comparatively little attention has been paid to the direct association between learners' overall language learning strategies and their academic reading strategies, particularly in vocational EFL contexts characterized by technical and workplace-oriented literacy demands (Grabe & Stoller, 2020; Koda, 2021).

Therefore, this study investigates the relationship between language learning strategies and academic reading strategies among Indonesian vocational high school students. By examining this relationship from a self-regulated learning perspective, the study extends existing literature beyond instructional effectiveness and reading outcomes to explain how learners' strategic competence in language learning shapes their academic reading behaviors within vocational English education.

METHODOLOGY

This study employed a quantitative correlational design to examine the relationship between Language Learning Strategies (LLS) and Academic Reading Strategies (ARS) without manipulating the study variables, making it appropriate for investigating naturally occurring associations between strategic learning behaviors (Creswell & Guetterman, 2021). The participants comprised 30 tenth-grade female students enrolled in the Banking and Accounting Services programs at SMK NU Simo Karanggeneng, Indonesia, during the 2025/2026 academic year. Participants were selected using purposive sampling because they shared comparable educational backgrounds and English learning experiences relevant to the research objectives.

Data were collected using two widely validated self-report instruments. Language learning strategies were measured using the Strategy Inventory for Language Learning (SILL Version 7.0) (Oxford, 1990), a 50-item instrument assessing six dimensions of strategic language learning: memory, cognitive, compensation, metacognitive, affective, and social strategies. Academic reading strategies were assessed using the Survey of Reading Strategies (SORS) (Mokhtari & Sheorey, 2002), which consists of 30 items measuring global, problem-solving, and support reading strategies. Responses to both instruments were recorded on a five-point Likert scale ranging from 1 (Never or Almost Never True of Me) to 5 (Always or Almost Always True of Me).

Data were analyzed using IBM SPSS Statistics 26. Prior to hypothesis testing, the assumptions of normality and linearity were examined using the One-Sample Kolmogorov–Smirnov test and ANOVA test of linearity, respectively. Because the study aimed to determine the strength and direction of the association between two continuous variables, the relationship between LLS and ARS was subsequently analyzed using Pearson's product-moment correlation coefficient, with statistical significance established at $p < .05$ (Creswell & Guetterman, 2021).

FINDINGS AND DISCUSSION

Research Findings

Descriptive analysis was performed for both variables to observe the distribution patterns among the 30 participants.

Table 1. Descriptive Statistic of Students' Learning Strategy (Variable X)

	N	*Minimum*	*Mean*	*Std. deviation*
Memory Strategies	*30*	*23.00*	*28.9000*	*4.95740*
Cognitive Strategies	*30*	*34.00*	*44.2000*	*7.48055*
Compensation Strategies	*30*	*11.00*	*16.3333*	*3.77225*
Metacognitive Strategies	*30*	*22.00*	*32.0333*	*4.59748*
Affective Strategies	*30*	*15.00*	*21.1333*	*3.07081*
Social Strategies	*30*	*16.00*	*19.7333*	*2.34790*

Valid N (listwise)	*30*	

As detailed in Table 1, cognitive strategies represented the primary learning modality among the vocational students, yielding the highest average score ($M = 44.20$). Conversely, compensation strategies recorded the lowest mean score ($M = 16.33$), demonstrating that the participants rarely used contextual guessing to address linguistic gaps.

Table 2. Descriptive Statistic of Students' Reading Strategy (Variable Y)

	N	*Minimum*	*Maximum*	*Mean*	*Std. deviation*
Global Reading Strategies	*30*	*40.00*	*58.00*	*48.0667*	*4.72655*
Problem Solving Strategies	*30*	*25.00*	*38.00*	*30.6000*	*3.75637*
Support Reading Strategies	*30*	*26.00*	*45.00*	*33.0000*	*4.09373*
Valid N (listwise)	*30*				

The descriptive patterns in Table 2 reveal that global reading strategies were the dominant text processing method used by the students ($M = 48.07$). In contrast, problem-solving strategies, which involve micro-level repair during reading breakdowns, were utilized less frequently ($M = 30.60$).

Prerequisite Assumption Tests: The One-Sample Kolmogorov-Smirnov normality test generated an unstandardized residual significance value of $p = 0.200$ and a Monte Carlo significance value of $p = 0.434$. Since both values exceed the standard significance threshold ($p > 0.05$), the data distribution satisfies the assumption of normality. The linearity test yielded an ANOVA significance level of 0.001 ($p < 0.05$), confirming a linear relationship between the two variables.

Hypothesis Testing: Having fulfilled the prerequisite criteria, a Pearson Product-Moment correlation test was applied. The statistical computation revealed a correlation coefficient (r) of 0.751, with a significance value (Sig. 2 tailed) of $p < 0.001$. This confirms a significant, strong, and positive relationship between the two variables, requiring the rejection of the null hypothesis (H_0) and the acceptance of the alternative hypothesis (H_1). The coefficient of determination analysis (R^2) yielded a value of 0.565, indicating that 56.5% of the total variance in academic reading strategy choice can be explained by the students' language learning strategy profiles.

Research Discussion

The present study examined the relationship between Language Learning Strategies (LLS) and Academic Reading Strategies (ARS) among Indonesian vocational high school students. The findings revealed that cognitive strategies were the most frequently employed language learning strategies, whereas compensation strategies were used least frequently. In reading, students reported greater use of global reading strategies than problem-solving strategies. More importantly, a strong positive relationship was identified between LLS and ARS ($r = .751$, $p < .001$), with language learning strategies explaining 56.5% of the variance in students' academic reading strategies.

The predominance of cognitive strategies indicates that vocational students tend to process language through active practice, analysis, and application rather than rote memorization. This pattern is consistent with the nature of vocational education, which emphasizes procedural knowledge and authentic task performance (Pane et al., 2021). From the perspective of Self-Regulated Learning (SRL), cognitive strategies represent essential regulatory mechanisms through which learners organize, elaborate, and transform information during learning (Zimmerman & Schunk, 2023). Likewise, Oxford's Strategic Self-Regulation (S²R) Model argues that cognitive strategies become effective only when coordinated with metacognitive regulation, enabling learners to adapt strategically to different learning contexts (Oxford, 2017). The relatively limited use of compensation strategies, however, suggests that many students remain reluctant to employ inferencing and contextual guessing when linguistic knowledge is insufficient. Similar patterns have been reported in EFL settings, where limited

vocabulary breadth often constrains learners' willingness to use compensatory strategies while reading authentic texts (Koda, 2021; Zhang & Zou, 2022).

Students' reading strategy profiles further reinforce this interpretation. The predominance of global reading strategies suggests that learners generally possess adequate planning behaviors, such as previewing text structure, identifying organizational patterns, and establishing reading purposes before engaging with a text. However, the comparatively lower use of problem-solving strategies indicates that many students experience difficulties regulating comprehension when meaning breaks down. According to Interactive Models of Reading, successful reading requires continuous interaction between bottom-up linguistic processing and top-down knowledge activation, both of which must be supported by metacognitive monitoring throughout the reading process (Grabe & Stoller, 2020; Koda, 2021). Similarly, Online Reading Comprehension Theory emphasizes that contemporary readers must continuously evaluate information, monitor comprehension, and integrate evidence across multiple sources, making strategic regulation central to academic literacy rather than a supplementary skill (Coiro, 2021). Therefore, the relatively limited use of problem-solving strategies may indicate insufficient metacognitive regulation rather than merely limited linguistic proficiency.

The strongest contribution of this study lies in the significant positive relationship between language learning strategies and academic reading strategies. This finding provides empirical support for SRL theory by demonstrating that learners' general strategic regulation extends to domain-specific reading behaviors (Zimmerman & Schunk, 2023). It also corroborates Oxford's (2017) proposition that language learning strategies should be understood as integrated self-regulatory processes rather than isolated learning techniques. The present findings are further consistent with Information Processing Theory, which proposes that strategic regulation facilitates efficient allocation of attentional and cognitive resources during learning, enabling learners to process, organize, and retrieve information more effectively (Schunk & DiBenedetto, 2020). Consequently, students who effectively regulate their language learning are more likely to activate appropriate strategies while reading academic texts, including planning, monitoring, inferencing, and evaluating comprehension.

The coefficient of determination ($R^2 = .565$) indicates that language learning strategies account for more than half of the variance in academic reading strategies, highlighting strategic learning as a substantial predictor of students' reading behavior. Nevertheless, the remaining unexplained variance (43.5%) suggests that academic reading is influenced by multiple learner- and context-related variables beyond strategic competence. Previous research has consistently identified English proficiency, vocabulary knowledge, prior knowledge, reading motivation, self-efficacy, text complexity, teacher scaffolding, and classroom instructional practices as important determinants of strategic reading performance (Grabe & Stoller, 2020; Teng & Zhang, 2021; Zhang & Zou, 2022; Ghimire & Mokhtari, 2025). This finding therefore supports the multidimensional nature of reading comprehension proposed in contemporary literacy research, where cognitive, motivational, linguistic, and contextual factors operate interactively rather than independently (Afflerbach et al., 2020; OECD, 2023).

The present findings are broadly consistent with recent empirical evidence demonstrating that self-regulated learners exhibit greater metacognitive awareness, stronger strategic engagement, and better reading performance across EFL contexts (Teng & Zhang, 2021; Ghimire & Mokhtari, 2025). Likewise, Zhang and Zou (2022) concluded that language learning strategies function most effectively when embedded within broader self-regulatory processes rather than applied as isolated techniques. However, unlike previous studies that primarily examined the effectiveness of reading strategy instruction or the contribution of metacognitive strategies to reading achievement, the present study directly investigated the relationship between learners' overall language learning strategies and their academic reading strategies. Moreover, research involving vocational high school students remains relatively limited despite the distinctive literacy demands associated with vocational education. Consequently,

this study extends the current literature by providing empirical evidence that broader strategic competence underpins students' academic reading behaviors in vocational EFL settings.

From a pedagogical perspective, these findings suggest that improving students' academic reading should move beyond teaching isolated reading techniques toward fostering broader self-regulated learning. English instruction should explicitly develop learners' abilities to plan, monitor, evaluate, and adapt their learning strategies across language tasks, thereby enabling the transfer of strategic competence to increasingly complex academic and vocational reading activities. Such an approach is consistent with contemporary views of strategic language learning, which regard self-regulation as a transferable competence supporting lifelong learning and workplace readiness (Oxford, 2017; Zimmerman & Schunk, 2023; OECD, 2023).

CONCLUSION

This study demonstrates that Language Learning Strategies (LLS) are strongly associated with Academic Reading Strategies (ARS) among Indonesian vocational high school students, supporting the proposition that broader strategic competence underpins domain-specific reading behavior. Students predominantly employed cognitive learning strategies and global reading strategies, yet showed limited use of compensation and problem-solving strategies, suggesting that while they can effectively plan and organize reading tasks, they experience difficulties regulating comprehension when encountering linguistic or textual challenges.

These findings provide empirical support for Self-Regulated Learning (SRL) theory (Zimmerman & Schunk, 2023) and Oxford's Strategic Self-Regulation (S^2R) model (Oxford, 2017), reinforcing the view that academic reading strategies are manifestations of learners' broader self-regulatory competence rather than isolated reading techniques. By extending this relationship to the context of vocational EFL education, the study contributes to a relatively underexplored area of strategy research and highlights the importance of strategic learning for vocational literacy development.

Pedagogically, the findings suggest that English instruction should move beyond teaching discrete reading strategies toward fostering self-regulated learning through explicit training in planning, monitoring, evaluation, and strategic reflection. Such an approach may strengthen students' ability to transfer strategic competence across language tasks and improve their capacity to comprehend academic and workplace-related texts. Future research should employ larger and more diverse samples and examine additional factors, such as language proficiency, vocabulary knowledge, reading motivation, and self-efficacy, to develop a more comprehensive understanding of strategic reading in vocational EFL contexts.

REFERENCES

Afflerbach, P., Cho, B.-Y., & Kim, J.-Y. (2020). Conceptualizing and assessing higher-order thinking in reading. *Theory Into Practice, 59*(3), 258–267. https://doi.org/10.1080/00405841.2020.1770913

Cervetti, G. N., & Wright, T. S. (2020). The role of knowledge in understanding and learning from text. In E. B. Moje, P. Afflerbach, P. Enciso, & N. K. Lesaux (Eds.), *Handbook of reading research* (Vol. V, pp. 385–403). Routledge.

Coiro, J. (2021). Toward a multifaceted heuristic of digital reading to inform assessment, research, practice, and policy. *Reading Research Quarterly, 56*(S1), S9–S31. https://doi.org/10.1002/rrq.302

Creswell, J. W., & Guetterman, T. C. (2021). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson.

de Boer, H., Donker, A. S., Kostons, D., & van der Werf, M. P. C. (2023). Long-term effects of self-regulated learning interventions in education: A meta-analysis. *Educational Research Review, 38*, 100527. https://doi.org/10.1016/j.edurev.2022.100527

Dörnyei, Z., & Ryan, S. (2023). *The psychology of the language learner revisited*. Routledge. https://doi.org/10.4324/9781315779553

Fitria, R., Widyantoro, A., & Sukarno. (2024). Strategies used by Indonesian high school English teachers to improve students' reading comprehension: A qualitative study. *Englisia: Journal of Language, Education, and Humanities, 12*(1). https://doi.org/10.22373/ej.v12i1.22830

Ghimire, N., & Mokhtari, K. (2025). Evaluating the predictive power of metacognitive reading strategies across diverse educational contexts. *International Journal of Educational Technology in Higher Education, 22*, Article 40. https://doi.org/10.1186/s40536-025-00240-3

Grabe, W., & Stoller, F. L. (2020). *Teaching and researching reading* (3rd ed.). Routledge.

Koda, K. (2021). *Insights into second language reading: A cross-linguistic approach* (2nd ed.). Cambridge University Press.

Mokhtari, K., & Reichard, C. A. (2023). Revisiting metacognitive awareness of reading strategies in the twenty-first century. *Journal of Adolescent & Adult Literacy, 67*(2), 127–136.

Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of reading strategies. *Journal of Developmental Education, 25*(3), 2–10.

OECD. (2023). *PISA 2022 results (Volume I): The state of learning and equity in education*. OECD Publishing. https://doi.org/10.1787/53f23881-en

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

Pane, A., Dasopang, M. D., & Fitriani. (2021). *Belajar dan pembelajaran*. Perdana Publishing.

Panadero, E. (2022). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology, 13*, 861271. https://doi.org/10.3389/fpsyg.2022.861271

Rose, H., Briggs, J. G., Boggs, J. A., Sergio, L., & Ivanova-Slavianskaia, N. (2018). A systematic review of language learner strategy research in the face of self-regulation. *System, 72*, 151–163. https://doi.org/10.1016/j.system.2017.12.002

Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology, 60*, 101832. https://doi.org/10.1016/j.cedpsych.2019.101832

Teng, L. S., & Zhang, L. J. (2021). Empowering learners with metacognitive strategies in EFL reading and writing: From theory to practice. *Language Teaching Research, 25*(4), 558–582. https://doi.org/10.1177/1362168820923584

Teng, L. S., & Zhang, L. J. (2022). *Teaching and researching self-regulated learning in language education*. Routledge.

Zimmerman, B. J., & Schunk, D. H. (Eds.). (2023). *Self-regulated learning and academic achievement: Theoretical perspectives* (3rd ed.). Routledge. https://doi.org/10.4324/9781315697048

Zhang, L. J., & Zou, D. (2022). Self-regulated language learning: What have we learned and where are we going? *Language Teaching Research, 26*(5), 1035–1046.