The Impact of Explicit Writing Strategy Instruction on EFL Learners' Strategy Use across Proficiency Levels

Abstract

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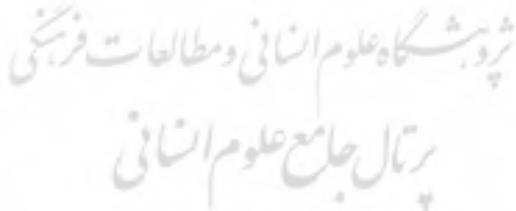
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Over the past decades, the use of strategies by language learners has been the subject of considerable research. Yet comparatively few studies have examined the direct effects of strategy instruction on the actual writing strategy use of learners, with specific comparisons involving students at different levels of proficiency. This study examined if focused writing strategy instruction can increase the use of writing strategies by EFL learners. Using a mixed-methods design, 64 undergraduate learners in Iran were divided into experimental and control groups. The experimental group received strategy-based instruction grounded in Oxford's (1990) framework, while the control group received conventional writing instruction. Data were collected through pre- and post-tests, stimulated recall protocols, and a validated strategy-use questionnaire. Findings from a mixed between-within ANOVA revealed significant time-group- proficiency interactions, indicating that strategy instruction benefited learners differently across proficiency levels. Qualitative analysis further highlighted how learners integrated strategies into their writing practices. The results have implications for tailoring writing instruction to proficiency-specific needs.

Key Words: Academic Writing, L2 Writing, Learner Proficiency, Metacognitive Awareness, Writing Strategy Instruction

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1. Introduction

Within the developing discipline of English as a Foreign Language (EFL), the significance of learner strategies has grown more salient, particularly with respect to productive skills like writing. Although research on writing strategies has abounded over the past decades, a considerable lacuna still exists with regard to the impact of explicit strategy instruction on the actual writing behavior of learners, especially at various proficiency levels (Macaro, 2006). L2 writing is a multidimensional cognitive and linguistic task, which frequently demands that learners utilize both their linguistic resources and strategic competence to successfully orchestrate the writing process (Anderson, 2003; Kellogg, 1996).

In spite of broad recognition of the advantages of strategy use, it is not clear whether learners at different proficiency spectrums benefit equally from strategy instruction. Some research indicates that high-proficiency learners more easily internalize and utilize strategies (Ikeda & Takeuchi, 2003), yet other research has reported substantial gains for lower-proficiency students where instruction is suitably scaffolded (Vandergrift & Tafaghodtari, 2010). Such mixed outcomes point to a need for more sensitive examination of how strategy instruction works within varied learner groups.

In addition, most of the research that does exist has emphasized test scores over an investigation of how learners actually use strategies in the process of writing. To gain insight into the strategic processes learners employ—not merely their results—methodological windows into internal cognitive activity are necessary. Stimulated recall, specifically, has emerged as a fruitful method for prompting reflective explanation of strategic choices during writing, particularly when verbalization is scaffolded through recorded performance (Gass & Mackey, 2000).

This research adds to the burgeoning literature on L2 writing strategies through its investigation of the effect of an intervention intended to foster strategic writing behaviors in university students participating in an L2 writing course. More specifically, it explored how learners of different proficiency levels used strategies after instruction, with particular emphasis on their planning, monitoring, and revision activities. Through the combination of qualitative insights from stimulated recall interviews and quantitative comparison of strategy frequency, the study sought to present a fuller portrait of the developmental effect of strategy instruction. The results may have implications for writing practitioners, curriculum developers, and educational policymakers interested in improving writing instruction in diverse and multilingual academic environments.

2. Theoretical and Empirical Background

Research into second language (L2) writing strategies has developed considerably over the last decades with an increasing agreement that strategic competence is a key aspect of successful writing (Macaro, 2006; Manchón, 2008). Unlike any other language skill, writing is distinguished by its recursive nature in which constant interaction among cognitive, linguistic, and metacognitive processes is necessary (Flower & Hayes, 1980; Kellogg, 1996). Strategic writing behaviors of planning, monitoring, and revising have been found to play an instrumental role in determining the quality and coherence of learners' written production (Anderson, 2005; Graham, 1997).

2.1. Models of Strategic Writing

Among theoretical models undergirding writing strategy research, Kellogg's (1996) working memory model continues to be central. It positions writing as an executive function relying strongly on the coordination of idea generation, language formulation, and monitoring. Likewise, Flower and Hayes (1980) underscored writing as a problem-solving process, during which writers are continually assessing goals, audience, and rhetorical structures. More recently, Grabe and Zhang (2023) maintained that strategic L2 writing needs to be understood as a dynamic between long-term writing development and moment-by-moment decision-making, requiring both procedural knowledge and strategic flexibility.

The applicability of these models is especially evident in the case of learners with varied proficiency levels. As proficiency level rises, learners tend to demonstrate more capacity to balance various sub-processes in writing, including idea generation and linguistic accuracy, while using metacognitive strategies concurrently (Teng, 2024). In contrast, lower-proficiency learners can be less able to distribute cognitive resources effectively, making explicit strategy instruction necessary.

2.2. Strategy Instruction and L2 Writing Development

There is a strong body of research that attests to the efficacy of explicit strategy instruction in enhancing the writing performance of learners (Plonsky, 2011; Sasaki, 2002). Strategy instruction has demonstrated to improve both the quality and quantity of strategy deployment, resulting in higher metacognitive control and greater writing fluency. Nevertheless, the degree to which learners take up and transfer instructed strategies is moderated by aspects of language proficiency, task type, and instructional design (Macaro, 2010; Manchón et al., 2007).

Empirical research has provided mixed findings on the relative advantage of strategy training by proficiency level. Ikeda and Takeuchi (2003) reported greater benefits for more

proficient learners from reading strategy instruction, while Vandergrift and Tafaghodtari (2010) reported larger gains for less proficient learners in a listening-based intervention. Such inconsistencies indicate that the structure of strategy instruction needs to be attuned to learners' starting strategy repertoires and cognitive readiness (Teng & Zhang, 2021).

Additionally, a recent longitudinal study conducted by Horbach and Giannakaki (2023) illustrated that differentiated instruction, whereby learners choose and consolidate strategies on the basis of reflective assessment, results in more robust writing performance and strategic awareness gains. This corroborates the case presented by Manchón (2008), who advocated for individualized, needs-driven instruction that supports learner independence and problem-solving conduct.

2.3. Capturing Strategic Thinking: Methodological Considerations

Accessing learners' internal strategic processes continues to be a methodological issue for L2 writing research. Though questionnaires like Oxford's (1990) Strategy Inventory for Language Learning (SILL) have been extensively employed, they tend to be subject to self-report biases and miss the dynamic process of strategy use (Wharton, 2000). Think-aloud protocols have been proposed as a more immediate way of accessing strategy use in the course of task performance (Anderson, 2005), though they have the potential to interfere with the normal writing process, especially for lower level learners (Sasaki, 2000).

Stimulated recall, on the other hand, has become an increasingly versatile and learner-responsive technique for eliciting strategic behavior. By having learners comment on recorded writing sessions, it enables researchers to tap into both overt and covert strategies, with minimal interference with the task itself (Gass & Mackey, 2000). Current methodological overviews suggest stimulated recall as a complementary instrument that adds qualitative depth and ecological validity to research on strategy use (Zhang & Teng, 2023).

While the literature warrants the benefit of strategy instruction, there is limited research on its effect in the specific area of L2 academic writing and across different proficiency levels. In addition, the majority of existing studies have focused on performance outcomes instead of strategic development. The current study attempted to fill this research void by exploring how explicit writing strategy instruction affected the strategic behavior of students at different proficiency levels through the use of stimulated recall interviews and frequency analysis of strategy deployment. Accordingly, the following research questions were proposed:

1. Does explicit writing strategy instruction significantly increase the use of writing strategies among EFL learners?

2. Does learners' proficiency level influence the effects of explicit writing strategy instruction on their writing strategy use?

3. What insights do EFL Learners provide regarding the effectiveness of writing strategy instruction?

3. Method

3.1. Research Design

This research followed a quasi-experimental, mixed-methods design in examining the effect of focused writing strategy instruction on students' utilization of academic writing strategies at various proficiency levels. The design involved a pre-test/post-test control group design, augmented by qualitative data gathering using stimulated recall interviews. The aim was to examine both the frequency and quality of using writing strategies before and after the intervention, with emphasis on metacognitive and cognitive strategy engagement in the course of writing tasks.

3.2. Participants

The participants were 64 undergraduate students enrolled in an English course at a large public university in Iran. They were in their second year of study and represented diverse academic disciplines, including science, engineering, and the social sciences. All participants had studied English as a foreign language for at least seven years through the national curriculum. They were selected through non-random convenience sampling, as intact classes were available and accessible for the purposes of this study.

A placement writing task and an institutional language exam were used to categorize students into higher proficiency (CEFR B2–C1) and lower proficiency (A2–B1) groups. The participants were then randomly assigned into two groups: experimental (n = 32) and control (n = 32). Each group contained 16 higher proficiency and 16 lower proficiency learners. Gender distribution was roughly balanced (58% female, 42% male), and all students gave informed consent for their participation. Ethical approval for the study was obtained from the university's research ethics committee.

3.3. Data Collection Instruments

3.3.1. Writing Tasks and Stimulated Recall. Both groups completed two writing tasks: one administered before and one after the instructional period. For each task, students produced a brief argumentative essay (250–300 words) on socially relevant topics designed to provoke genuine cognitive engagement.

Immediately after each writing task, a subsample of 24 students (six per subgroup: high/low proficiency × experimental/control) participated in stimulated recall interviews. The decision to select six students from each subgroup was guided by methodological considerations of qualitative research, where smaller samples allow for in-depth exploration while ensuring representativeness across conditions (cf. Sasaki, 2000). This number also reflected practical constraints of time and resources in conducting and transcribing detailed recall sessions.

All writing sessions were video-recorded to capture observable behaviors (e.g., pausing, rereading, consulting notes). During the recall sessions, participants reviewed their own recordings and were prompted to verbalize their thoughts, decision-making, and strategy use. To minimize cognitive load and elicit more detailed responses, the interviews were conducted in Persian.

The interview protocol included six core open-ended questions. These questions targeted learners' planning, monitoring, and revision behaviors, as well as their perceptions of task difficulty and strategy usefulness. The questions were adapted from established stimulated recall protocols in L2 writing research (e.g., Sasaki, 2000; Wenden, 1991) and reviewed by two experts in applied linguistics to ensure content validity. The sessions were audio-recorded and subsequently translated and transcribed for analysis. Transcripts, along with observation notes, were coded for the occurrence and type of strategy use.

3.3.2. Learner Diaries and Strategy Use Questionnaire. Participants in the experimental group maintained reflective learner diaries throughout the intervention, documenting the strategies they attempted, their perceptions of the strategies' effectiveness, and any challenges they faced. To ensure comparability, students in the control group also kept diaries; however, they were instructed to reflect on their writing experiences in general, without specific reference to strategies. This design minimized the possibility that the reflective component itself would bias the results.

In addition, all participants (both control and experimental groups) completed a task-specific writing strategy questionnaire at the beginning and the end of the semester. The questionnaire was adapted from Oxford's (1990) Strategy Inventory for Language Learning and tailored to the writing context. Content validity was established through expert review by two applied linguistics specialists, and a pilot test confirmed its clarity and reliability. Cronbach's alpha for the adapted version was 0.82, indicating acceptable internal consistency. The inclusion of both groups in pre- and post-testing allowed for a meaningful comparison of changes in perceived strategy use.

3.4. Procedure

The experimental group received direct instruction in writing strategies over an 18-week period (two academic semesters). The instructional module was developed based on current L2 writing strategy taxonomies (e.g., Anderson, 2005; Macaro, 2006) and a pilot needs analysis. Drawing on Hayes' (2012) model, the training targeted three broad strategy categories—planning, self-monitoring, and revision—which were selected due to their foundational role in academic writing and their noted underuse during the pre-test phase. Instruction was delivered through bi-weekly 90-minute workshops that combined teacher modeling, group activities, task-based exercises, and guided reflections. In the initial six sessions, each strategy was introduced and modeled explicitly. In the subsequent sessions, strategy use was embedded into authentic writing tasks, during which students were encouraged to adapt strategies to task requirements and document their experiences in learner diaries.

The control group followed the same syllabus and completed identical writing tasks and assignments. Importantly, they also received regular instruction in academic writing, including essay structure, coherence and cohesion, grammar, and vocabulary. However, unlike the experimental group, they were not provided with explicit strategy instruction. To ensure comparability, both groups maintained reflective journals; the control group used them for general writing reflections, whereas the experimental group was guided to record their application of specific strategies. This design helped control for the possible influence of self-reflection activities on learning outcomes.

Both groups were taught by instructors with equivalent academic qualifications and teaching experience, and the control group's instructor was explicitly instructed to maintain consistency in syllabus coverage, instructional materials, and classroom management. The only difference between the groups was the presence or absence of explicit strategy training, which allowed for a meaningful comparison of the instructional effect.

3.5 Data Analysis

3.5.1. Quantitative Analysis. The quantitative analysis drew on two complementary data sources: (1) responses from the strategy-use questionnaire and (2) frequency counts of strategies identified in the stimulated recall transcripts. Questionnaire data were analyzed to assess pre- and post-test changes in perceived strategy use across groups and proficiency levels. Descriptive statistics and a mixed between-within ANOVA (time × group × proficiency) were employed to evaluate differences in strategy use patterns.

For the stimulated recall data, a coding framework adapted from Roca de Larios et al. (2008) and Sasaki (2000) was applied to classify strategy use into seven categories: Task Analysis, Planning, Formulating, Self-Monitoring, Revision, Evaluation, and Resourcing. While explicit instruction targeted only three categories (Planning, Self-Monitoring, and Revision), the broader framework allowed us to capture both taught and emergent strategies that learners spontaneously employed. This provided a more comprehensive picture of actual strategy use.

Two trained coders independently analyzed a subset of the transcripts. Inter-coder reliability, assessed with Cohen's Kappa (κ = 0.85), was reported in the qualitative analysis section rather than the quantitative results, in order to clarify its methodological role. This distinction ensured consistency with the description of instruments and avoided conflating questionnaire data with qualitative coding.

3.5.2. Qualitative Analysis. The qualitative data comprised three main sources: Stimulated recall interviews, learner diaries, and classroom video-taped observations. Unlike in the quantitative analysis—where stimulated recall transcripts were coded to obtain frequency counts of strategy use—here they were analyzed thematically to explore the *nature* and *quality* of learners' strategy application. This distinction ensured that the same dataset contributed to both quantitative breadth and qualitative depth without conceptual overlap.

Thematic analysis followed a recursive coding approach, focusing on learners' self-awareness, adaptability, and capacity to coordinate multiple strategies during writing. Particular attention was paid to episodes where students adjusted or reconfigured strategies in response to task-related challenges. Video-taped observations, which had captured learners' on-task behaviors (e.g., pausing, consulting notes, rereading drafts), were integrated into this analysis to provide an external perspective on the cognitive processes reported during stimulated recall.

To enhance the credibility and trustworthiness of the findings, methodological triangulation was employed, combining evidence from questionnaires, recall interviews, diaries, and observational notes. This integration allowed us to identify points of convergence across data sources, thereby strengthening the interpretation of learners' strategic development.

4. Results

This section presents the findings of the study based on the quantitative and qualitative data collected before and after the intervention. Results are reported in relation to changes in

writing strategy use among learners across different proficiency levels and experimental conditions.

4.1. Quantitative Findings

Analysis of strategy usage during the writing tasks indicated a clear increase in both the number and range of strategies employed by the experimental group after the instructional intervention. In contrast, the control group showed no substantial change in their strategy use from the pre-test to the post-test. These findings suggest the intervention had a notable impact on strategic writing behavior.

4.1.1. Strategy Use across Groups. To investigate whether the experimental and control groups differed in their use of writing strategies across time, a mixed between-within subjects ANOVA was conducted with time (pre-test vs. post-test) as the within-subjects factor and group (experimental vs. control) as the between-subjects factor. Results revealed a significant main effect for time, $F_{(1, 62)} = 56.41$, $p < 0.001$, partial $\eta^2 = .48$, indicating that overall strategy use increased from pre- to post-test. A significant main effect was also found for group, $F_{(1, 62)} = 29.17$, $p < 0.001$, partial $\eta^2 = .32$, with the experimental group employing more strategies overall than the control group. Most importantly, the time × group interaction was significant, $F_{(1, 62)} = 42.06$, $p < 0.001$, partial $\eta^2 = .40$, showing that the experimental group experienced a far greater increase in strategy use compared with the control group. Table 1 presents the descriptive statistics for each group across the two time points, while Gain scores were calculated by subtracting the mean pre-test score from the mean post-test score for each group.

Table 1.

Descriptive Statistics for Strategy Use by Group

Group	Pre-Test (M, SD)	Post-Test (M, SD)	*Gain Score*
Experimental	4.1 (1.3)	8.5 (1.9)	+4.4
Control	4.0 (1.2)	4.4 (1.4)	+0.4

4.1.2. Proficiency-Level Comparisons. To explore whether learners' proficiency levels moderated the effects of strategy instruction, a two-way mixed ANOVA was conducted with time (pre-test vs. post-test) as the within-subjects factor, and group (experimental vs. control) and proficiency (high vs. low) as between-subjects factors. Results showed a significant main effect for group, $F_{(1, 60)} = 34.72$, $p < 0.001$, partial $\eta^2 = .37$, confirming that the experimental group outperformed the control group overall. However, the time × group × proficiency interaction was not statistically significant, $F_{(1, 60)} = 2.13$, $p = 0.15$. This suggests that the benefits of instruction were broadly consistent across proficiency bands.

In table 2, Gain scores were calculated by subtracting individual pre-test scores from post-test scores, then averaging across learners within each proficiency subgroup. Moreover, descriptive analyses of gain scores within the experimental group revealed interesting trends: Higher-proficiency learners appeared to demonstrate greater improvement in self-monitoring and evaluation strategies, whereas lower-proficiency learners showed larger gains in planning and task analysis. Although these differences did not reach statistical significance, they provide insight into how learners at different proficiency levels may differentially internalize and apply strategy instruction.

Table 2.

Strategy Gain Scores by Proficiency Level (Experimental Group)

Strategy Type	High Proficiency (Gain)	Low Proficiency (Gain)
Planning	+2.1	+3.3
Self-Monitoring	+2.7	+1.8
Revision	+1.5	+1.4
Evaluation	+2.9	+1.6
Total	+9.2	+8.1

4.2. Qualitative Findings

Data from stimulated recall interviews and learner diaries offered deeper insight into how learners conceptualized and applied strategies during writing.

4.2.1. Increased Strategic Awareness. Prior to the instructional intervention, most participants tended to focus on a limited range of strategies—like translating word-for-word or just running through basic grammar corrections. After the intervention, though, those in the experimental group reported a much greater awareness of the overall structure of the task, the intended audience, and the rhetorical aims behind their writing. In other words, their approach shifted from surface-level edits to a deeper engagement with purpose and context. *For example,* Student 14 (low proficiency, experimental group) noted that: *"In the past, I would simply write and hope for the best; now, I pause to consider my message and how to express it clearly."*

4.2.2. Emergence of Flexible Strategy Use. Several students demonstrated strategic flexibility—the ability to switch between planning and revision strategies depending on the demands of the task. For instance, Student 6 (high-proficiency learner, experimental group) argued that: *"I usually write everything first, then I fix mistakes. Now I plan more and revise in stages, especially when I'm not sure how to express complex ideas."*

4.2.3. Metacognitive Reflections. Entries from learner diaries revealed that many students began reflecting on their own writing process. Some low-proficiency learners indicated they

had never thought of writing as a process before the workshops. As an example, Student 22 (low proficiency, experimental group) expressed that: *"I didn't realize I could take control of my writing; now I feel that I have a method, not just an outcome."*

5. Discussion

This investigation aimed to determine the impact of explicit instruction in writing strategies on learners' academic writing practices across various proficiency levels. The findings corroborated the earlier research indicating that targeted strategy training enhances learners' metacognitive regulation and strategic engagement (see Anderson, 2005; Sasaki, 2002). More specifically, the study demonstrated that learners at different stages of proficiency benefit in distinct yet complementary ways from explicit instruction. Higher-proficiency learners gained more in areas such as self-monitoring and evaluation, while lower-proficiency learners showed greater improvements in planning and task analysis. These outcomes suggest that strategy training can be tailored to proficiency levels in order to maximize effectiveness for diverse groups of learners.

The significant increase in the usage of strategies from the experimental group as compared to the control group indicates the potential of explicit teaching in fostering strategic composition behavior. The finding confirms previous studies which asserted that strategies in composition are not innate but can be taught and practiced if properly scaffolded (Manchón, 2008; Plonsky, 2011). The shift from heavy usage of mechanical or surface strategies towards a more balanced usage of planning, self-monitoring, and revision indicates the growing control over the composition procedure by the students.

Interestingly, both the more proficient and the less proficient experimental group students exhibited significant improvement in the utilization of strategies, though in non-overlapping areas. More proficient students exhibited a bigger growth in strategies involving self-monitoring and evaluation, which indicates the superior potential for real-time self-reflection and correction in the production process. This finding corresponds with the notion by Grabe and Zhang (2023) regarding more proficient students benefiting the most from the teaching of metacognitive strategies owing to the wider cognitive bandwidth and linguistic versatility they possess.

In comparison, low proficiency students showed significant improvement in planning and task analysis. Such results indicate that if the instruction is adequately contextualized, even students with minimal linguistic resource can internalize and transfer strategic behavior in the way of scaffolding their own writing. As Teng (2024) maintained, beginners and

intermediate students can construct strategic awareness with adequate models and repeated practice.

Qualitative data persisted in substantiating the results. Stimulated recall interviews and learner diaries revealed students had become more conscious about the choices they made in their writing and began performing tasks more intentionally. Prior to the intervention, the majority of students linearly composed from introduction through the conclusion with minimal rewriting and reflection. Data collected after the intervention revealed growing awareness on the recursive nature of the act of writing and the need for coming back at earlier levels in response to growing task demands.

This growth in employment of strategies coincides with Kellogg's (1996) description of working memory in composition in which the blending of the processes for planning, formulation, and revision is emphasized. The growth in adaptive employment of strategies most prominently in the group of high proficiency similarly underpins the most recent study by Horbach and Giannakaki (2023), which asserts flexibility as the distinguishing feature of composition expertise.

6. Conclusion

This study investigated the effect of explicit writing strategy instruction on EFL learners' use of cognitive and metacognitive strategies within an academic writing context, with particular attention to proficiency-level differences. The results demonstrated that sustained, targeted instruction significantly enhanced learners' ability to plan, monitor, and revise their writing, thereby fostering greater self-regulation and reflective engagement with the writing process.

Although no statistically significant interaction between group and proficiency level were obtained, descriptive trends suggested that higher-proficiency learners tended to improve more in strategies associated with self-monitoring and evaluation, whereas lower-proficiency learners gained more in planning and task-analysis strategies. These patterns, while not conclusive, indicate that learners may internalize and apply strategy instruction in ways shaped by their initial proficiency.

From a curricular perspective, the findings support the integration of writing strategy instruction as a core component of L2 writing courses rather than as supplementary material. Encouraging strategic awareness through tools such as reflective journals and stimulated recall can strengthen learner autonomy and long-term competence in academic writing.

These findings have several pedagogical implications. First, they may highlight the necessity of explicit instruction in strategy use, particularly in L2 writing contexts where learners are expected to produce cognitively demanding texts. Second, the results may suggest that differentiated instruction—that is, instruction responsive to learners' initial proficiency levels—may yield meaningful gains across a broad spectrum of learners. Lower proficiency students may benefit from explicit modeling and guided practice in planning and organizing ideas, while more advanced learners may require support in monitoring and refining their textual output.

Moreover, the success of stimulated recall and reflective journaling in revealing learners' strategic behavior underscores the value of integrating metacognitive reflection into writing curricula. Such practices not only make strategy use visible to learners themselves but also encourage the development of learner autonomy.

Despite the promising results, several limitations should be acknowledged. The sample size, though sufficient for statistical analysis, was restricted to one institution, limiting the generalizability of the findings. Future studies might expand the scope to include multiple institutions or compare outcomes across different educational systems.

Additionally, the study focused primarily on short-term gains in strategy use. Longitudinal research is needed to determine whether the observed strategic behaviors are sustained over time and transferred to other writing contexts, such as academic assignments or standardized assessments. Future work could also explore the intersection of writing strategy instruction with other learner variables such as motivation, self-efficacy, or anxiety (Zhang & Teng, 2023).

References

Anderson, N. J. (2005). *L2 strategy research*. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 757–771). Lawrence Erlbaum.

Flower, L., & Hayes, J. R. (1980). The cognition of discovery: Defining a rhetorical problem. *College Composition and Communication*, 31(1), 21–32. https://doi.org/10.2307/356630

Gass, S., & Mackey, A. (2000). *Stimulated recall methodology in second language research*. Lawrence Erlbaum Associates.

Grabe, W., & Zhang, C. (2023). Revisiting strategic L2 writing: A multidimensional model of development. *Journal of Second Language Writing*, 63, 101023. https://doi.org/10.1016/j.asw.2022.100690

Graham, S. (1997). Effective language learning: Positive strategies for advanced level language learning. *Modern Language Journal, 81*(4), 564–567.

Horbach, J., & Giannakaki, M. (2023). Differentiated instruction and strategic flexibility in academic writing. *System*, *112*, 102976. https://doi.org/10.1016/j.ssaho.2024.101230

Ikeda, M., & Takeuchi, O. (2003). Can strategy instruction help EFL learners? An empirical study. *Language Learning Journal*, *31*(1), 37–46.

Kellogg, R. T. (1996). A model of working memory in writing. In C. M. Levy & S. Ransdell (Eds.), *The science of writing* (pp. 57–71). Lawrence Erlbaum.

Macaro, E. (2006). Strategies for language learning and for language use: Revising the theoretical framework. *Modern Language Journal*, *90*(3), 320–337. https://doi.org/10.1111/j.1540-4781.2006.00425.x

Macaro, E. (2010). Continuum companion to second language acquisition. Continuum.

Manchón, R. M. (2008). Writing strategies in second language acquisition. In R. M. Manchón (Ed.), *Learning, teaching, and researching writing in foreign language contexts* (pp. 229–256). Multilingual Matters.

Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Newbury House.

Plonsky, L. (2011). The effectiveness of second language strategy instruction. *Language Learning*, 61(4), 993–1038. https://doi.org/10.1177/13621688211072981

Roca de Larios, J., Manchón, R., & Murphy, L. (2008). The foreign language writer's strategic behavior: A qualitative approach. In R. M. Manchón (Ed.), *Learning, teaching and researching writing in foreign language contexts* (pp. 141–164). Multilingual Matters.

Sasaki, M. (2000). Toward an empirical model of EFL writing processes: An exploratory study. *Journal of Second Language Writing*, *9*(3), 259–291. https://doi.org/10.1016/S1060-3743(00)00028-X

Sasaki, M. (2002). Building an empirically-based model of EFL learners' writing processes. *Language Learning*, *52*(1), 1–35. https://doi.org/10.1007/978-94-010-0363-6_3

Teng, L. S. (2024). Teaching writing strategies to EFL learners: The role of explicitness and reflection. *TESOL Quarterly*, *58*(1), 115–140.

Teng, L. S., & Zhang, L. J. (2021). Empowering learners in the EFL classroom: The role of strategy-based instruction. *Language Teaching Research*, *25*(5), 690–712.

Vandergrift, L., & Tafaghodtari, M. H. (2010). Teaching L2 learners how to listen does make a difference. *Language Learning*, *60*(2), 470–497. https://doi.org/10.1111/j.1467-9922.2009.00559.x

Wharton, S. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning*, *50*(2), 203–243. https://doi.org/10.1111/0023-8333.00117

Zhang, L. J., & Teng, L. S. (2023). Researching writing strategies in multilingual contexts: A methodological review. *System*, *113*, 103016. https://doi.org/10.1016/j.jslw.2023.101038