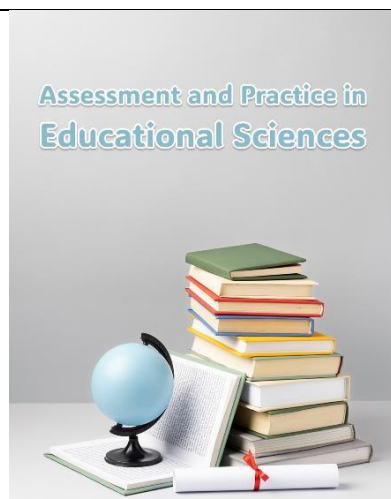




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The Impact of Applying Text-based Instruction on Academic Writing: The Case of Iranian Undergraduate EFL Learners

ABSTRACT

This study delves into the crucial realm of English as a Foreign Language (EFL) learners' perception regarding the effectiveness of Text-based instructions on their academic writing. Acknowledging the paramount importance of writing skills in language acquisition, the research aims to unravel the impact of specific text-based instructions on learners' success in academic settings. Drawing on a quasi-experimental design, 38 undergraduate TEFL students participated, with 20 in the experimental group and 18 in the control group. The results, analyzed through pretests, posttests, and semi-structured interviews, substantiate a significant improvement in the experimental group, affirming the efficacy of embedded text-based instructions. Learners' perceptions, obtained through interviews, provide valuable insights for tailoring effective text-based instruction in EFL education.

Keywords: EFL learners, text-based instructions, Academic writing, Language acquisition

Introduction

Academic writing constitutes one of the most demanding dimensions of second and foreign language learning because it requires learners to coordinate linguistic knowledge, cognitive resources, rhetorical awareness, and strategic control within a single productive activity. For English as a Foreign Language (EFL) learners, writing is not simply the transcription of previously learned vocabulary and grammatical structures; rather, it is a complex process through which ideas must be generated, selected, organized, linguistically encoded, evaluated, and revised in accordance with the expectations of a particular audience and discourse community. Cognitive accounts of writing have consequently conceptualized writing proficiency as an

integrated competence involving several interacting knowledge and processing systems (1). Working-memory limitations further influence writers' ability to coordinate content generation, linguistic formulation, and higher-order planning, particularly when relevant knowledge and lower-level writing processes have not yet become sufficiently accessible or automatized (2). Accordingly, difficulties in academic writing may arise not from a single linguistic deficiency but from the cumulative demands imposed by language, cognition, organization, rhetorical purpose, and task management.

The importance of these competencies becomes especially evident in higher education, where students are expected to demonstrate learning through written assignments, examinations, reports, essays, and other academically valued genres. Academic writing competence therefore has direct implications for students' ability to communicate disciplinary knowledge and participate successfully in university learning (3). Nevertheless, teaching writing in higher education remains challenging, particularly in EFL settings where learners must develop both general academic literacy and control over a language that is not their first language. Problems may include generating relevant ideas, organizing content coherently, developing paragraphs, selecting appropriate vocabulary, controlling grammar, and satisfying genre-specific conventions (4). Research on writing knowledge further suggests that stronger writers possess more developed understandings of writing processes and conventions than less skilled writers, highlighting the relationship between what learners know about writing and what they are ultimately able to produce (5). Similar developmental research indicates that differences between more and less successful writers can be observed in their knowledge of writing and their capacity to mobilize that knowledge during composition (6).

Writing proficiency consequently depends on more than mastery of linguistic forms. Effective writers must exercise control over the processes that transform knowledge and intentions into coherent texts. Investigations of writing control have emphasized the coordination necessary for managing multiple writing operations, including planning, formulation, monitoring, and revision (7). Such control is particularly significant for second-language writers because linguistic processing may consume cognitive resources that more proficient writers can devote to organization, argumentation, and rhetorical effectiveness. Cross-linguistic and cognitive-linguistic research likewise illustrates that meaning construction across languages can require complex conceptual and linguistic decisions, as demonstrated by work on the cognitive-linguistic dimensions of metaphor translation (8). Thus, instruction that merely presents grammatical rules or assigns topics for independent composition may be insufficient for learners who need explicit support in understanding how successful texts are constructed and how writing processes can be strategically managed.

A particularly important concept in this regard is metacognition. Metacognitive knowledge concerns learners' awareness of cognition, tasks, strategies, and their own learning processes, while metacognitive regulation concerns the capacity to plan, monitor, and evaluate performance. The broader theoretical development of metacognitive and perspective-taking constructs has underscored the importance of reflecting on mental processes rather than functioning solely at the level of immediate task performance (9). In EFL writing, metacognitive awareness can enable learners to recognize writing problems, select appropriate strategies, monitor whether a text is meeting its communicative purpose, and evaluate whether revision is necessary. Among Iranian EFL learners, metacognitive awareness of writing strategy use has been directly associated with writing performance, supporting the pedagogical relevance of helping learners become more conscious and deliberate writers (10). Likewise, metacognitive strategy use has been examined within L2 writing assessment, emphasizing that successful writing involves strategic decision-making before, during, and after text production (11).

Metacognition also intersects with self-regulation. Writing requires students to sustain effort, set goals, manage difficulties, evaluate progress, and modify ineffective approaches. Writing self-efficacy and self-regulated learning strategies have therefore emerged as important constructs in EFL writing research, with evidence suggesting meaningful relationships between learners' beliefs about their writing capabilities and the strategies through which they regulate writing activity (12). From this

perspective, effective instruction should not merely provide learners with information about what constitutes a good text; it should also make the processes underlying successful writing visible and manageable. By helping learners identify task requirements, observe models, analyze textual features, organize ideas, construct drafts, and evaluate their writing, instruction may progressively transfer regulatory responsibility from the teacher to the learner.

This emphasis corresponds with the broader literature on strategy instruction in language learning. Strategy-based teaching rests on the assumption that successful learners do not simply possess superior linguistic knowledge; they also employ purposeful procedures for approaching language tasks. The theoretical framework of language learning and language-use strategies emphasizes the need to understand strategies as goal-oriented actions situated within specific tasks and learning contexts (13). Research has consequently sought to move strategy instruction beyond isolated lists of techniques toward explicit, contextualized instruction that enables learners to understand when, why, and how particular strategies should be used (14). At the same time, classroom-oriented research has highlighted the value of teachers examining strategy use within their own instructional settings, thereby connecting language-learning theory to the realities of classroom practice (15).

The effectiveness of explicit strategy instruction is supported by a substantial research tradition. A meta-analysis of writing strategy instruction demonstrated the pedagogical value of explicitly teaching procedures that support successful composition (16), while a broader meta-analysis of second-language strategy instruction confirmed that strategic interventions can produce meaningful benefits in L2 learning (17). Evidence from other language skills further supports the principle that strategies can be explicitly taught and developed. Strategy instruction has improved performance among lower-intermediate foreign-language learners in listening contexts (18), while longitudinal research has demonstrated that strategy use and language comprehension develop dynamically over time (19). Similarly, metacognitive strategy instruction has been investigated as a means of enhancing EFL listening performance (20). Although listening and writing involve different productive and receptive demands, this body of research supports the broader pedagogical proposition that learners benefit when strategic processes that might otherwise remain implicit are made explicit, modeled, practiced, and evaluated.

Within writing specifically, L2 composing involves strategic decisions at multiple levels. Empirical modeling of EFL writing processes has shown that learners differ in the ways they plan and manage composing activities, suggesting that writing development is associated with changes in the organization of the composing process itself (21). Lexical retrieval represents another strategically demanding component because writers must access appropriate words while simultaneously preserving meaning, grammaticality, fluency, and textual coherence. Research synthesizing lexical retrieval in second-language writing demonstrates that L2 writers employ different strategies when lexical resources are insufficient or temporarily inaccessible (22). These findings reinforce the need for instructional approaches that address writing as a process rather than treating the finished written product as the sole object of teaching and assessment.

Text-based instruction is particularly relevant within this pedagogical landscape because it makes texts themselves central resources for learning how written communication operates. Rather than asking students to produce a genre after receiving only a topic and general explanation, text-based approaches expose learners to models from which rhetorical organization, linguistic choices, discourse patterns, and genre expectations can be identified. Such instructional practices allow learners to examine how successful texts accomplish communicative purposes before attempting independent production. This orientation is closely related to genre-based writing instruction, in which learners develop knowledge of the social purposes, structural organization, and characteristic linguistic features of recurring text types. The genre-based approach has been implemented in the teaching of recount texts with the explicit purpose of promoting learners' writing skills (23), and it has likewise been used to improve students' production of descriptive texts (24). These studies support the educational value of providing learners with systematic guidance concerning how texts are organized rather than relying exclusively on unguided writing practice.

A major pedagogical strength of text-based instruction is therefore its potential to scaffold the transition from observation to independent performance. Through interaction with models, learners can notice organizational patterns and language resources; through guided analysis, they can develop an explicit understanding of how those resources function; and through supported and independent composition, they can apply such understanding to new writing tasks. Research on writing strategy instruction among intermediate-proficiency ESL learners similarly indicates that systematic strategy teaching can enhance writing performance (25). Textual scaffolding may also contribute indirectly to lexical development. Research comparing text-based and audio-based dynamic glosses has shown the relevance of strategically designed textual support for L2 vocabulary learning (26). Because vocabulary knowledge and the ability to deploy lexical resources appropriately are central to written expression, carefully structured engagement with texts may simultaneously support linguistic development and awareness of discourse-level organization.

The relationship between reading and writing provides an additional rationale for text-based instruction. Academic writers are also readers who must recognize textual structure, identify rhetorical relationships, evaluate information, and observe how linguistic choices contribute to meaning. Research on the discrimination and cognitive processing of IELTS reading-comprehension items illustrates the complexity of processing written language in EFL assessment contexts (27). When model texts are incorporated into writing instruction, reading can become an analytical activity through which learners notice textual features that can subsequently inform their own production. At the assessment level, the complexity of judging language proficiency is also reflected in research exploring adaptive comparative judgment as an approach to proficiency rating (28). Together, such work underscores that academic literacy involves interconnected processes of interpreting, producing, and evaluating texts and that writing instruction should facilitate learners' awareness of the criteria by which successful texts are recognized.

These concerns have become even more significant with the rapid integration of generative artificial intelligence into academic writing. Recent systematic review evidence indicates that generative AI is increasingly influencing academic writing practices in higher education, introducing new possibilities for idea generation, linguistic support, editing, and feedback while simultaneously raising pedagogical questions about how writing competence should be developed and evaluated (29). Research among doctoral scholars has similarly documented perceptions concerning both the effectiveness and ethical use of AI tools in academic writing (30). At the institutional and regulatory levels, AI-assisted academic writing has generated concerns involving governance, responsibility, authorship, transparency, and appropriate legal frameworks (31). Teachers are likewise negotiating the integration of AI into the assessment of and feedback on EFL academic writing, with recent research examining educators' views regarding its educational use (32). These developments do not diminish the importance of explicit writing instruction; rather, they increase the need for learners to possess sufficient textual, rhetorical, and metacognitive knowledge to evaluate both their own writing and technologically generated suggestions critically.

Consequently, contemporary EFL writing pedagogy faces a dual responsibility. Learners must acquire the linguistic resources required for academic communication, but they must also develop sufficient awareness of genres, textual organization, writing processes, and strategies to exercise independent control over their compositions. Without such knowledge, students may remain dependent on teacher correction, model imitation, or technological assistance without understanding why particular textual choices are effective. Text-based instruction offers a potentially valuable response because it situates linguistic knowledge within complete texts, makes rhetorical conventions observable, and provides learners with structured opportunities to move from analysis toward production. Its emphasis on modeling and guided practice is consistent with cognitive perspectives on writing, metacognitive approaches to strategy use, and empirical findings supporting explicit strategy instruction.

Nevertheless, the effectiveness of an instructional approach cannot be established solely through theoretical plausibility. It is necessary to determine whether text-based instruction produces measurable changes in learners' writing performance and how learners themselves experience the instructional process. Learner perceptions are particularly relevant because an approach that is pedagogically structured may still be experienced as demanding, time-consuming, unfamiliar, or difficult to apply independently. Conversely, learners may identify particular components—such as task analysis, exposure to models, brainstorming, genre identification, organization of ideas, or guided construction—as especially valuable. Examining both performance outcomes and learners' perceptions can therefore provide a more comprehensive understanding of instructional effectiveness than either quantitative achievement data or qualitative experience alone. This need is particularly important in Iranian undergraduate EFL contexts, where previous research has established the relevance of metacognitive writing strategy awareness (10), but further evidence is needed concerning the contribution of systematic text-based instruction to academic writing development.

Accordingly, the present study aimed to investigate the impact of text-based instruction on the academic writing performance of Iranian undergraduate EFL learners and to explore their perceptions of the effectiveness, beneficial components, and challenges of this instructional approach.

Methods and Materials

This study employed a quasi-experimental mixed-methods design to investigate the impact of text-based instruction on EFL learners' academic writing and to explore their perceptions of this instructional approach. The study was conducted with 38 undergraduate students majoring in Teaching English as a Foreign Language (TEFL) at Islamic Azad University. The participants consisted of 24 females and 14 males aged between 20 and 23 years who were enrolled in an academic writing course. Due to institutional scheduling constraints, random assignment was not feasible. Therefore, convenience sampling was used, and two intact classes were assigned as the experimental group ($n = 20$) and the control group ($n = 18$). Both groups were taught by the same instructor and followed the same course content throughout the study.

Writing Pretest and Posttest: To determine the participants' initial writing proficiency, the writing section of the Preliminary English Test (PET) was administered as the pretest. Participants were required to write a 100-word composition on a given topic within 30 minutes. The writing samples were independently evaluated by two raters according to the PET scoring criteria, including content fulfillment, organizational knowledge, language use, vocabulary, grammatical accuracy, and coherence. Following the six instructional sessions, a parallel PET writing task was administered as the posttest to assess changes in the participants' writing performance. Both groups completed the posttest under the same conditions as the pretest, and they were required to write a 100-word composition within 30 minutes. The posttest writing samples were also independently assessed by the same two raters using the PET scoring criteria. To ensure consistency in the assessment process, inter-rater reliability was calculated for both the pretest and posttest scores.

Semi-Structured Interview: To explore learners' perceptions of text-based instruction, semi-structured interviews were conducted with six participants from the experimental group. The interview protocol consisted of five open-ended questions focusing on learners' experiences, perceptions, and challenges related to academic writing and the implementation of the text-based instructional framework. Participants were allowed to respond in either Persian or English to facilitate more accurate and comfortable expression of their views. All interviews were audio-recorded, transcribed, and analyzed qualitatively. The interview data were coded and categorized using MAXQDA software, and recurring concepts were grouped into broader themes.

Procedures: The study was conducted over six instructional sessions. Before the treatment, both groups completed the PET writing pretest. The experimental group received instruction based on the text-based framework proposed by Feez and Joyce (1998), while the control group received conventional writing instruction following the prescribed coursebook. The text-based instructional framework consisted of several stages, including building knowledge of the field, modeling and deconstructing texts, joint text construction, independent text construction, and evaluation. During the treatment sessions, students engaged in a variety of writing genres, including descriptive writing, opinion writing, comparison and contrast essays, advantages and disadvantages essays, and problem–solution essays. Instructional activities included vocabulary development, brainstorming, genre awareness, text analysis, collaborative writing, peer review, and independent writing tasks. Through these activities, learners were guided to identify textual features, organize ideas effectively, and apply genre-specific writing strategies. In contrast, the control group received traditional writing instruction emphasizing paragraph structure, grammatical accuracy, and organization of ideas. Although both groups worked on similar writing topics, the control group was not exposed to the stages or instructional principles of the text-based framework.

At the end of the treatment period, both groups completed the PET writing posttest. All writing samples were assessed by two experienced TEFL instructors using the PET rating scale. One week after the posttest administration, six volunteers from the experimental group participated in the semi-structured interviews to provide further insights into their experiences with text-based instruction.

Following the administration of the pretest, the participants received six instructional sessions. After the completion of the treatment, a parallel writing task from the PET was administered as the posttest to examine the effectiveness of text-based instruction on learners' writing performance. Similar to the pretest, participants were required to write a composition within 30 minutes, and their written texts were evaluated by the same two raters based on the PET scoring criteria. The inter-rater reliability coefficient for the posttest scores was calculated to ensure consistency between the two raters.

Findings and Results

To ensure the normality assumption, the skewness and kurtosis values were computed for the pretest and posttest scores. According to Field (2018, p. 346), “an absolute value greater than 1.96 is significant at $p < 0.05$, above 2.58 is significant at $p < 0.01$, and above 3.29 is significant at $p < 0.001$ ”. since the computed ratios were lower than ± 1.96 , it was concluded that the normality assumption was retained.

Table 1 Normality Analysis Results

	N	Min	Max	Mean	Std. D	Skew	Kurt		
	St.	St.	St.	St.	St.	St.	Std. E.	St.	Std. E.
Exp Post	20	13.07	23.00	18.21	2.89	.186	.441	-1.195	.858
Ex. Pre	20	10.00	18.00	13.89	2.46	.543	.441	-1.253	.858
Con. Pre	18	11.00	18.00	14.11	2.50	.501	.448	-1.425	.872
Con. Post	18	10.00	19.00	14.29	2.79	.194	.448	-1.274	.872

Table 2 and Table 3 show the Pearson Correlations computed to measure the pairwise correlation between raters and indicate their average level of agreement for both the pretests and posttests. The results showed that there were significant agreements between the raters ($r(38) = .72$ in writing pretests and $r = .79$ in the posttests).

Table 2 Correlations btw Raters in Writing Pretests

		Rater1	Rater2
Rater1	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	38	

Rater2	Pearson Correlation	.626**	1
	Sig. (2-tailed)	.000	
	N	38	38

Table 3 Correlations btw Raters in Writing Posttests

		Rater1	Rater2
Rater1	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	38	
Rater2	Pearson Correlation	.872**	1
	Sig. (2-tailed)	.000	
	N	38	38

In order to draw conclusions concerning the text-based instructions on learners' writing ability, the effect of treatment within each group was calculated. This could provide evidence on whether treatments provided in the experimental and control groups were effective without being compared with the other. As shown in Table 4, there was a relatively large increase in the writing ability of the experimental group from pretest ($M = 12.89$) to posttest ($M = 18.00$), but participants in the control group performed similarly both on the pretest ($M = 13.11$) and posttest ($M = 14.29$).

Table 4 Descriptive Statistics for within-Subjects Comparison

		Mean	N	Std. D	Std. E Mean
Pair 1	Exp Pre	12.89	20	2.55	.483
	Exp Post	18.00	20	2.99	.566
Pair 2	Con Pre	13.11	18	2.50	.481
	Con Post	14.29	18	2.79	.538

Results from the Paired Samples t-test (Table 5) indicated that the improvement in the experimental group was significant, $t(19) = -17.49$, $p = 0.00$. The effect size was calculated and found to be 0.91, which shows a very large effect for the treatment. Instructing learners using the text-based strategies significantly improves their writing skills.

Table 5 T-Tests Results of Pretest-Posttest Comparisons in Both Groups

		Paired Differences		Std. E	t	df	Sig.
		Mean	Std. D				
Pair 1	Exp Pre – Post	-4.12	1.30	.24	-17.49	19	.000
Pair 2	Con Pre- Post	-.18	1.07	.20	-.89	17	.379

Although the data presented in Table 4 and Table 5 were indicative of the effectiveness of text-based instruction through implementation of text-based framework, the pretest and posttest mean scores of the experimental and control groups were also compared to provide complementary information as to which treatment was more effective.

The pretest scores of the two groups were compared to establish their comparability at the outset of the study. As shown in Table 6, and Table 7, the two groups were not significantly different from each other, $t(36) = -.32$, $p = 0.75$, when measured at the pretest. In other words, experimental and control groups were almost similar in terms of their writing ability before being

taught through either the classroom instruction (experimental group) or the conventional activities provided in the learners' writing textbooks (control group). Therefore, any gain during the posttest could safely be attributed to the type of treatment provided in each group.

Table 6 Descriptive Statistics for Pretest and Posttest Scores in the Groups

	Group	N	Mean	Std. D.	Std. E. M.
Pretest	Experimental	20	12.89	2.55	.48
	Control	18	13.11	2.50	.48
Posttest	Experimental	20	18.00	2.99	.56
	Control	18	14.29	2.79	.53

Reading the mean column in Table 6 indicated that the posttest mean score of the experimental group ($M = 18.00$) was higher than that of the control group ($M = 14.29$), implying that the treatment provided in the experimental group (implementation of writing strategy instruction) was more effective in improving the writing skills of the participants. This finding was confirmed by the results of the Independent Samples t-test. As presented in Table 7, the t-test values of $t(36) = 5.00$, and $p = 0.00$, indicated that the difference in the post-test means was statistically significant. Therefore, given the results in Table 5 and Table 7, the research hypothesis was rejected. Instructing learners through the strategies significantly improves their writing skills.

Table 7 T-Test Results of Pretest and Posttest Comparisons between the Groups

	Levene's Test		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Pretest	.018	.824	-.320	36	.750	-.28	.68
Posttest	.232	.674	5.005	36	.000	3.91	.78

In the interview, the main focus was on the participants' perceptions and experiences of involvement the text-based instruction. The content coding was created for all the concepts. After coding the interviews, the themes were classified based on the effectiveness of embedding the strategies, the helpful part of the task, challenges with phases, the effect of working with these concepts in the writing class, and their recommendations. The thematic analysis was carried out through MAXQDA to identify the respondents' perceptions with the aim of recognizing the themes and subthemes regarding participants' perceptions toward implementing text-based on their writing skills.

To find out the EFL learners' perceptions, they were asked: How do embedding these strategies help you practice better in writing courses? Give an example. the following extracts reflect their thoughts:

Practicing the text-based stages in writing can play a significant role in EFL learners' writing skills. 1) "More than 70% is effective, because we get to know the stages related to writing process, for example, analyzing the task, we can easily think and write, but it is very difficult to write about a topic without these items" (Respondent, 2). Another one confirmed the usefulness of this method in selecting topics and setting the goal "The instruction that is related to the practical stages is more effective because we are familiar with linguistic knowledge and want to apply them appropriately to write and expand on that topic more easily". The other participants also emphasized the model as a good feature for writing process because they easily organized set the goal, analyze task, and they were able to write about the topics after the instruction. "It is very effective

because the tasks we followed and the patterns we elaborated informed us then we could use the tasks better after the strategies” (Respondent 6).

They all found that the text-based instruction was really helpful since they practiced the strategies and the instructor supported enough. Meanwhile, they could grasp and transfer the applied tasks in the texts. The extent to which participants mentioned the positive effect of text-based instructions on their writing ability shows that it was effective.

In line with the main objective of the study, the researcher considered the idea of embedding the strategies in writing and the effectiveness in their understanding. The researcher took into account the process experienced while they were writing. Some comments were as follows:

2) “By facing this framework and using the tasks, we will have a better understanding and perception, and we get the whole process.” (Resp. 1)

3) “Sometimes it can cause a challenge while applying the stages, but in some topics, they are understandable and can be well thought out and written about. Of course, we need more practices” (Resp. 2)

Considering the challenges, they experienced during their writing course, the researcher asked a question. The respondents stated the problematic areas and any challenges they faced.

Despite the positive points about embedding instructional strategies in writing tasks, some of the participants mentioned challenges such as task analysis, writing by yourself, applying the text-based framework, etc. Some comments were as follows:

1) “The task and genre analysis are the most important and challenging parts for me. Understanding the genre and exploring the proper strategies takes more time and energy”. (Resp. 6)

2) “... although in some cases, like the specific ways of writing of each author, more practice is needed”. (Resp. 5)

Besides the challenges they felt in applying the strategies, they mentioned that they needed more practice to apply them easily. It seems that the participants realized the effectiveness of the strategies although they should practice more. According to the classified themes, it was revealed that some parts of the instruction procedures were helpful and the respondents confirmed. Almost all mentioned the positive effects of the treatment during the writing process since they have background information about the topics and they relate to the needs and desires of young learners.

6) “Topics and instruction were helpful because I have information and background knowledge about writing process”. (Resp. 2)

7) “Topics are directly related to the needs and desires, so we realized the writing process by those stages”. (Resp. 7)

Generally, the respondents explained that they followed instructional text-based framework and the academic writing process. They showed that applying those strategies was helpful but challenging. They confirmed the effectiveness of those topics and practical stages in dealing with academic writing. However, they reported some challenges. They get used to do free writing without identifying task, brainstorming to organize ideas in genres, etc. Some felt more practice would make it better. Therefore, they perceived this strategy as a good way to be embedded in writing courses. They affirmed the positive aspects of using writing strategy instruction.

According to coding systems and excerpts, the effectiveness took a high frequency of about 25 among 34 concepts. That is to say, despite the challenges (n = 5) mentioned in the interviews, they found their writing course useful. The participants' perceptions of the activities in the writing classes and the results of the posttests verified the positive effect of embedding text-based instruction. On the other hand, the results obtained through the interview indicate that EFL learners experienced working with writing strategies. They explained its effectiveness in writing tasks, brainstorming, organizing ideas, and organizing paragraphs.

The quantitative findings of the study revealed that the integration of text-based instruction had a positive effect on EFL learners' academic writing performance. The posttest results indicated that the experimental group outperformed the control group after the treatment period. Specifically, the mean score of the experimental group ($M = 18.00$) was considerably higher than that of the control group ($M = 14.29$). Furthermore, the Independent Samples t-test confirmed that the difference between the two groups was statistically significant ($t(36) = 5.00, p < .001$). These findings suggest that the implementation of text-based instruction contributed significantly to the development of learners' writing abilities.

Discussion and Conclusion

The present study investigated the impact of text-based instruction on the academic writing performance of Iranian undergraduate EFL learners and explored learners' perceptions of the effectiveness, beneficial components, and challenges of this instructional approach. The quantitative findings demonstrated a clear advantage for learners who received text-based instruction. At the beginning of the study, the experimental and control groups showed comparable levels of writing ability, with mean pretest scores of 12.89 and 13.11, respectively, and the between-group difference was not statistically significant, $t(36) = -0.32, p = .75$. Following the intervention, however, the experimental group's mean writing score increased to 18.00, whereas the control group achieved a considerably lower posttest mean of 14.29. The posttest difference between the groups was statistically significant, $t(36) = 5.005, p < .001$. Within-group analysis likewise showed a significant pretest-to-posttest improvement in the experimental group, $t(19) = -17.49, p < .001$, with a very large reported effect size of 0.91, whereas the relatively small improvement observed in the control group was not statistically significant, $t(17) = -0.89, p = .379$. These findings indicate that the structured text-based intervention was substantially more effective than conventional writing instruction in promoting the learners' academic writing performance.

The significant improvement in the experimental group can first be explained by the cognitively demanding and multidimensional nature of writing itself. Academic writing requires writers to simultaneously coordinate idea generation, linguistic encoding, organization, rhetorical decisions, monitoring, and revision. Cognitive models conceptualize writing proficiency as an integrated system in which multiple processes interact rather than as the simple accumulation of grammatical and lexical knowledge (1). Working-memory limitations can make this coordination particularly difficult for developing writers, especially when lower-level processes are insufficiently automatized and consume resources that could otherwise be allocated to planning and organization (2). Text-based instruction may have reduced this processing burden by breaking writing into explicit and manageable stages. Rather than requiring learners to solve all aspects of the writing task simultaneously, the intervention guided them through task analysis, examination of models, idea organization, collaborative construction, and independent writing. Such scaffolding plausibly freed cognitive resources for higher-order decisions and helped students establish a clearer representation of how successful academic texts are produced.

The findings are also consistent with research emphasizing the importance of explicit strategy instruction in writing. Graham's synthesis of writing strategy instruction showed that directly teaching learners how to approach planning, drafting, revising, and other compositional processes can lead to meaningful improvements in writing performance (16). Similarly, the broader meta-analytic evidence on second-language strategy instruction indicates that deliberate instruction in learning strategies can positively influence L2 achievement (17). Among intermediate-proficiency ESL learners, systematic writing strategy instruction has also been found to improve writing outcomes (25). The present findings therefore add support to the argument that successful writing strategies should not be assumed to emerge spontaneously. When the processes employed by proficient writers are explicitly modeled, practiced, and gradually transferred to learners, students are better positioned to regulate their own composing behavior.

The improvement observed after text-based instruction may further be explained by enhanced metacognitive awareness. Effective writers need to understand not only what they intend to communicate but also how they are approaching the task, whether the strategies they use are working, and what adjustments are required. Research among Iranian EFL learners has demonstrated a meaningful association between metacognitive awareness of writing strategies and writing performance (10). Likewise, metacognitive strategy use has been shown to play an important role in L2 writing assessment, indicating that planning, monitoring, and evaluating are integral components of effective written performance (11). The instructional framework used in the present study required learners to analyze tasks and genres, organize ideas, observe textual patterns, and evaluate the applicability of strategies before undertaking independent production. These processes can foster the transition from relatively unreflective composing to more consciously regulated writing. The participants' interview comments support this interpretation, as several learners explicitly stated that becoming familiar with the stages of the writing process helped them analyze the task, set goals, organize their ideas, and approach writing more systematically.

The results may also be interpreted through the relationship between writing self-regulation and perceived competence. EFL writers who possess stronger self-efficacy tend to make greater use of self-regulated writing strategies, suggesting that confidence and strategic behavior are mutually reinforcing aspects of writing development (12). Text-based instruction can potentially support this process by reducing uncertainty about what to do at different points in composition. When learners are provided with concrete models and explicit stages, writing becomes less of an undefined task and more of a sequence of manageable decisions. The participants' qualitative responses reflected this function of the intervention. Learners described the framework as helping them understand the "whole process," apply familiar linguistic knowledge more appropriately, and write about topics more easily after analyzing the task and following the prescribed stages. This increased procedural clarity may have contributed to greater confidence, more sustained engagement, and ultimately stronger writing performance.

A further explanation concerns the genre-sensitive nature of the instructional approach. Genre-based and text-based pedagogies make the organizational and linguistic conventions of different texts explicit, allowing learners to understand how communicative purposes are realized through particular structural patterns. Previous research has shown that the Genre-Based Approach can facilitate students' writing of recount texts (23) and improve the production of descriptive texts by providing systematic guidance regarding generic structure and language use (24). These findings align closely with the current study, in which the learners worked with different writing genres and analyzed their textual organization before constructing their own texts. The advantage of this approach is that learners are not simply asked to imitate surface features. Rather, they are encouraged to recognize how a genre organizes information, how ideas progress across a text, and what linguistic resources are appropriate for the communicative purpose. This explicit genre knowledge may explain the experimental group's improved ability to organize and develop written responses.

The present results are additionally compatible with evidence concerning differences in writing knowledge between stronger and weaker writers. More skilled writers tend to possess richer knowledge about writing and demonstrate greater control over the processes involved in producing effective texts (5). Developmental work similarly indicates that writers' knowledge of writing conventions and procedures is related to the quality of their written performance (6). Text-based instruction may contribute to such knowledge development because it makes otherwise implicit features of successful texts available for systematic examination. Through model-text analysis, learners can notice how paragraphs are structured, how ideas are linked, how discourse develops, and how rhetorical goals are realized. The significant posttest gains in the experimental group can therefore be interpreted partly as an outcome of increased declarative and procedural knowledge about academic text construction.

The qualitative findings further strengthened the quantitative evidence. Interview coding revealed that positive perceptions of effectiveness were dominant, accounting for approximately 25 of the 34 coded concepts, while only five coded instances concerned challenges. Learners particularly valued brainstorming, organizing ideas and paragraphs, task and genre analysis, and working through the stages of academic writing. This convergence between measurable improvement and learners' subjective experiences is important because it suggests that the treatment was not merely statistically effective; learners also recognized practical changes in how they approached writing. Their perceptions are compatible with strategic models of language learning in which strategies are regarded as purposeful actions selected to accomplish particular task goals (13). They also support the argument that strategy instruction becomes more meaningful when strategies are contextualized within authentic tasks rather than taught as decontextualized techniques (14).

The emphasis participants placed on task analysis, organization, and movement from guided activity to independent production is also consistent with empirical research on L2 composing processes. Sasaki's work on EFL writing processes demonstrated that instruction can influence how learners plan, including movement toward more global forms of planning (21). This is particularly relevant to the current findings because some participants contrasted their previous tendency toward relatively unrestricted or unplanned writing with the more systematic procedures introduced during the intervention. By encouraging learners to identify the nature and communicative demands of the task before beginning to write, text-based instruction may have shifted attention away from sentence-by-sentence production toward higher-level organization. Such change is important because proficient writing depends on control of the entire text rather than exclusive concentration on local language accuracy.

Lexical and linguistic processes may have benefited from the same instructional structure. Second-language writing often places considerable pressure on lexical retrieval because learners must find words that accurately represent their intended meanings while maintaining grammatical and rhetorical appropriateness. Research on lexical retrieval in L2 writing shows that learners employ a range of strategies to compensate for lexical difficulties and sustain text production (22). By providing model texts and developing background knowledge before independent writing, text-based instruction may have supplied learners with accessible lexical resources and contextualized examples of appropriate language use. Evidence that text-based forms of instructional support can contribute to L2 vocabulary learning further supports the usefulness of meaningful textual input for language development (26). Accordingly, the stronger posttest writing of the experimental group may reflect not only improved organization but also more effective access to and deployment of linguistic resources.

The findings also resonate with research from other domains of language learning showing that metacognitive and strategy-oriented instruction can improve performance when learners are explicitly taught how to approach complex tasks. Metacognitive strategy instruction has enhanced EFL listening performance (20), while explicit strategy instruction has also benefited lower-intermediate foreign-language listeners (18). Longitudinal evidence further demonstrates that language learners' strategy use evolves alongside changes in task competence (19). Although writing differs from listening, these studies support a common instructional principle: effective performance is facilitated when learners gain strategic knowledge concerning how to engage with demanding language tasks. The present results extend this principle to text-based academic writing and demonstrate that the combination of textual models, explicit analysis, guided practice, and independent production can have a substantial effect within an Iranian undergraduate EFL context.

At the same time, the interview findings show that text-based instruction was not uniformly effortless for learners. Participants reported that task and genre analysis could be demanding and time-consuming, that independently applying the framework remained difficult, and that further practice was needed to use the stages more comfortably. These difficulties are understandable because strategic competence develops gradually. Learning a new instructional framework initially imposes

additional cognitive demands: students must attend not only to the writing task itself but also to procedures that are not yet habitual. Strategy research has emphasized that learners need to understand when and how to select strategies rather than simply being exposed to them (13, 15). Thus, the challenges described by participants do not contradict the positive quantitative results; instead, they suggest that the process of developing strategic independence requires repeated practice until the instructional stages become more fluent and adaptable.

The current results are also relevant to contemporary discussions surrounding academic writing in an era of generative artificial intelligence. AI-assisted writing tools can provide rapid linguistic suggestions, revision assistance, and feedback, and their use has expanded considerably within higher education (29). PhD scholars have likewise reported both perceived benefits and ethical concerns regarding the use of AI tools for academic writing (30), while regulatory scholarship has emphasized questions of authorship, accountability, transparency, and responsible use (31). Teachers are similarly considering how AI may be integrated into the assessment of and feedback on EFL writing (32). Against this background, the present findings highlight the continuing importance of developing learners' own textual and metacognitive competence. Students who understand genre structure, task requirements, organization, and revision principles are better positioned to critically evaluate external feedback—including AI-generated suggestions—rather than accepting it without informed judgment.

Overall, the quantitative and qualitative findings provide convergent evidence supporting the effectiveness of text-based instruction for academic writing development. The experimental group demonstrated a substantial and statistically significant improvement, whereas the control group showed no comparable change, and learners themselves predominantly perceived the intervention as useful for task analysis, brainstorming, organizing ideas, understanding genres, and managing the stages of writing. The findings can be explained by several mutually reinforcing mechanisms: reduction of cognitive complexity through staged instruction, enhancement of metacognitive awareness, explicit development of writing strategies, increased genre knowledge, stronger self-regulatory control, and provision of textual and linguistic models. Taken together, the results support the view that academic writing instruction is more effective when learners are taught not only what an acceptable text should look like but also how to analyze, construct, monitor, and independently regulate the process through which such a text is produced.

Several limitations should be considered when interpreting the findings of the present study. First, the sample consisted of only 38 undergraduate TEFL students from a single university, which limits the generalizability of the findings to other educational institutions, age groups, proficiency levels, and EFL populations. Second, because institutional conditions prevented random assignment, intact classes and convenience sampling were used, meaning that unmeasured pre-existing differences between the groups cannot be completely excluded despite their comparable pretest performance. Third, the instructional period consisted of only six sessions, which was sufficient to identify short-term improvement but did not permit evaluation of the durability of the effects. Fourth, the qualitative component involved only six volunteers from the experimental group, and voluntary participation may have resulted in greater representation of learners who held stronger views about the intervention. Finally, writing performance was assessed through relatively short timed compositions, which may not fully represent the more extensive research, revision, source integration, and recursive drafting processes involved in authentic university academic writing.

Future studies should replicate the investigation with larger and more heterogeneous samples recruited from multiple universities and different EFL educational contexts. Randomized controlled designs could provide stronger evidence of causal effectiveness, while studies involving learners at elementary, intermediate, and advanced proficiency levels could determine whether text-based instruction produces different effects according to existing linguistic competence. Researchers should also consider extending the intervention over an entire semester and incorporating delayed follow-up assessments to determine

whether improvements are retained after formal instruction ends. More extensive qualitative investigations involving classroom observations, learner diaries, stimulated-recall interviews, and analysis of successive writing drafts could clarify how learners actually use the instructional stages during composition. Future research could additionally examine individual components of writing performance, such as organization, coherence, grammatical accuracy, lexical diversity, genre control, and revision quality, rather than relying solely on overall scores. Comparative studies could also investigate text-based instruction alongside process writing, genre-based instruction, metacognitive strategy training, peer-feedback approaches, and carefully designed AI-assisted writing instruction.

EFL teachers and curriculum designers may consider incorporating text-based instructional principles systematically into academic writing courses rather than relying primarily on topic assignment, grammar correction, and evaluation of finished products. Teachers can begin a writing unit by building relevant background knowledge, presenting carefully selected model texts, guiding students in identifying genre purposes and organizational patterns, and explicitly demonstrating how writers plan and develop ideas. Joint construction, peer discussion, brainstorming, and guided analysis can then be used as transitional stages before learners complete independent writing tasks. Because some students may initially experience task and genre analysis as demanding, teachers should provide repeated practice and gradually reduce support instead of expecting immediate independent mastery. Writing assessment can also be aligned with instruction by providing feedback on planning, organization, genre awareness, revision, and strategic decision-making in addition to grammar and vocabulary. Ultimately, the framework should be implemented flexibly so that learners progressively internalize the stages and learn to select, adapt, and combine them according to the demands of different academic writing tasks.

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Authors' Contributions

All authors equally contributed to this study.

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The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adhered in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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