Original Research

Infusing Reflective Learning into Process Writing Instruction: Effects on Grade 11 Students' Writing Strategies Use and Self-efficacy at Kumsa Moroda Secondary School

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Abstract	Article Information
The main objective of this study is to research the effects of infusing reflective learning into process writing instruction on secondary school students' use of process writing strategies and self-efficacy in paragraph writing. Two intact classes of grade 11 students participated in the study. A concurrent quasi-experimental design is employed. A purposive sampling technique is used to choose these two groups, and the lottery sampling technique is utilized to assign them to the experimental and control groups. As data collection instruments, pre- and post-tests, a self-efficacy questionnaire, and semi-structured interviews were employed. An independent samples t-test was employed to analyze the data, and mean, standard deviation, and inferential statistics were employed to report the data. The findings show that students' usage of planning, drafting, revising, and editing techniques was significantly improved because of infusing reflective learning into process writing instructions, and they also have developed higher levels of writing self-efficacy. The study concludes that infusing reflective learning into process writing instruction is an effective pedagogical instructional technique in improving students' use of process writing strategies and self-efficacy toward writing. It suggests that secondary school students could be encouraged to use reflective learning in process writing instructions during paragraph-writing tasks.	*Corresponding Author: Gebisa Tefera E-mail: gebisatefera2014@gmail.com

INTRODUCTION

One of the major goals of teaching English as a foreign language is to improve students' writing skills because writing skills are essential for students' academic success, and it also supplements other language skills and components. For instance, writing activities can reinforce vocabulary, speaking, listening, reading, and grammar skills (Deti et al., 2023). Besides, writing skills are 21st-century essential skills that all students at all levels of education need to develop. Students should be

motivated to reflect on the stages of process writing while they write a paragraph. It helps them to reinforce their cognitive competence, linguistic competence, and sociolinguistic competence. However, for many EFL secondary school students across the globe, writing is a challenging and difficult skill for different reasons. It involves, for example, a lack of ideas, poor organizational skills, a lack of vocabulary, grammar errors, and poor mechanics (Aminah & Supriadi, 2023; Nurlatifah

& Yusuf, 2022; Riadil, 2023). Students' insufficient knowledge of the process writing strategy use is raised as a major challenge for their poor performance in writing skills (Chicho, 2022). The strategies of process writing are the conscious actions and methods that should be developed by the students of secondary schools to cope with paragraph writing tasks. The strategies entail planning (e.g., brainstorming and outlining), writing, rewriting, and proofreading. Good writing techniques are necessary in order to create coherence in writing. Studies have demonstrated the significance of employing efficient writing techniques, which significantly impact students' writing abilities (Graham, 2008; Han, 2017; Harris et al., 2013). Moreover, writing strategies are essential for EFL students to improve their writing proficiency and writing conventions.

Further, secondary school students' low self-efficacy is another factor that highly contributes to poor writing skill performance. For instance, studies noted that (De Vleeschauwer, 2023; Setyowati et al., 2024; Takarroucht, 2022) low self-efficacy in writing is the determinant of poor performance in the EFL students' context. Students who have low self-efficacy are less motivated to practice writing skills. As a result, they develop less confidence in paragraph writing. According to Karafil and Oguz (2022), if students have high self-efficacy, they have confidence in paragraph writing activities and vice versa.

When students join secondary school, the need for writing skills increases. They are expected to take note from their teachers' teaching, make notes from their reading, and write different assignments; all can be done through writing skills (Geng et al., 2022).

Like many international and national EFL students, Kumsa Moroda secondary school students are unable to use process writing strategies effectively. They have trouble structuring their ideas, creating coherence and unity, and successfully editing their manuscripts. These difficulties frequently result from the use of product approach writing strategies, which place more emphasis on the finished written output than the steps required in creating it. The majority of Kumsa Moroda Secondary School students rarely apply the process of writing instructions, which are meant to enhance students' writing through planning, drafting, rewriting, and editing exercises (Gashaye & Muchie, 2021). Similarly, international studies claim that many secondary school students struggle to write effectively. They might write several drafts but neglect to critically reflect and assess their ideas.

Despite the curriculum's emphasis on writing for academic success, a large number of Ethiopian secondary school students consistently exhibit deficiencies in the areas of idea generation, organizing supporting details, vocabulary selection, accurate grammar use, cohesive device use, meaningful revision, and clarity (Deti et al., 2023). Writing instruction is still mostly product-oriented in many Ethiopian EFL classes, with teachers concentrating on editing finished manuscripts rather than teaching students the processes of the writing strategies. They approach writing tasks with anxiety, fear of errors, and limited belief in their ability to improve. Low confidence reduces motivation, discourages revision, and leads to superficial writing.

Cognizant of these problems, many international and local language researchers investigated the implementation of process writing instruction into the pedagogical approaches (Graham & Sandmel, 2011; Moon, 2004). The results of their findings showed that students rarely apply process writing instruction while they are writing paragraphs, and as a result, they perform poorly in writing. Despite the recognized value of infusing reflective learning into process writing instructions, few studies have been conducted on the effects of infusing reflective learning into process writing instructions at secondary school. While process-oriented writing teaching can help with some of these issues, it cannot ensure better method utilization until students actively consider their choices and advancement (Adula, 2018; Hailemariam & Gebeyehu, 2020; Ho et al., 2020). Though there can be a number of determinants of the development of students' writing skills, it can

be greatly influenced by the teaching approaches; what goes on in the classroom between teachers and students (Nunan, 1991).

Therefore, the underutilization of the reflective method in learning writing is blamed for the students' failure to employ process writing strategies effectively. It has been noted that product-oriented instruction is prioritized over the development of writing techniques in many schools. According to the current researcher's hypothesis, infusing reflective learning into process writing instruction can help students identify their areas of weakness, evaluate their writing progress, and develop self-confidence. There is still a lack of thorough research on how infusing reflective learning into process writing instruction improves students' usage of paragraph writing strategies and boosts their self-efficacy in the Ethiopian secondary school. Many Ethiopian secondary schools have trouble structuring their thoughts. Especially, Kumsa Moroda Secondary School grade 11 students are unable to write a coherent paragraph in English. They are reluctant towards paragraph writing. Thus, by investigating whether infusing reflective learning into process writing instruction might improve students' use of process writing strategies and their writing self-efficacy during paragraph writing, the study aims to minimize the gap and provide empirical evidence.

Statement of the problem

Writing skills are one of the essential language skills that secondary school students need to develop. It plays an important role in helping students express their ideas, organize their thoughts, and communicate information clearly. Besides, through writing, students can demonstrate their understanding of different subjects and share their opinions in a structured way. Therefore, developing writing skills is very important for academic success.

However, for Ethiopian secondary school students who learn English as a Foreign Language (EFL), writing is often considered the most difficult skill to master. Particularly, Kumsa Moroda secondary school students face several problems when they try to write in English, such as the inability to choose appropriate content, lack of organization of ideas, limited vocabulary knowledge, poor grammatical knowledge, and difficulties with language mechanics. The problem of most Ethiopian secondary school students is the inability to compose coherent paragraphs (Deti et al., 2023; Adula, 2018). Consequently, they make writing a complicated process. This challenge may cause anxiety and discouragement, and it can demoralize students to write. Students can therefore lose confidence in their writing capability (Mogesse et al., 2025).

Adula (2018) investigated the implementation of process writing instruction at Jimma University's specialized secondary school and reported students' poor implementation of process writing instruction as a reason for students' difficulty in writing. In the same manner, Hailemariam & Gebeyehu (2020) assessed the implementation of the process approach to teaching writing skills and reported that students are poor at using process writing instruction while writing paragraphs. However, few previous studies have dealt with the effects of infusing reflective learning into process writing instructions on students' process writing strategy use and self-efficacy towards paragraph writing.

Therefore, the current researchers hypothesized that infusing reflective learning into process writing instructions may improve secondary school students' use of process writing strategies and help them develop self-confidence in paragraph writing. Additionally, it can help students identify their areas of strength and weakness and force them to study independently, which may improve the secondary school students' process of using writing strategies and self-efficacy when composing paragraphs.

Research questions

1. Does infusing reflective learning into process writing instructions improve students' use of process writing strategies?
2. To what extent does infusing reflective learning into process writing instruction

help students develop self-efficacy in paragraph writing?

3. Is there any linear relationship between the use of process writing strategies and self-efficacy in paragraph writing?

MATERIALS AND METHODS
Research Design

A concurrent quasi-experimental pre- and post-test design was employed to assess the effects of infusing reflective learning into process writing instructions on secondary school students' process writing strategy use, self-efficacy in writing, and the correlation between the writing strategy and self-efficacy in writing. Two intact grade 11 classes were selected: one as the experimental group and the other as the control group. This design allowed comparison of the groups before and after the training (Creswell et al., 2004).

Setting of the study

The study was conducted at Kumsa Moroda Secondary School, located in the East Wollega Zone of the Oromia Regional State. The school was selected because it consists of students from rural kebeles and Nekemte Town, which enables the researcher to clearly identify the students' paragraph writing challenges.

Participants and Sampling Techniques

The subjects of the study were Kumsa Moroda Secondary School Grade 11 students. A purposive sampling method was utilized to choose two intact sections of grade 11. A purposive sampling method was employed to choose two intact sections of grade 11. Both groups had similar academic backgrounds and prior writing experience, as confirmed by pre-test results, and it is also a level that marks critical points in developing the paragraph writing skills of the students, as it is a transitional level to tertiary-level education, which requires a good mastery of writing skills. The lottery sampling technique was used to assign these two sections to the experimental and control groups. This technique increases validity and experimental comparison in the sense that the

assignment of sections into the experimental and the control groups was made randomly without regard to any existing traits in the sections.

Research Instruments
Paragraph Writing Test

This study's primary data collection instrument was a paragraph writing test aimed at assessing students' use of planning, drafting, revising, editing, and publishing strategies while writing paragraphs. This instrument is used to measure the extent to which secondary school students are able to use process writing instruction during paragraph writing, which was borrowed from Sundari and Febriyanti (2022).

Writing Self-Efficacy Questionnaire

The second data collection instrument was a writing self-efficacy questionnaire, which was aimed at evaluating students' confidence in paragraph writing. A self-efficacy survey questionnaire was given to participants of the study before and after the instructional intervention. The self-efficacy survey questionnaires consist of a pre-self-efficacy questionnaire and a post-self-efficacy questionnaire that were given to both the experimental and control groups. A pre-self-efficacy survey questionnaire was used to establish a baseline comparison of the students' self-efficacy prior to instructional intervention and ensure that both groups have equal self-efficacy in paragraph writing. Following the intervention, a post-self-efficacy survey questionnaire was given to measure the specific effects of reflective learning infused into process-oriented writing instruction on the self-efficacy of the experimental group. It consists of 11 items with five Likert scale responses, which were strongly disagree, disagree, moderately disagree, agree, and strongly agree. The answers were in the strongly disagreeing to strongly agreeing range. The items were meant to measure their confidence in paragraph writing tasks. The items were adapted from Karafil & Oguz (2022).

A semi-structured interview

The experimental group was interviewed in a semi-structured manner to supplement quantitative data

and offer better insight into the perceived impact of reflective learning infused into process-writing instructions on the utilization of process-writing strategies and self-efficacy of paragraph writing amongst students. A sample size of five (5) students is selected. The participants were sampled purposively on the basis of their active participation in the class and their ability to specify their learning experiences. Their intuitions were essential to the effects of introducing reflective learning to process writing instructions on the process writing strategy use and their self-efficacy with reference to paragraph writing. In addition, it investigates the notion of beliefs held by the students regarding the application of reflective learning injected into process writing instructions in paragraph writing exercises. The semi-structured interview items were adapted from Abbas (2016).

Procedures of the study

A systematic approach was used in the data collection and data analysis process. First, pre-test and pre-self-efficacy questionnaires were used to find baseline equivalence. Creating initial equivalence was critical in order to put any differences found after the intervention on the instructional process, as opposed to differences existing at baseline among the groups. The experimental group was given reflective learning infused into process writing instruction training, and the control group was taught using the conventional instructional methodology. Post-test and post-self-efficacy questionnaires were done after the intervention. Finally, a semi-structured interview was held with the selected students of the experimental group to reflect their perception of reflective learning, difficulties in it, and its impact on writing paragraphs and the confidence of writing to the students.

Data Analysis

SPSS version 27 was run to carefully analyze the data collected through pre- and post-tests to check accuracy, objectivity, and statistical reliability. First of all, the pre-test scores were checked to identify the baseline similarity in paragraph writing performance of the experimental and control groups. The post-test scores were also analyzed after the instructional intervention, both to assess the extent of improvement in paragraph writing and specifically for the experimental group that was trained on reflective learning infused into process writing instruction. In order to investigate the statistical significance of the differences in the performance of the two groups, an independent samples t-test was computed to compare the post-test performance of the experimental and control groups. Besides the quantitative data, the qualitative data acquired through the semi-structured interview were also collected. The thematic analysis of an interview with selected students in the experimental group was conducted. The self-efficacy questionnaire data analysis was also conducted. Self-efficacy questionnaires were employed to collect data on students' confidence in their ability to use process writing strategies, and an independent samples t-test was run to analyze the results.

Ethical considerations

Information should be collected in an ethical manner. The rights of the participants in a study must be protected. Obtaining consent is not only a formal requirement but also an important ethical responsibility. The privacy of the participants should be maintained by using numbers instead of names on the returned instruments and by keeping all information confidential. Therefore, the current researcher got informed consent from the subjects after clearly explaining the purpose of the study.

Validity and Reliability

In order to achieve validity, subject specialists and experienced EFL teachers reviewed the test to confirm that it represented components of paragraph writing, and before the main administration, the test was pilot-tested with small groups of students to check whether the instructions were understandable and the test appeared appropriate and fair. The initial analysis was to measure the understandability of the process writing strategies application by the students in paragraph writing. Through the knowledge

acquired during the pilot study, the necessary adjustments were made to remove any uncertainties and also to correct the test item that would enable the pre-test and the post-test to be correct in applying the use of process writing strategies appropriately and the conceptual alignment to the goals of the study.

In testing the internal consistency of the use of process writing strategies, the alpha of Cronbach's alpha was calculated in the pilot study, and the reliability coefficient was 0.71, which showed a high level of reliability. Moreover, to enhance procedural stability and reduce the chances of administrative bias, the participants were trained within a 40-minute period in English to facilitate procedural consistency. These strategies, in combination, augmented the reliability and procedural validity of the instrument of the study, in turn boosting the accuracy of the research findings in general.

RESULTS AND DISCUSSIONS
Results

This section provides a detailed analysis and interpretation of the data collected throughout the study for both the experimental and control groups. The discussion focuses on the foremost results that highlight comparative performance and current trends and assesses the effect of infusing reflective learning into process writing instruction on students' process writing strategy use and self-efficacy towards paragraph writing. In doing so, the study reflects the pedagogical implications of infusing reflective learning into process writing instruction during writing in general and during paragraph writing in particular.

This section also presents potential directions for future research and pedagogical innovation. A detailed examination of the collected data; the objective is to examine the effect of infusing reflective learning into process writing instruction, whether it positively affects secondary school students' use of process writing strategy and develops high self-efficacy towards paragraph writing, or whether other variables may have contributed to the observed outcomes.

Table 1

Pre-test and Independent Sample T-test Results for the Experimental vs. Control Groups.

Item	Groups	N	Mean	Std.	t-value	P-value	DF
Planning	Exp.	30	2.0333	.71840	-.901	.371	58
	Cont.	30	2.2000	.71438			
Drafting	Exp.	30	2.1667	.69893	-1.48	.142	58
	Cont.	30	2.4000	.49827			
Revising	Exp.	30	2.1333	.68145	-1.52	.133	58
	Cont.	30	2.3667	.49013			
Editing	Exp.	30	1.9000	.80301	.495	.622	58
	Cont.	30	1.8000	.76112			
Total Grand Mean	Exp.	30	2.0600	.41072	-.979	.322	58
	Cont.	30	2.1600	.38020			

Table 1 reveals the results of an independent-samples t-test comparing the experimental and control groups' process writing strategies used in the pre-test. The findings showed there were no significant differences in planning, drafting, revising, editing, or publishing in the two groups. Whereas slight differences were found in the mean scores, none of them was statistically significant. The overall mean scores comparison also indicated there was no statistically significant variation between the experimental group (M = 2.06, SD = 0.41) and the control group (M = 2.16, SD = 0.38), t (58) = -0.98, p =.322.

Table 2

Post-test Results of an Independent Samples T-Test for the Exp. vs. Control Groups

Item	Groups	N	Mean	Std. D	T-value	P-value	Effect size	Df
Planning	Exp.	30	2.9333	.52083	3.779	<.001	.976	58
	Cont.	30	2.4333	.50401				
Drafting	Exp.	30	2.9667	.49013	3.364	<.001	.869	58
	Cont.	30	2.5333	.50742				
Revising	Exp.	30	2.9000	.54772	3.434	<.001	.878	58
	Cont.	30	2.4333	.50401				
Editing	Exp.	30	2.9667	.55605	3.638	<.001	.939	58
	Cont.	30	2.4667	.50742				
Publishing	Exp.	30	2.8333	.53067	2.994	<.004	.773	58
	Control	30	2.4333	.50401				
Total grand mean	Exp.	30	2.9200	.27593	5.744	<.001	1.483	58
	Cont.	30	2.4600	.34099				

Table 2 indicates the independent samples t-test results of the experimental and control groups in process writing strategies used during paragraph writing. The results showed that the experimental groups outperformed the control group in all process writing strategies used. And there also existed a significant difference between the experimental and control groups. The total grand mean revealed a statistically significant difference between the experimental (M = 2.92, SD = 0.28) and control groups (M = 2.46, SD = 0.34), t(58) = 5.74, p < .001, d = 1.48, respectively. This shows that the training was successful in enhancing the Experimental group process writing strategies are used.

Table 3

Pre-Self-efficacy Results of an Independent Samples T-Test for the Exp.vs. Cont. Groups

Item	Group Statistics							
	Groups	N	Mean	Std. D	T-value	p-value	Effect size	DF
I can choose my own topic to write a paragraph.	Exp.	30	2.30	.46609	-1.06	.292	-.275	58
	Cont.	30	2.43	.50401				
I can write an outline before I start writing.	Exp.	30	2.46	.50742	.000	1.000	.000	58
	Cont.	30	2.46	.50742				
I write a topic sentence that contains the topic and controlling idea.	Exp.	30	2.33	.47946	-0.787	.434	-.203	58
	Cont.	30	2.43	.50401				
I generate ideas before writing a paragraph.	Exp.	30	2.40	.4983	-1.55	.125	.403	58
	Cont.	30	2.60	.4983				
I can jot down supporting sentences that provide details.	Exp.	30	2.40	.49827	.261	.795	.067	58
	Cont.	30	2.36	.49013				
I can use appropriate vocabulary in my writing.	Exp.	30	2.26	.44978	-1.08	.281	-.281	58
	Cont.	30	2.40	.49827				

Table 3 continues.

Item	Groups	N	Mean	SD	t-test	p-value	Effect	DF
I use accurate grammar when writing paragraphs.	Exp.	30	2.56	.50401	-.519	.605	.134	58
	Cont.	30	2.63	.49013				
I use punctuation marks correctly in my paragraph writing.	Exp.	30	2.50	.50855	1.588	.118	.410	58
	Cont.	30	2.30	.46609				
I can write a concluding sentence to summarize my writing.	Exp.	30	2.40	.49827	-.769	.445	-.197	58
	Cont.	30	2.50	.50855				
I can evaluate my writing to avoid errors.	Exp.	30	2.40	.49827	-.258	.798	-.067	58
	Cont.	30	2.43	.50401				
I ask my friends for comments to improve my writing.	Exp.	30	2.40	.49827	-.258	.798	-.067	58
	Cont.	30	2.43	.50401				
Pre-self-efficacy grand mean	Exp.	30	2.40	.18902	-1.144	-.257	-.295	58

Table 3 shows the pre-self-efficacy questionnaires' outcomes of an independent samples t-test that compares the experimental (N = 30) and control (N = 30) groups towards paragraph writing. The result did not reveal any statistically significant variations between the two groups in all items of the self-efficacy questionnaires. Besides, the grand mean of the experimental group was 2.40 (SD = 0.19), and the grand mean of the control group was 2.45 (SD = 0.16), t (58) = -1.14, p =.257. The effect size value was low (Cohen's d = -0.295), meaning that the practical significance was low.

Table 4 indicates the outcome of the post self-efficacy questionnaire with an independent samples t-test. The test treats the experimental group and the control group in terms of the responses given by the students of secondary schools to questions about their self-efficacy in paragraph writing. More writing topic selection skills were reported by the experimental group (M = 3.80, SD = 0.41) compared to the control group (M = 2.37, SD =

0.49), t (58) = 12.33, p < .001, d = 3.18. Writing clear subject sentences, creating and organizing ideas, writing supporting phrases, and outlining before writing all showed similar significant differences, with t-values ranging from 7.17 to 9.02 and substantial effect sizes (d = 1.85–2.33). In terms of vocabulary utilization, grammar correctness, punctuation, composing ending sentences, self-evaluation, and peer assessment, the experimental group also did better than the control group. The effect sizes ranged from 1.51 to 1.97, and all comparisons were statistically significant at p < .001, suggesting significant practical differences across groups. t(58) = 7.83, p < .001, d = 2.02 Overall, the experimental group's post-self-efficacy grand mean (M = 3.54, SD = 0.20) was higher than the control group's (M = 2.52, SD = 0.14). Based on these findings, students in the experimental group showed a significant increase in writing self-efficacy.

Table 4

Post Self-efficacy Results of an Independent Samples T-test for Exp. Vs. Cont. Groups

Group Statistics								
Item	Groups	N	Mean	SD	t-test	p-value	Effect	DF
I can choose my own topic to write a paragraph.	Exp.	30	3.800	.4068	12.32	<.001	3.182	58
	Cont.	30	2.366	.4901				

Table 4 continues.

Item	Group	N	Mean	SD	t	Sig.	Mean diff.	df
	Exp.	30	3.533	.5074				
I can write an outline before I start writing.	Cont.	30	2.533	.5713	7.16	<.001	1,851	58
I write a topic sentence that contains the topic and controlling idea.	Exp.	30	3.600	.4982				
	Cont.	30	2.433	.5040	9.016	<.001	2.328	58
I generate ideas before writing a paragraph.	Exp.	30	3.533	.5074				
	Cont.	30	2.467	.5074	8.142	<.001	2.102	58
I can jot down supporting sentences that provide details.	Exp.	30	3.566	.5040				
	Cont.	30	2.533	.5074	7.914	<.001	2.043	58
I can use appropriate vocabulary in my writing.	Exp.	30	3.500	.5085				
	Cont.	30	2.566	.5040	7.140	<.001	1.844	58
I use accurate grammar when writing paragraphs.	Exp.	30	3.500	.5723				
	Cont.	30	2.566	.5040	6.703	<.001	1.731	58
I use punctuation marks in paragraph writing.	Exp.	30	3.533	.5074				
	Cont.	30	2.533	.5074	7.63	<.001	1.971	58
I can write a concluding sentence to summarize my writing.	Exp.	30	3.466	.5074				
	Cont.	30	2.466	.5074	7.633	<.001	1.971	58
I can evaluate my writing to avoid errors.	Exp.	30	3.433	.5040				
	Cont.	30	2.566	.5040	6.66	<.001	1.720	58
I ask my friends for comments to improve my writing.	Exp.	30	3.433	.5683				
	Cont.	30	2.633	.4901	5.839	<.001	1.508	58
Post-self-efficacy grand mean	Exp.	30	3.536	.2002	7.833	<.001	2.022	58

Table 5 indicates the outcome of the Pearson product-moment correlation between paragraph writing self-efficacy and process writing strategies use. The outcome revealed that the two variables had a rather positive relationship (r =.581, N = 60), where the paragraph writing strategies used correlate with the self-efficacy. The relationship was significant at a level of 0.01 (p < .01). This result implies that students were more willing to use the process writing strategies when they said they were confident in their competencies.

Table 5

Post-Test Correlation between Self-Efficacy and Paragraph Writing Strategies Use

Item	Correlations	Post self -efficacy grand mean data.	post-paragraph writing test Grand mean data
Writing self-efficacy	Pearson Correlation	1	.581[**]
	Sig. (2-tailed)		.000
	N	60	60
process writing strategies use	Pearson Correlation	.581[**]	1
	Sig. (2-tailed)	.000	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

Discussions

The results of the intervention show statistically significant variation. The experimental group demonstrated significant improvement in using process writing strategies and developed high self-efficacy towards paragraph writing when compared to the control group. As indicated in the grand mean scores of the experimental and control groups in paragraph writing strategies use (M=2.92) and (M=2.46), respectively, there are great differences between groups. Further, at P<.001, the outcome of an independent samples t-test between groups indicates a statistically significant distinction between groups. The experimental group started to use infusing reflective learning into process writing instruction during paragraph writing, and infusing reflective learning into process writing instruction helped them develop higher self-efficacy in paragraph writing. That means the experimental group students improved in planning, revising, editing, and self-monitoring skills, which enhanced the quality of their paragraph writing.

In addition, students' self-efficacy increased, indicating greater confidence and persistence in paragraph writing tasks. In order to help the experimental group in practicing evaluating their use of process writing strategies, a reflection-guided question was infused into each stage of the process writing strategies. Research by Abbas (2016), Deti et al. (2023), and others has shown that students who received reflective learning-infused process writing instructions improved paragraph writing performance. Our results are in line with those findings.

The study's results suggest that EFL students may benefit from infusing reflective learning into process writing instruction, which could, in turn, improve students' paragraph writing performance and enable the development of self-confidence, according to this study and the related studies cited earlier.

Interviewees in the experimental group also confirmed that before the intervention, they were unaware of reflective learning-infused process writing strategies and practices, and how to apply them during paragraph writing tasks. They revealed that the training helped them improve the use of process writing strategies and develop self-efficacy in paragraph writing. Thus, the results of the interview data analysis coincide with those of the researchers cited earlier.

CONCLUSIONS

The objective of this study was to examine the impacts of infusing reflective learning into the process writing instruction of secondary school students' process writing strategy use and their self-efficacy in paragraph writing. Based on the results obtained, several conclusions can be drawn. First, the findings indicate that infusing reflective learning into process writing instruction significantly improves the use of process writing strategies and their self-efficacy towards paragraph writing. Secondary school students were able to effectively apply planning, drafting, revising, editing, and publishing strategies during paragraph writing tasks, and they followed a more methodical approach to each step of the writing process. Second, when process writing was taught through reflection learning, self-efficacy among students in paragraph writing improved. This strategy boosted students' self-efficacy with regard to their writing capacity, enhanced their desire to accomplish writing activities, and made them struggle whenever they encountered challenges. Finally, the results show a positive linear relationship between students' use of process writing strategies and their self-efficacy. The effectiveness of the intervention is also confirmed by the higher post-test and self-efficacy scores of the experimental group compared with those of the control group, as well as by supporting evidence from the semi-structured interviews.

Recommendations

In light of the study's findings, students showed significant improvement in their use of process writing strategies and developed higher self-efficacy in paragraph writing when reflective learning was integrated into process writing instruction. Therefore, the following recommendations are proposed to improve

secondary school students' use of reflective learning, infused into process writing strategies, and to help them develop stronger self-efficacy in paragraph writing.

Secondary school EFL teachers in Ethiopia should support students in paragraph writing by motivating them to use reflective learning as part of process writing strategies. This approach can help students think about their own learning, recognize their strengths and weaknesses, and improve their writing skills. When students reflect on their writing, they become more aware of the steps involved in producing a good paragraph, such as planning, drafting, revising, and editing. In addition, reflective learning encourages students to take an active role in their learning, which can improve their confidence and motivation during paragraph writing tasks.

Moreover, secondary school students should actively participate in self-reflection, peer reflection, and group reflection activities. These activities help students think about their own learning and learn from one another. Through self-reflection, students can examine their own work and identify areas that need improvement. Peer reflection allows students to give and receive feedback from their classmates, while group reflection encourages discussion and shared understanding of writing tasks. Furthermore, students are encouraged to use reflection as a way to support their learning, improve their use of writing strategies, and build greater confidence in paragraph writing.

Finally, future researchers are encouraged to conduct further studies on reflection-based instruction in writing and other language skills.

CRediT Statement of Authorship Contribution

Gebisa Tefera: Investigation, Data curation, Formal analysis, and Writing—Original Draft. **Rufael Disasa:** Validation, Supervision; **Ebisa Daba**: Writing—Review & Editing, Project Administration

Conflict of Interest Declaration
The authors declare no conflict of interest.

Ethical Approval

Wollega University has written an official letter of cooperation, which allowed us to organize the process with school administrators and participants. The researcher has given an explanation of the purpose of the study in detail, making sure that the participants were fully aware of the purpose and importance of the research. It was completely on a voluntary basis, and the participants were made aware of their freedom to leave the study at any time without incurring any adverse effects.

Data Availability

The study's data are accessible upon request.

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