

Measuring the Effectiveness of the PDREF Framework through Collaborative Writing Activities in Teaching Descriptive Essays

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Abstract: The ability to write descriptive essays is an essential competence for students of English as a Foreign Language (EFL). However, many students still face difficulties in organizing ideas and producing systematic writing. This study aims to measure the effectiveness of the PDREF framework (Planning, Drafting, Revising, Editing, and Final Draft) in teaching descriptive essay writing. PDREF was applied as a process-oriented instructional framework in teaching writing. This study employed a quantitative approach using a one-group pre-test and post-test design. The participants of this study were 10 students from the English Education Department at Universitas Islam Balitar. The data were analyzed using a paired sample t-test through SPSS. The results of the analysis showed a significant improvement in students' writing ability, with the mean score increasing from 65.40 in the pre-test to 82.70 in the post-test. The paired sample t-test result indicated a significance value of 0.000 (Sig. 2-tailed < 0.05), which means that there was a significant difference before and after the implementation of the PDREF framework. Therefore, the PDREF framework is found to be effective in improving EFL students' descriptive essay writing skills, particularly in terms of idea organization and descriptive quality.

Kata Kunci:

Efektivitas, Kerangka PDREF,
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Abstrak: Kemampuan menulis esai deskriptif merupakan salah satu kompetensi penting yang harus dimiliki oleh mahasiswa Bahasa Inggris sebagai Bahasa Asing. Namun, banyak mahasiswa masih mengalami kesulitan dalam mengorganisasi ide dan menghasilkan tulisan yang sistematis. Penelitian ini bertujuan untuk mengukur efektivitas kerangka PDREF (Planning, Drafting, Revising, Editing, and Final Draft) dalam pembelajaran menulis esai deskriptif. PDREF diterapkan sebagai kerangka pembelajaran berbasis proses dalam pengajaran menulis. Penelitian ini menggunakan pendekatan kuantitatif dengan desain one-group pre-test dan post-test. Partisipan penelitian ini adalah 10 mahasiswa Program Studi Pendidikan

Bahasa Inggris Universitas Islam Balitar. Data dianalisis menggunakan uji t sampel berpasangan (paired sample t-test) melalui SPSS. Hasil analisis menunjukkan adanya peningkatan yang signifikan pada kemampuan menulis mahasiswa, dengan rata-rata skor meningkat dari 65,40 pada pre-test menjadi 82,70 pada post-test. Hasil uji t sampel berpasangan menunjukkan nilai signifikansi sebesar 0,000 (Sig. 2-tailed < 0,05), yang berarti terdapat perbedaan yang signifikan sebelum dan sesudah penerapan kerangka PDREF. Oleh karena itu, kerangka PDREF terbukti efektif dalam meningkatkan keterampilan menulis esai deskriptif mahasiswa EFL, khususnya dalam aspek pengorganisasian ide dan kualitas deskripsi.

INTRODUCTION

Writing is an essential skill in learning English as a Foreign Language (EFL), particularly in academic contexts (Hyland, 2003). Writing a descriptive essay requires not only linguistic competence but also the ability to organize ideas, develop clear descriptions, and construct coherent paragraphs (Harmer, 2004; Tajuddin et al., 2025). However, in practice, many students still face difficulties in the writing process, especially in generating ideas, organizing drafts, and revising their work, which results in less systematic and underdeveloped writing products. These difficulties are often caused by limited exposure to structured writing instruction and insufficient practice in guided writing activities (Wendimu & Gebremariam, 2024). As a result, students tend to produce texts that lack clarity, coherence, and detailed description. In addition, they frequently struggle to connect ideas logically from one sentence to another, which affects the overall quality of their writing (L. S. Flower & Hayes, 1977; Nurjanah & Sari, 2024). This issue indicates that writing instruction in many EFL contexts still tends to emphasize product-oriented assessment rather than process-oriented instruction (Widiawitasari et al., 2020). In contrast, the process writing approach highlights that writing is a recursive process involving planning, drafting, revising, and editing. Without structured scaffolding, students often struggle to develop their ideas progressively and improve the quality of their writing (Faraj, 2015).

Collaborative writing has been increasingly recognized as an effective pedagogical approach in EFL instruction (Kruse et al., 2023). Through collaborative activities, students can share ideas, negotiate meaning, provide feedback, and jointly construct written texts (Ismail, 2025). Previous studies have shown that collaborative writing promotes greater learner engagement, enhances critical thinking, and improves writing quality by allowing students to learn from one another throughout the writing process (Abe, 2020; Anggraini et al., 2020). Integrating collaboration into process-oriented writing instruction may therefore provide additional support for students who struggle to generate ideas, organize content, and revise their writing effectively (Woodrich & Fan, 2017).

To address these challenges, the PDREF framework (Planning, Drafting, Revising, Editing, and Final Draft) was developed based on the principles of process writing theory and adapted to support collaborative writing activities in EFL classrooms (Sari, 2024). The framework provides structured guidance that enables students to generate ideas, construct drafts, exchange feedback, revise content, and refine language use through a series of recursive writing stages. Unlike conventional writing instruction that often focuses primarily on the final product, PDREF is expected to help pre-service teachers' continuous improvement throughout the writing process while encouraging active learner engagement and peer interaction (Bitchener et al., 2005; L. Flower & Hayes, 1981; Harmer, 2004). Through these structured stages, students are expected to develop better organization, coherence, and descriptive quality in their writing.

Previous studies have reported that process-based writing instruction improves students' writing performance in terms of coherence, organization, and content development (Desalegn & Hailu, 2026). Another study reported that the process approach emphasizes guiding learners through recursive writing stages, which contributes positively to students' writing achievement (As-shidiqi, 2022). Then, guiding students through recursive stages of writing, including planning, drafting, revising, and editing, has been found to enhance students' writing achievement and foster self-regulated learning strategies in the EFL writing context (Guo et al., 2021). However, most of these studies focus on general process writing approaches or collaborative writing strategies, while empirical investigations specifically examining the PDREF framework in teaching descriptive essay writing remain limited, particularly in Indonesian EFL higher education contexts. Furthermore, only a limited number of studies have integrated process-oriented writing instruction with collaborative writing activities in higher education EFL settings.

This issue occurred in the fourth semester of the Essay Writing course at Universitas Islam Balitar Indonesia. Students are expected to produce well-structured descriptive essays as part of their academic writing competence. However, many students still struggle to formulate a clear thesis statement to guide the development of their essays. The preliminary classroom

observations and students' initial writing performance indicated that many students still experienced difficulties in composing descriptive essays. This condition was reflected in the average pre-test score of 65.40, which was below the expected level of writing achievement in the course. Students frequently encountered problems in formulating clear thesis statements, developing relevant supporting details, and organizing ideas coherently across paragraphs. They also struggle to develop adequate supporting details that are relevant and logically organized within each paragraph. In addition, students often find it challenging to write an effective conclusion that appropriately summarizes the main ideas. These difficulties are largely influenced by limited vocabulary knowledge, which restricts their ability to express ideas accurately and effectively. Furthermore, inaccurate word choice and sentence construction frequently lead to unclear and less coherent writing.

Therefore, this study contributes to the existing literature by examining the effectiveness of the PDREF framework as a process-oriented, collaborative writing model for descriptive essay instruction in an Indonesian EFL higher-education context. This study addresses the following research question: Is the PDREF framework effective in improving EFL students' descriptive essay writing skills? The objective of this study is to measure the effectiveness of the PDREF framework in teaching descriptive essay writing to students of the English Education Department at Universitas Islam Balitar.

METHOD

Research Design

This study employed a quantitative approach using a pre-experimental one-group pre-test and post-test design (Apuke, 2017). The design was selected because the primary objective of the study was to examine the initial effectiveness of the PDREF framework in improving students' descriptive essay writing performance within an authentic classroom setting. A pre-experimental design was considered appropriate because only one intact class was available for the intervention, making random assignment and the establishment of a control group impractical. Furthermore, withholding the instructional treatment from some students for research purposes was considered pedagogically inappropriate, as all students were expected to receive the same learning opportunities. The one-group pre-test and post-test design also enabled each participant to serve as their own baseline, allowing changes in writing performance before and after the intervention to be systematically measured.

The one-group pre-test and post-test design is widely used in educational research to evaluate the impact of an intervention within a specific group of participants. According to This study employed Creswell & Creswell (2017) This design provides an effective means of examining learning outcomes by measuring participants' performance at two different points in time. In this study, students' descriptive writing abilities were assessed before the implementation of the PDREF framework and after completing the instructional sessions, enabling the researcher to identify the extent of improvement achieved through the framework.

To address these challenges, the lecturer implemented the PDREF writing framework in teaching descriptive essay writing. In this instructional process, students were not only required to write individually but were also engaged in collaborative writing activities to enhance their learning experience. Through collaboration, students were encouraged to share ideas, discuss content development, and provide feedback to one another during each stage of the writing process. This collaborative practice aimed to help students produce higher-quality writing than when writing individually. The PDREF framework was applied in a structured manner, guiding students through planning, drafting, revising, editing, and finalizing their essays.

Research Participants

The participants of this study were 10 students enrolled in an Essay Writing course in the English Education Department at Universitas Islam Balitar during the academic semester in which the study was conducted. An intact-class sampling approach was employed because only one

Essay Writing class was offered during the semester, consisting of 10 registered students. Therefore, all students in the class were included in the study to ensure complete representation of the available population.

The relatively small sample size reflects the actual class enrollment rather than researcher selection. Although the sample size limits statistical generalizability, this study was intended as an initial exploration of the effectiveness of the PDREF framework in improving students' descriptive essay writing performance within a real classroom context. The participants shared relatively similar academic backgrounds and English proficiency levels, providing a relatively homogeneous group for examining changes in writing performance following the instructional intervention. Therefore, this study should be viewed as an initial exploration of the PDREF framework, with the results serving as preliminary evidence to support future studies involving larger and more diverse samples.

Research Instruments

The primary instrument used in this study was a writing test administered in two stages, namely the pre-test and post-test. The writing test required students to produce a descriptive essay based on a given topic. The pre-test was conducted before the implementation of the PDREF framework to assess students' initial writing ability, while the post-test was administered after the instructional treatment to evaluate any improvement in their writing performance.

To ensure objective and consistent assessment, the students' essays were evaluated using an analytic scoring rubric adapted from established writing assessment criteria. The rubric assessed five major components of writing: content, organization, vocabulary, grammar, and mechanics. The use of an analytic rubric based on Jacob's (1981) identifies strengths and weaknesses in specific aspects of students' writing and enhances the reliability of the scoring process as the following rubric in table 1.

Table 1. Jacobs's scoring rubric analysis

Aspect	Score range
Content	30
Organizasion	20
Vocabulary	20
Grammar	25
Mechanic	5
Total	100

Research Data Collection

The data collection process was conducted through the administration of writing tests before and after the implementation of the PDREF framework. Initially, students completed a pre-test in which they were asked to write a descriptive essay on a specified topic. The purpose of this test was to determine their baseline writing performance prior to receiving instruction through the PDREF framework.

Following the pre-test, the PDREF framework was implemented during a series of instructional sessions. Upon completion of the treatment, students were required to complete a post-test involving a similar descriptive writing task. The essays produced in both tests were collected and scored using the analytic rubric. The resulting scores served as the primary data for measuring the effectiveness of the instructional framework.

Research Procedure Framework

The study was conducted through three main phases: pre-test, treatment, and post-test as shown in figure 1. In the first phase, students completed an individual pre-test to assess their initial ability in writing descriptive essays. The pre-test required students to write a descriptive essay based on a given topic within a specified time allocation. The scores obtained from the pre-test served as baseline data for measuring students' writing performance before the implementation of the PDREF framework.

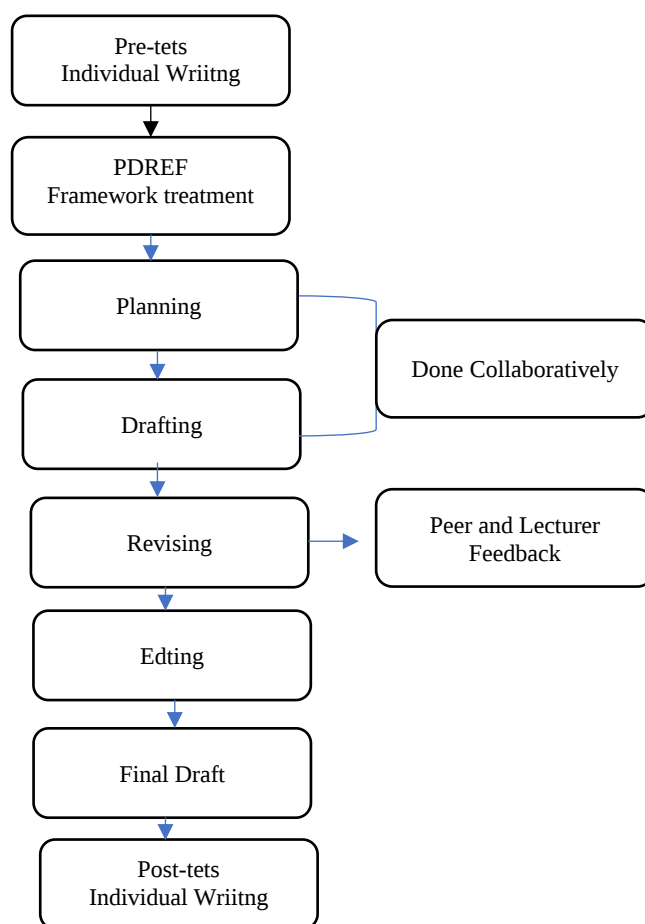


Figure 1. Research Procedure of the PDREF Framework

In the second phase, the PDREF framework was implemented through five instructional stages: Planning, Drafting, Revising, Editing, and Final Drafting. During the planning stage, students collaboratively generated ideas, determined the essay focus, and organized supporting details. In the drafting stage, students developed their ideas into initial essay drafts. Subsequently, during the revising stage, students exchanged peer feedback and received lecturer feedback to improve content development, coherence, and organization. The editing stage focused on correcting grammatical errors, vocabulary use, punctuation, and mechanics. Finally, students produced a final draft by incorporating the feedback and revisions obtained throughout the writing process.

In the final phase, students completed an individual post-test involving a descriptive essay writing task similar to that of the pre-test. The post-test was administered to evaluate the effectiveness of the PDREF framework in improving students' descriptive essay writing skills. The pre-test and post-test scores were then analyzed using descriptive statistics and a paired sample t-test.

Research Data Analysis

The collected data were analyzed using both descriptive and inferential statistical techniques. Descriptive statistics were used to calculate the mean scores of the pre-test and post-test to provide an overview of students' descriptive essay writing performance before and after the implementation of the PDREF framework. Before conducting the inferential analysis, a normality test was performed using the Shapiro-Wilk test because the sample size consisted of

fewer than 50 participants. The normality test was conducted to ensure that the data met the assumptions required for parametric statistical analysis.

After the data were confirmed to be normally distributed, a paired-samples t-test was conducted in SPSS version 26 to determine whether there was a statistically significant difference between pre-test and post-test scores. The paired sample t-test was selected because it is appropriate for comparing two related sets of scores obtained from the same participants before and after an instructional intervention. The level of significance was set at 0.05. The hypotheses of the study were formulated as follows:

H₀: There is no significant difference between students' pre-test and post-test scores after the implementation of the PDREF framework.

H₁: There is a significant difference between students' pre-test and post-test scores after the implementation of the PDREF framework.

If the significance value (Sig. 2-tailed) was lower than 0.05, the null hypothesis (H₀) was rejected and the alternative hypothesis (H₁) was accepted, indicating that the PDREF framework had a significant effect on students' descriptive essay writing performance.

RESULTS AND DISCUSSION

Improvement of Students' Descriptive Writing Skills

The results of this study show a significant improvement in students' descriptive essay writing after the implementation of the PDREF framework as described in table 2.

Table 2. Descriptive Statistics of Pre-test and Post-test Scores

Test	N	Mean	Standart Deviation
Pre-test	10	65.40	1.51
Post-test	10	82.70	2.00

The descriptive statistics indicate that students' writing performance improved after the implementation of the PDREF framework. The mean score increased from 65.40 in the pre-test to 82.70 in the post-test, showing an improvement of 17.30 points. In addition, the standard deviation of the post-test scores (SD = 2.00) remained relatively low, suggesting that the improvement was observed consistently among the participants. The improvement can be seen from the comparison between pre-test and post-test scores, as shown in Table 3.

Table 3. Pre-test and Post-test Scores of Students' Writing Performance

No	Initial	Pre- test score	Post-test score
1	PST 1	64	80
2	PST 2	66	83
3	PST 3	67	85
4	PST 4	63	81
5	PST 5	65	84
6	PST 6	66	82
7	PST 7	64	80
8	PST 8	68	86
9	PST 9	65	83
10	PST 10	66	83

Based on Table 3, the mean score of the pre-test was 65.40, while the mean score of the post-test increased to 82.70. This indicates a substantial improvement in students' writing performance after being taught using the PDREF framework. The increase suggests that students were able to better organize their ideas, develop clearer descriptions, and produce more coherent essays.

Hypothesis Testing

To determine whether the improvement was statistically significant, a paired sample t-test was conducted using SPSS. The result showed that the significance value (Sig. 2-tailed) was 0.000, which is lower than the significance level of 0.05. This indicates that there is a statistically significant difference between the pre-test and post-test scores.

Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted. It can be concluded that the PDREF framework has a significant effect on improving students' descriptive essay writing skills.

Table 4. The Result of Normality Test (Shapiro-Wilk)

Score	Statistic	df	Sig.
Pre-test	0.919	10	0.355
Post-test	0.911	10	0.289

Since the significance values of both pre-test and post-test scores are greater than 0.05, the data are normally distributed. Therefore, the assumption of normality was fulfilled, and the paired sample t-test could be conducted.

Table 5. The Result of Paired Sample T-Test

Pair	Mean Difference	Std. Deviation	Std. Error Mean	Lower	Upper	t	Df	Sig. (2 tailed)
Pre-test – Post-test	-17.30	0.95	0.30	-17.98	-16.62	-57.71	9	0.000

Because all participants demonstrated consistent improvements of approximately 16–18 points from the pre-test to the post-test, the paired-samples t-test yielded a large t-value and a highly significant result ($p < .001$).

Discussion

The findings revealed that the implementation of the PDREF framework significantly improved students' descriptive essay writing skills. The mean score increased from 65.40 in the pre-test to 82.70 in the post-test, indicating an improvement of 17.30 points. Furthermore, the paired sample t-test demonstrated a statistically significant difference between the pre-test and post-test scores ($p = 0.000 < 0.05$). These findings suggest that the PDREF framework effectively supports students in developing their descriptive writing competence.

The improvement can be explained through the cognitive process theory of writing proposed by (L. Flower & Hayes, 1981). According to this theory, writing is not a linear activity but a recursive process involving planning, translating ideas into text, and revising. The PDREF framework reflects this process by providing students with systematic stages of Planning, Drafting, Revising, Editing, and Final Drafting. During the planning stage, students generated and organized ideas before writing, which helped them develop more focused and coherent descriptive essays. This finding supports Flower and Hayes' argument that effective planning enables writers to manage ideas more efficiently and improve the overall quality of their writing.

The results also support Harmers (2004) view that successful writing instruction should focus on the writing process rather than solely on the final product. Harmer emphasizes that students need opportunities to draft, revise, and edit their work before producing a final version. In this study, students were encouraged to improve their essays continuously through multiple writing stages. As a result, they were able to strengthen essay organization, expand descriptive details, and reduce linguistic errors. This process-oriented instruction contributed significantly to the improvement observed in the post-test scores.

Another factor contributing to the effectiveness of the PDREF framework was the incorporation of feedback during the revising and editing stages. Students received comments

from both peers and the lecturer, allowing them to identify weaknesses in content, organization, grammar, and vocabulary. This finding is consistent with Bitchener et al (2005), who argue that feedback plays a crucial role in helping learners recognize writing problems and improve subsequent drafts. Through continuous revision, students became more aware of their mistakes and were able to produce clearer and more accurate descriptive essays.

The findings are also consistent with previous studies on process-based writing instruction. Desalegn & Hailu (2026) found that process writing approaches improve students' ability to organize ideas, develop content, and maintain coherence in their writing. Similarly, students who experienced structured writing stages demonstrated better writing achievement than those who followed conventional writing instruction (As-shidiqi, 2022). The significant improvement observed in this study confirms that structured writing procedures facilitate students' writing development and enhance learning outcomes.

Furthermore, the collaborative activities embedded in the PDREF framework contributed to students' writing improvement. During the planning and revising stages, students exchanged ideas, discussed essay content, and provided feedback to their peers. This interaction enabled learners to gain new perspectives and refine their writing more effectively. The finding supports (Guo et al., 2021), who found that collaborative and process-oriented writing instruction promotes self-regulated learning and improves students' writing performance in EFL contexts.

Overall, the findings indicate that the PDREF framework provides effective scaffolding throughout the writing process. By guiding students through structured writing stages, facilitating collaboration, and encouraging continuous revision, the framework successfully improved students' descriptive essay writing skills. Therefore, PDREF can be considered an effective instructional framework for teaching descriptive essay writing in higher education EFL classrooms.

CONCLUSION

This study concludes that the PDREF framework is effective in improving EFL students' descriptive essay writing skills. The findings show a significant improvement in students' writing performance after the implementation of the PDREF-based instruction. The effectiveness of the PDREF framework can be attributed to its structured writing stages, which guide students through planning, drafting, revising, editing, and finalizing their essays. These stages help students organize their ideas more systematically, develop clearer descriptions, and produce higher-quality written texts.

This study contributes to the field of EFL writing instruction by providing empirical evidence that a process-oriented and structured writing framework can enhance students' writing performance, particularly in descriptive essay writing. It is recommended that EFL lecturers integrate the PDREF framework into writing instruction to support students in developing their writing skills. Future research is suggested to apply the PDREF framework to larger samples, different educational levels, and various genres of writing to further validate its effectiveness.

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