

Roundtable In EFL Argumentative Writing: Effects on Achievement and Perceptions

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Abstract: This study examined how the Roundtable technique, combined with process writing, affected EFL students' argumentative writing performance and their perceptions of its use in a Critical Writing course. A mixed-methods explanatory sequential design was used. A 42-item questionnaire, pre-test and post-test writing scores, and semi-structured interviews were used to collect quantitative and qualitative data from 32 undergraduate students in the English Education Department of Universitas Halu Oleo. Descriptive statistics and a paired-samples t-test were used to assess the quantitative data. In contrast, thematic analysis of the qualitative data was used to supplement and clarify the quantitative results. After the intervention, students' achievement in argumentative writing significantly improved, according to the findings. With a statistically significant difference ($t(31) = 41.97, p < .001$), the mean score rose from 71.63 on the pre-test to 81.00 on the post-test, indicating a very large effect. With an overall mean of 3.12 on a four-point Likert scale and strong internal consistency (Cronbach's $\alpha = .91$), the questionnaire findings likewise indicated generally positive opinions of the instructional paradigm. These findings were corroborated by the interview data, which demonstrated that Roundtable promoted classroom participation, idea development, argument organization, critical engagement, and revision. However, problems remained, especially in vocabulary, grammar, coherence, and evidence-based reasoning. The results reveal the pedagogical effectiveness of combining the Roundtable and process writing to improve students' argumentative writing skills and to create dynamic classroom settings in EFL higher education. It is recommended that further research explore the effect of the Roundtable on specific features of argumentative writing, including coherence, evidence integration, and linguistic accuracy, using a quasi-experimental design with larger, more diverse samples.

Keywords: cooperative learning, EFL argumentative writing, mixed-methods study, process writing, Roundtable, student perceptions, writing achievement.

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■ INTRODUCTION

EFL academic writing skills remain a major weakness for students, impacting their academic success, careers, and global participation. A study of 300 Bangladeshi students showed that they experienced serious difficulties in conceptual structure, grammar, and writing motivation (Chowdhury et al., 2025). In general, the review study found that traditional, individualistic writing instruction has not been able to overcome students' low performance, motivation, and

interest in English writing. At the same time, recent studies have confirmed that cooperative learning can improve academic achievement, decrease anxiety, and boost motivation and interest in learning English (Beaëiroviæ et al., 2022; Phan, 2023). Social constructivist views of learning as a process of constructing knowledge through interaction, dialogue, and shared problem-solving also align with cooperative learning (Vygotsky, 1978). In this view, students learn better when they actively exchange ideas, negotiate meaning,

and collaboratively build understanding with their peers rather than simply relying on teacher-centered instruction.

The Indonesian context, for example, shows, based on classroom-based observations and assessment records, that most EFL students enter university-level writing courses ill-prepared in structured argumentation and therefore ill-equipped to meet the genre demands of academic discourse (Nenotek et al., 2022; Isadaud et al., 2022). The mismatch between expected and actual writing competence is structural, not incidental, a consequence of years of teacher-fronted, product-oriented pedagogy that values correctness over the development of reasoning and rhetorical skill. This condition emphasizes the need for more structured cooperative strategies to support writing skills, especially in argumentative genres that require high critical thinking.

Roundtable is a cooperative learning structure that assigns students to write answers or ideas in turns on a single sheet of paper, so that all members actively contribute to the joint written product (Pirka et al., 2024). Research in the EFL context shows that variations of simultaneous roundtables are significantly more effective than traditional teacher feedback in improving descriptive writing and social-interpersonal skills among junior high school students in Indonesia (Romadhoni, Saroh, et al., 2022a). Another study found that using roundtable techniques for descriptive writing increased the average student score from 73.60 to 83.03, with high statistical significance (Rosidah, 2025). The development of modified roundtables with pictures, combined with a process approach, was also shown to produce greater increases in writing scores and more positive student perceptions than conventional roundtables (Pirka et al., 2024). Consistent with this trend, Zhang et al. (2025) found that structured peer-writing activities within

cooperative frameworks resulted in significant improvements in the quality of argumentative texts produced by university-level EFL learners. The most significant improvements were in claim elaboration and counterargument integration, areas often cited as the weakest in EFL student writing. Taken as a whole, the state-of-the-art literature suggests a clear developmental arc, from early demonstrations of Roundtable efficacy in basic writing genres to more sophisticated applications now positioned to meet the higher-order demands of argumentative writing. In general, these findings indicate that roundtables can help students brainstorm, develop ideas, and compose texts collaboratively in writing classes.

Although cooperative learning is effective in improving critical thinking and the quality of argumentative essays (Romadhoni, Andania, et al., 2022; Zhang et al., 2025), studies examining roundtables on argumentative writing remain very limited. A 2022 study showed that cooperative learning can develop critical thinking in argumentative essay writing among non-English-speaking students in Indonesia, but it did not explicitly use roundtables (Romadhoni, Andania, et al., 2022). Another 2022–2023 study confirmed the effectiveness of various cooperative learning models and flipped-STAD in expository writing and increasing motivation, but again did not focus on roundtables or the argumentative genre (Beaëiroviæ et al., 2022; Romadhoni, Saroh, et al., 2022; Shafiee Rad et al., 2023). In 2024, the development of Roundpics highlighted the benefits of modified roundtables for general writing skills and student perceptions, but the genre studied was not argumentative (Pirka et al., 2024). Thus, there is a research gap regarding the application of the Roundtable technique in the instruction of argumentative writing, particularly in the context of higher-education EFL. Previously, the effectiveness of the Roundtable technique has been proven for descriptive and general writing tasks (Pirka et al., 2024; Rosidah,

2025). Research on cooperative learning has also shown positive effects on the development of argumentative writing (Romadhoni, Andania, et al., 2022; Zhang et al., 2025). However, there is limited empirical evidence on the integration of the Roundtable technique into argumentative essay writing and on students' perceptions of its implementation. Therefore, this study aims to contribute to the existing literature by investigating the impact of the Roundtable on students' achievement and learning experiences of argumentative writing in an EFL higher education context.

This gap is important to address because argumentative writing is a primary means of developing critical thinking, reasoning skills, and academic literacy in higher education (Romadhoni, Andania, et al., 2022; Sandra et al., 2024). Global findings indicate that students often present unclear arguments, lack logical coherence, and exhibit weak structure, thereby requiring more collaborative and targeted pedagogical interventions (Sandra et al., 2024). On the other hand, a literature review on cooperative learning indicates that cooperative strategies can improve writing achievement, motivation, and positive attitudes towards English language learning (Beæiroviæ et al., 2022; Phan, 2023). However, without strong empirical evidence specifically on the roundtable technique in the context of argumentative writing, EFL teachers still lack a scientific basis for selecting and designing the most appropriate strategy. Therefore, research that directly tests the impact of roundtables on students' outcomes and perceptions in argumentative writing is urgent.

Based on the background and gaps above, the current study aims to explore the effect of using the Roundtable technique on EFL students' argumentative essay writing achievement and to investigate students' perceptions of the technique's implementation. Implementation in writing classes. In particular, this work tries to

answer two questions: (1) To what extent does the use of the Roundtable improve students' argumentative writing skills compared with traditional writing instruction? and (2) What are students' perceptions of their strengths, weaknesses, and learning experiences in the roundtable-based argumentative writing activities? The results are expected to provide an empirical basis for the development of more collaborative and effective writing pedagogy.

This study was conducted in the English Education Department of Universitas Halu Oleo, Kendari, Southeast Sulawesi, where many EFL undergraduates still face problems with academic writing, such as organizing ideas, developing arguments, and using academic language (Aldabbus & Almansouri, 2022; Nenotek et al., 2022). As with other EFL programs in Indonesia, thesis statements, coherence, and supporting ideas tend to be challenging for students, affecting the quality of their essays (Aldabbus & Almansouri, 2022; Nenotek et al., 2022; Nguyen, 2025). At the same time, English has a strategic role in the Indonesian curriculum to prepare globally competitive human resources, but classroom practices often remain teacher-centered and product-oriented rather than process- and strategy-oriented (Isadaud et al., 2022). These conditions make the English Education Department of Halu Oleo University a relevant and promising site for investigating how the Roundtable technique could support students' development of argumentative writing and address persistent challenges in academic writing.

■ **METHOD**

Research Design

This study used an explanatory sequential mixed-methods design (Creswell, J. & Plano-Clark, 2011; Creswell, 2014; Hirose & Creswell, 2023). This design was selected because the study aimed to investigate two interrelated issues: the effect of the Roundtable

technique on students' writing achievement and students' perceptions of its use in the writing classroom. In the first phase, quantitative data were collected through pretest and posttest scores and a 42-item questionnaire. The test scores were used to determine whether the students' argumentative writing was improved after the intervention. The questionnaire measured the students' perceptions of Roundtable and process writing. In the second phase, qualitative data were collected through semi-structured interviews to explain and enrich the quantitative findings. This design enabled the researcher to move from statistical evidence to a more nuanced comprehension of students' experiences, providing a more complete picture of how Roundtable functioned in teaching writing.

The quantitative strand used a one-group pretest-posttest design. Although this design lacks a separate control group, it was deliberately chosen for a variety of practical and methodological reasons. First, the study was conducted in one intact class, which was not divided into experimental and control groups because such a division would have resulted in instructional contamination and disrupted the natural learning environment. Second, given that all participants had the same instructional history, course prerequisites, and initial proficiency level (as confirmed by the homogeneity of pretest scores), the within-group pre-post comparison offers a defensible internal baseline for gauging post-intervention gains. Third, the intervention period was short, and the classroom setting was controlled, reducing the risk of confounding by external factors. This is in line with the common practice in classroom-based EFL intervention research where randomized control designs are logistically or ethically impossible.

The current study did not include a control group for pedagogical and contextual reasons. The study was conducted in an intact Critical Writing class. All students enrolled in the class were expected to receive the same instructional

support as the course learning outcomes. Pedagogically, it was considered inappropriate within the institutional context to assign some of the students to a traditional instructional condition and deny the intervention to others. Moreover, the study had an exploratory aim, i.e., to explore the potential effectiveness of the Roundtable technique when implemented under authentic classroom conditions rather than to establish causal relationships through experimental control. To bolster the validity of the findings, multiple sources of evidence were utilized, including pre-test/post-test comparisons, student perception surveys, semi-structured interviews, and a non-parametric robustness check using the Wilcoxon signed-rank test. These lines of evidence converged to provide a rich basis for judging the instructional impact of the intervention.

Participants

Participants in this study were 32 undergraduate students in the English Education Department at Universitas Halu Oleo who were enrolled in a writing-related course, specifically critical and argumentative writing. They were chosen because they had directly experienced the implementation of the Roundtable in classroom instruction and thus were able to provide relevant achievement and perception data. All participants were drawn from the same class and treated equally, thereby creating a relatively homogeneous cohort for a classroom-based intervention study.

The participants were third-semester students who took the Critical Writing course in the odd semester of the 2025/2026 academic year. All participants had completed the Basic Writing and Intermediate Writing courses, which were prerequisites for entry into the study, ensuring that they shared a basic competence in English writing. To further ensure baseline equivalence, participants' English proficiency was informally assessed based on their pretest performance and history of placement within the department's standardized curriculum sequence.

The demographic profile of the group was similar in terms of academic background, with no participant indicating prior exposure to Roundtable-based instruction, thereby eliminating the risk of pre-existing differential advantage among participants within the group.

All 32 students completed the questionnaire and were also administered the pre-test and post-test. In the qualitative phase, all 32 participants were interviewed using semi-structured interviews to obtain a holistic understanding of their experiences of Roundtable and process writing. To preserve anonymity, interview excerpts are reported using student identification codes (e.g., Student 1, Student 18, Student 22) rather than participants' real names. By interviewing the entire class, the researchers were able to obtain a wider range of perceptions, benefits, and challenges related to the intervention and triangulate the qualitative findings with the quantitative results. The inclusion of all participants in the interview phase reinforced the explanatory purpose of the mixed-methods design by ensuring that diverse perspectives across achievement levels were represented.

Instruments

The data were collected through written tests, questionnaires, and semi-structured interviews. The writing tests were pretests and posttests used to measure students' achievement in argumentative writing before and after the implementation of the roundtable technique. Comparison of the two sets of scores provided evidence of the intervention's effect on writing performance. Both tests required students to write an argumentative essay on a specified topic within a given period. The essays were scored with an analytic writing rubric adapted from Jacobs et al. (1981). The rubric was adapted for argumentative writing, although it was created for general ESL composition. The content dimension, in particular, measured the clarity of claims, the development of arguments, the relevance of

supporting evidence, and the consideration of counterarguments. In the organization dimension, we evaluated the effectiveness of the thesis statement, the logic of the argument order, the coherence between paragraphs, and the overall argumentative structure of the text. Vocabulary was assessed for the appropriateness and precision of lexical choices; language use was used to assess grammatical accuracy and syntactic complexity, and mechanics was assessed for spelling, punctuation, and capitalization. The adapted rubric was chosen because it provided a holistic framework for evaluating the argumentative and linguistic aspects of students' essays.

To better reflect the goals of instruction in argumentative writing, the scoring descriptors for content and organization were updated to include claim making, incorporation of evidence, logical reasoning, and coherence of argumentation. The questionnaire used a 4-point Likert scale: 4 = strongly agree, 3 = agree, 2 = disagree, and 1 = strongly disagree. The four-point scale was deliberately chosen to minimize the central tendency bias often observed when neutral response options are available. In line with the study's goal of exploring student perceptions of a newly introduced instructional method, respondents were asked to choose between positive and negative stances for each statement rather than a neutral position. Earlier research in education has suggested that forced-choice Likert scales can offer more distinct attitude distinctions and reduce the possibility of participants selecting a neutral category when they are not motivated to assess an educational intervention. Therefore, a neutral midpoint was not deemed suitable for capturing the students' evaluative responses to the Roundtable-based writing activities.

In this study, a new questionnaire was developed based on theoretical frameworks from the cooperative learning literature and process writing models, as no validated instrument was found to capture the combined dimensions of

Roundtable and process-writing perceptions in an EFL argumentative writing context. The instrument was piloted before the main data collection with a comparable group of students outside the study sample. The validity of the items was tested using the product-moment correlation test, and the *r*-values ranged from 0.312 to 0.681; all 42 retained items were statistically valid because the *r*-values exceeded the critical value in the *r*-table at the 5% significance level. Then, Cronbach's Alpha was used to assess internal consistency, and it indicated that the instrument was within acceptable levels for use in educational research.

The third data source was the semi-structured interview, which provided the qualitative aspect of the study. The interview guide was developed based on the research questions and the questionnaire's dimensions. It examined students' previous experiences in writing argumentative compositions, their involvement in Roundtable activities, their views on how group discussion helped generate and organize ideas, and whether it influenced their approach to contemplating arguments. The interviews also asked students about the strengths and weaknesses of Roundtable, their experiences with each stage of the writing process, the role of feedback in revising and editing, and their perceptions of improvement in their writing ability. Furthermore, students were asked to reflect on what they still found difficult, which features of the learning model were most useful, what suggestions for improvement they had, and whether they would recommend the method to other classes. These interview questions provided the researcher with rich explanatory data that complemented the quantitative results. Given that participants were Indonesian undergraduate students, all semi-structured interviews were conducted in Indonesian to enable them to express their experiences and perspectives freely and naturally. The interviews were audio-recorded with participants' consent and subsequently

transcribed verbatim in Indonesian by the researcher. To ensure that the meaning and intent of participants' responses were accurately conveyed, the researcher translated the transcripts into English, as the researcher is proficient in both languages. To minimize interpretive bias and verify translation accuracy, a back-translation procedure was applied: a bilingual colleague independently translated the English versions back into Indonesian, and any discrepancies between the original and back-translated transcripts were resolved through discussion until consensus was reached. The quotations presented in this study are translations, while the original Indonesian transcripts are retained and available upon request.

Several validity procedures were used to enhance the trustworthiness of the qualitative data. First, the interview findings were cross-checked against the questionnaire responses and written test results through methodological triangulation, thereby converging data sources to enhance the credibility of the interpretations. Secondly, member checks were used, involving sharing the interview transcripts and preliminary interpretations with informants to verify, clarify, or contest the researcher's interpretation of their experiences. Third, the researcher maintained a reflective journal during the data collection and analysis stages to document analytical choices and reduce interpretive bias, thereby improving the dependability of the findings. Together, these procedures ensured that the qualitative part of the study met acceptable standards of credibility, transferability, and confirmability.

Research Procedure

This study was conducted in a Critical Writing class that incorporated the roundtable technique into the teaching of argumentative writing. At the beginning of the study, students took a pre-test to identify their writing ability and baseline data before the intervention. After that, the researcher applied the Roundtable in

classroom teaching. Students worked collaboratively in small groups to discuss issues, share ideas, and formulate positions and supporting arguments for their texts. The learning activities were also sequenced according to the stages of the writing process: planning, drafting, revising, editing, and publishing.

During the implementation of the Roundtable, students were organized into groups of four to five members. In the planning stage, each group was given an argumentative topic and a worksheet with guiding questions. One sheet of paper was passed around the group, and each student added one idea, claim, supporting reason, example, or piece of evidence before passing the paper to the next member. Multiple rounds of idea generation were discussed, refined, and collectively structured into a thesis statement, supporting arguments, counterarguments, and pertinent evidence. During the drafting stage of process writing, students used the resulting outline to individually draft a complete argumentative essay. Hence, the Roundtable technique was used primarily as a collaborative brainstorming and argumentation-development technique rather than as a method for writing the entire essay on a single sheet of paper.

After learning through the Roundtable, the students took the post-test to measure writing achievement at the end of the treatment. Then they completed a 42-item questionnaire designed to assess their perceptions of the learning process. After the quantitative data were collected, the researcher interviewed selected students to gain a more detailed explanation of their experiences, perceived benefits, challenges, and suggestions on the use of Roundtable and process writing. The research procedure thus followed a sequential pattern in which the quantitative findings were first generated and then clarified using qualitative data.

Data Analysis

Data were collected, and the researcher systematically prepared them for analysis. First,

the pre-test and post-test scores were tabulated and validated for accuracy and completeness. In order to minimize subjectivity in scoring essays, each student's essays were scored independently by two raters: the researcher, who was the course instructor, and a second rater who was a colleague with the same qualifications in EFL writing instruction and familiarity with the scoring rubric. Each rater scored each essay independently, without discussing individual scripts prior to scoring. Inter-rater reliability was calculated using the Intraclass Correlation Coefficient (ICC) as it is suitable for continuous scoring data. The analysis yielded an ICC of 0.81, indicating a high level of agreement between the two raters and confirming that the essay-scoring process was sufficiently reliable and consistent. According to common guidelines, ICC values above 0.75 indicate good reliability, and values above 0.90 indicate excellent reliability. When the two raters' scores for a particular essay differed by more than 5 points on the total scale, the disagreement was resolved through discussion until a consensus score was reached. The mean of the two raters' scores was used as the final score for analysis. Since the purpose of the analysis was to compare students' achievement before and after the intervention, the scores were paired so that each student's pre-test score was directly matched to their post-test score. Responses to the questionnaire were then coded numerically on a four-point Likert scale. The questionnaire included positive and negative statements, with negative items reverse-coded so that higher scores indicated more positive perceptions of Roundtable's writing instruction. The numbering was corrected following the deletion of one questionnaire item, and the instrument was restructured into 42 valid items. The data obtained from the questionnaire were then cleaned and grouped according to relevant dimensions for interpretation. The mean scores for each dimension and the overall instrument were systematically classified to interpret the questionnaire data in line with the classification

criteria adapted from Riduwan (2010), presented in Table 1.

Table 1. Categorization of questionnaire mean scores

Mean Score Range	Category
3.26 – 4.00	High
2.51 – 3.25	Moderate
1.76 – 2.50	Low
1.00 – 1.75	Very Low

Qualitative data were analyzed using thematic analysis of interview transcripts (Clarke & Braun, 2013). The analysis commenced with data familiarisation, in which the researcher read the interview transcripts and listened to the recordings multiple times to develop a comprehensive understanding of the participants' experiences. After that, initial codes were generated from meaningful statements related to students' perceptions, learning experiences, benefits, and challenges during the implementation of Roundtable and process writing. Next, similar codes were clustered into categories and reviewed to identify broader patterns across the dataset. These categories were reviewed, refined, and organized into overarching themes that captured recurring perceptions and experiences

across participants. Finally, the themes were defined, interpreted, and reported to explain and enrich the quantitative findings. Methodological triangulation, member checking, and reflective journaling used throughout the analysis to enhance the trustworthiness of the qualitative findings.

RESULT AND DISCUSSION **The Effect of Roundtable on Students' Argumentative Writing**

Figure 1 compares students' pre-test and post-test scores in response to the first research question. The table shows a clear upward trend in argumentative writing performance after the use of Roundtable. The pre-test score was 71.63, and the post-test score was 81.00. The improvement was not confined to a few students but was evident in every student scoring higher on the post-test. The trend implies that the use of Roundtable was more conducive to the students' writing development in a more balanced way. The degree of improvement varied among individuals, but the overall gain indicates that students improved after the intervention. In other words, not only do the descriptive results reveal an increase in the numbers, but they also indicate a favorable change in students' capacity to generate argumentative writing.

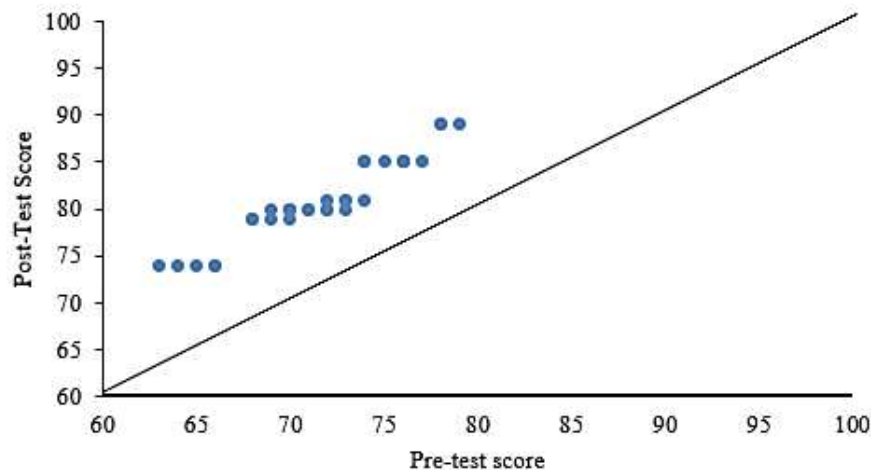


Figure 1. Distribution of individual pre-test and post-test scores

The clustering of data points around the graph in Figure 1 is a result of the rubric-based scoring process. The essays were scored using analytic performance bands and the final scores were reported as whole numbers. The resultant score distribution is discrete rather than continuous. Hence, several students may have the same score values, and these will appear as clusters in the scatter plot.

A paired-samples t-test was conducted to examine whether the difference between the two means was statistically significant (Langenberg et al., 2022; Okoye & Hosseini, 2024). The result showed a highly significant difference between the pre-test and post-test scores, $t(31) = 41.97$, $p < .001$. The 95% confidence interval for the mean difference ranged from 8.92 to 9.83, indicating that the improvement was stable and

unlikely to have occurred by chance. The magnitude of the effect was also extremely strong, as shown by Cohen’s $d_z = 7.42$. Since the distribution of difference scores was not fully normal, a Wilcoxon signed-rank test was also used as a robustness check, and it likewise confirmed a significant difference between the pre-test and post-test scores ($Z = -4.95$, $p < .001$). Taken together, these results indicate that the use of Roundtable had a statistically significant and practically strong impact on students’ writing achievement. As shown in Table 2, both the statistical significance and the effect size indicate that the Roundtable had a strong impact on students’ writing achievement.

The effect size and t-statistic magnitude indicate the consistent improvement observed among participants. Consequently, the difference

Table 2. Paired-Samples t-test of pre-test and post-test scores

Comparison	Mean Difference	t	df	p	95%CI	Effect Size (Cohen’s dz)	Wilcoxon Z
Pre-test – Post-test	9.38	41.97	31	< .001	8.92–9.83	7.42	-4.95

scores exhibited relatively low variability, resulting in a very small standard error.

To provide a richer understanding of how the Roundtable intervention influenced specific aspects of argumentative writing, an additional

component-level analysis was carried out. While the overall results suggested a significant gain in students’ writing achievement, it was also crucial to examine whether the improvement was uniform across the main writing dimensions or was limited

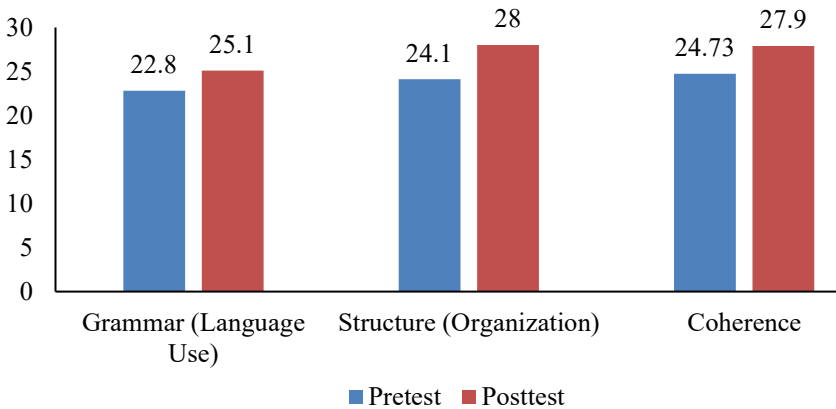


Figure 2. Comparison of pre-test and post-test mean scores in grammar, structure, and coherence

to specific aspects. Therefore, the mean pre-test and post-test scores were compared across three

major components of argumentative writing: grammar, structure, and coherence. As shown in

Figure 2, there were gains across all three components, although the extent of improvement varied by dimension.

Students' Perceptions on The Use of Roundtable-based Argumentative Writing Activities

To answer the second research question, the 42-item questionnaire was analyzed

descriptively after all negative items had been reverse-coded, as shown in Figure 2. Thus, higher scores were consistently associated with more positive perceptions of the Roundtable and process writing.

The overall mean for the questionnaire responses was 3.12 on a four-point Likert scale with a standard deviation of 0.72. This result implies that students had positive perceptions of

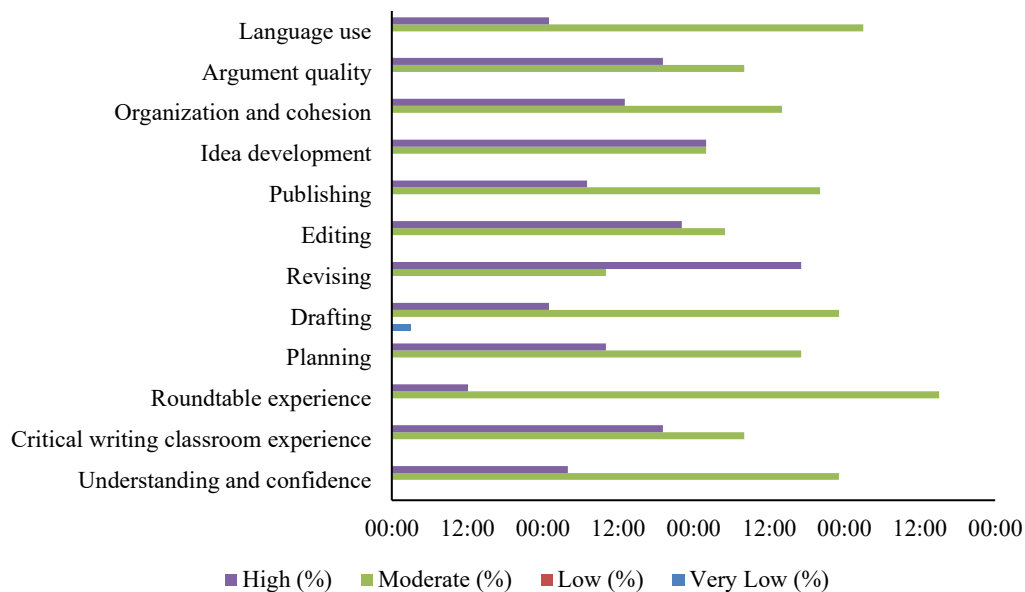


Figure 3. Percentage distribution of respondents' perceptions across questionnaire aspects

using Roundtable in teaching writing. The instrument was also internally consistent, with Cronbach's alpha = .91, indicating that the

questionnaire was sufficiently reliable to measure students' perceptions. The global results are summarized in Table 3.

Table 3. Overall questionnaire result

Variable	N	Number of Items	Mean	SD	Cronbach's Alpha
Students' perceptions of Roundtable	32	42	3.12	0.72	0.91

Figure 4 shows that roundtable activities promoted idea development and interaction received the highest mean score ($M = 3.59$), followed by revising through feedback and reflection ($M = 3.50$). In contrast, organizing ideas cohesively and maintaining coherence obtained the lowest mean score ($M = 2.70$). In addition to the quantitative outcomes, the

qualitative data were analyzed to provide insight into students' experiences using Roundtable in argumentative writing. The interview data were analyzed using thematic analysis (Clarke & Braun, 2013). As illustrated in Figure 4, two overarching themes emerged: positive impacts and continuing challenges. Within the positive theme, students reported improvements in idea generation,

argument organization, critical thinking, and engagement with the stages of the writing process. Continuing challenges, however, included unequal

participation among groups, insufficient time, and persistent difficulties with grammar, vocabulary, and the use of evidence.

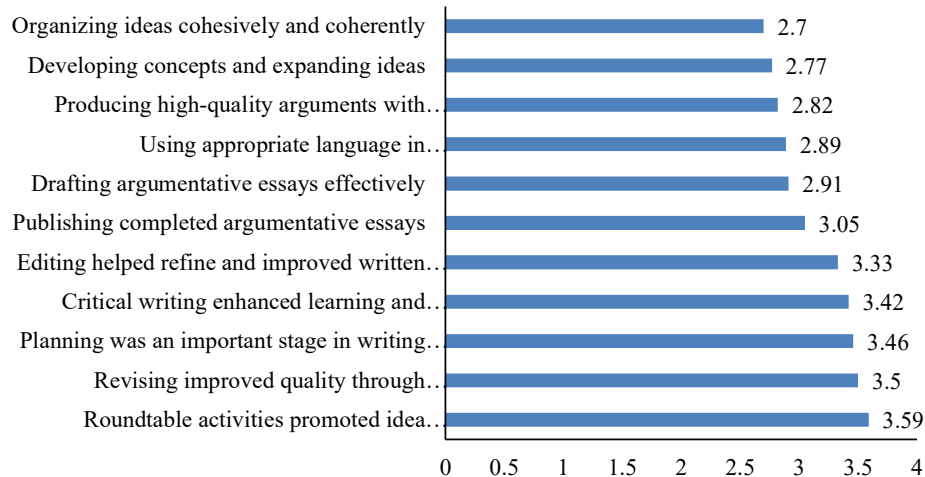


Figure 4. Mean scores of students' perceptions across questionnaire aspects (sorted in descending order)

To further illustrate these thematic findings, Figure 5 presents the dual outcomes of implementing the Roundtable technique in teaching argumentative writing, derived from a thematic analysis (Clarke & Braun, 2013), highlighting both the positive impacts, such as

enhanced idea generation, argument organization, critical thinking, and process writing, and the continuing challenges, including unequal participation, time constraints, and persistent weaknesses in grammar, vocabulary, and evidence-based argumentation.

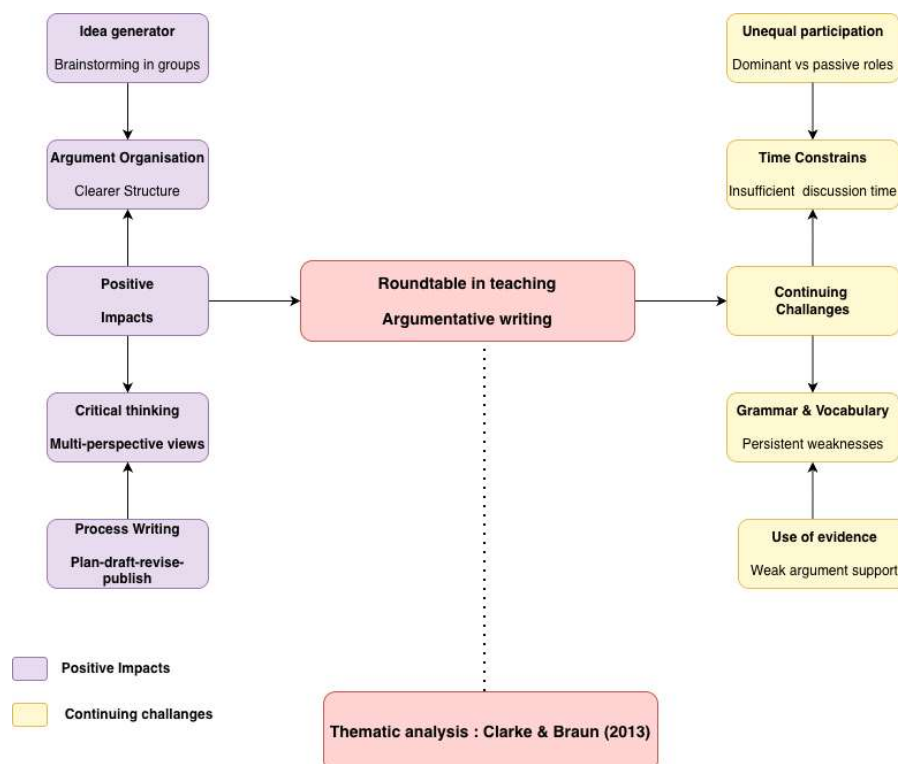


Figure 5. Thematic map of students' perception of roundtable in teaching argumentative writing

Roundtable as a Catalyst for Writing Improvement

A major theme that emerged from the interviews was that Roundtable had a clear impact on students' writing development. Students said they had difficulty with the structure of argumentative texts, starting their essays, and presenting arguments before the Critical Writing class. However, after participating in Roundtable activities, they described their writing as more structured, more purposeful, and easier to manage. *"I didn't often write argumentative essays prior to the class because I didn't know the correct structure."*

Student 1 said. Later, the same student reported significant progress, stating, *"I began to think more critically when writing essays, my grammar became slightly better, and my vocabulary choice also improved."* Student 18 also said, *"Before this class I was not able to write a thesis statement properly, but after joining Critical Writing I understood the structure of argumentative text better."* These comments indicate that Roundtable helped students to gain confidence and practical knowledge of argumentative writing.

Several students also mentioned that the improvement was not just in technical writing skills. Instead, they experienced a change in their general approach to writing. The learning process can help to understand *"important points that should be considered in making writing good,"* said student 10. In this way, Roundtable seems to have served as both a collaborative learning strategy and a scaffold for the development of academic writing skills.

Generating Ideas Through Collaborative Discussion

One of the most significant findings was that Roundtable improved students' ability to generate ideas. Many participants described discussion as the most helpful aspect of the learning process

because it allowed them to collect opinions, refine topics, and enrich the content of their essays. Students could instead work on their own ideas and build their arguments together by engaging with their peers.

Student 1 expressed this clearly, saying that *"many ideas appeared from different points of view, and this really helped us."* Student 2 said, *"Roundtable helped me see other points of view or opinions that were different."* These comments suggest that the collaborative format of the Roundtable led to a more lively and productive idea-generation process.

Other students commented that this group conversation helped them write fuller arguments. *"Roundtable discussion really helped me write opinions that supported my sentences, and my friends' ideas helped me see the topic from different points of view so I could write the content more completely."* (Student 5) Similarly, student 9 noted that the method made it unnecessary to use external tools, stating: *"When we do argumentative essays in groups, it's easier because the ideas we come up with are so many, and we don't need to use OpenAI anymore just to ask for ideas."* These accounts indicate that Roundtable was a useful resource for the ideation and development of argumentative writing.

Expanding Perspectives and Fostering Critical Thinking

Another recurring theme was that Roundtable helped students think more critically and from multiple perspectives. Many students said that before participating in group discussion, they would write from only one perspective. However, their repeated participation in the Roundtable taught them to take a stand and to see issues from both a supporting and an opposing perspective.

Student 6 said, *"Before I only wrote from one point of view, but after talking to friends, I*

got used to looking at the pros and cons before publishing my writing. Similarly, Student 14 stated, *"I became more open because I often heard my friends' points of view, and I became more critical to judge ideas or information that emerged during discussion."* These quotations indicate that the Roundtable promoted reflective thinking by exposing students to alternative perspectives and requiring them to respond to them. Students' accounts of how they constructed arguments also reflected this trend. As student 20 put it, *"It trained us to be more critical when arranging arguments."* Roundtable, thus, not only assisted writing, but also nurtured the more complex mental work of argumentative writing, such as evaluating claims, strengthening reasons, and anticipating counterarguments.

The Role of Process Writing in Supporting Roundtable

Added to the benefits of Roundtable was the use of process writing and especially the stages of planning, revising, and editing. This approach was also suggested by the interview data. Students frequently described these stages as necessary for moving ideas from discussion to coherent written text. Planning was often considered a particularly useful stage in the writing process.

Students said that planning helped them organize ideas, develop thesis statements, and determine the direction of their essays before drafting. Brainstorming, clustering, and outlining were concrete planning strategies mentioned by many. *"Planning helped us know what we were going to write,"* said Student 1, *"and revising helped us make our essay better."* Student 17 also said, *"I usually do brainstorming in the planning stage because it helps me to organize the ideas clearly and logically before I start to write."* Such comments suggest that planning helped to reduce uncertainty and gave students a clearer framework in which to write their arguments.

The revising stage was also regarded as important for improving the writing, mainly because feedback from peers and the lecturer was provided during this stage. Students said that revision helped them to pinpoint their weaknesses, strengthen their arguments, and improve the clarity of their writing. *"Revising was very helpful,"* Student 1 said, *"as the suggestions and feedback from the lecturer and friends made our writing better."* Student 5 said, *"The feedback from my lecturer and friends is important to me because I can know the mistakes in my writing and improve it."* Like these responses, these comments imply that revision was not just a corrective step but a reflective process in which students learned how to improve their content and reasoning.

Students also referred to the role of editing, especially in enhancing grammar, vocabulary, punctuation, and connectors. Students said that the editing stage made them aware of language accuracy, and that Roundtable helped them with ideas and arguments. Student 6 said, *"Editing helped me to pay attention to transition words such as 'however,' 'therefore,' or 'in contrast.'"* Student 19 also reported that editing helped the student to pay more attention to "tenses, connectors, and punctuation." The answers suggest that the students found editing an important step in making their writing more formal.

Students' Positive Perceptions of Roundtable

Regarding the second research question, interview data indicated that students generally had positive perceptions of Roundtable. Many found it a useful, interesting, and confidence-boosting manner of writing that made the task less scary.

Student 2 said, *"I strongly recommend this method because it really helps. Most students work on their own and lack confidence in their work. That is why round tables really help to build confidence."* Student

7 said, *"I found the roundtable beneficial because my friends were ready to give suggestions or solutions for my writing."* Likewise, Student 13 noted the model was useful: *"Roundtable plus process writing helps students learn step by step, exchange ideas, and get feedback."*

A few students also noted that the method fostered a more collaborative and motivating classroom environment. Student 21 said the approach *"makes students more active and does not make them feel writing is difficult."* This suggests that Roundtable was viewed positively not just for its academic benefits but also for the supportive interaction it fostered.

Perceived Strengths of Roundtable

When students discussed the benefits of Roundtable, they repeatedly identified three strengths: active participation, sharing ideas, and increased confidence. They appreciated the opportunity to work together, share ideas, and help each other along in the writing process.

Student 10 stated that the Roundtable was strong in that *"we can share knowledge, different points of view, and discover many ideas."* In the same vein, Student 12 stated that the best part of the roundtable and process writing was that *"I can be more confident to ask questions and express opinions in the group."* In another case, Student 22 commented that the method allowed students to become *"more active, understand the material better, and produce better writing."* These results suggest that students did not view Roundtable as a work-dividing technique per se, but rather as a collaborative structure that made writing more interactive and socially supported.

Challenges and Limitations in the use of Roundtable

The responses were generally positive, but students did mention several limitations in the

implementation of Roundtable. The most common problems were uneven participation, long discussions, and ongoing problems with language use and evidence-based writing. Repeated reference to unequal participation. *"Some friends didn't really participate that much."* Student 2 said, Similarly, Student 5 mentioned that discussion could be too long, especially if there are less active members. Student 9 was more critical and said that some members just *"put their names"* on the group work without contributing anything valuable. These comments suggest that the Roundtable's success was largely due to the dynamics and accountability among its members. However, student reports indicated that some of the writing difficulties did not improve post-intervention.

The most difficult of these was improving grammar, vocabulary, and use of evidence. *"Language is still a little difficult because I still don't know a lot of vocabulary,"* said Student 1. Likewise, Student 5 mentioned that *"My weak point is language because my vocabulary is limited and sometimes my grammar is still wrong."* *"The hardest part was using evidence or arguments, particularly picking examples or data that are really strong and relevant,"* said Student 17. These findings indicate that Roundtable was effective for idea generation and organization, but students required further assistance for higher-level language and argumentation skills.

The findings indicate that the intervention had pedagogical value on two levels. The quantitative results of this study showed a significant increase in students' writing achievement following the intervention. Second, data from both the questionnaire and the interview revealed that students generally had a positive experience with the instructional model, particularly in idea generation, collaborative reasoning, revision, and engagement with the writing process.

The findings add to theoretical understanding of writing instruction in at least three ways. First, they reassert the importance of social constructivist perspectives in writing pedagogy (Saleem et al., 2021; Newell et al., 2011; Wang & Newell, 2025). Students in this study did not build arguments in isolation. However, they participated in a process of exchanging ideas, questioning peers' perspectives, and negotiating meaning through roundtable discussions before and during writing. The interview data indicated that many students elaborated their positions after hearing alternative perspectives and receiving feedback from group members. This indicates knowledge and arguments were not produced in isolation but were co-constructed through social interaction, a key tenet of social constructivist theory. These collaborative conversations served as scaffolding, helping students generate ideas, identify weaknesses in arguments, and refine claims before turning them into written texts. The students' reported gains in idea development, perspective-taking, and critical engagement suggest that writing skills can be improved through interaction rather than only through solitary composition (Chen & Ren, 2022; Hoang & Hoang, 2024; Pham, 2023). Interviews showed that students often used discussion to test ideas, reflect on claims, and refine their positions before writing, consistent with the idea that learning arises from dialogue and collaborative meaning-making. Second, the study adds value to the teaching of argumentative writing in an EFL context by integrating collaborative learning theory (Landrieu et al., 2024; Masrul & Yuliani, 2023; Matos, 2021; Su et al., 2021).

Argument writing is hard thinking. It asks students to defend a claim, to anticipate counterarguments, to build a logical chain of reasoning. Qualitative data indicated that Roundtable served as a scaffold for sharing this cognitive load within the group. Peer exchange made students more aware of competing

perspectives and more deliberate in organizing their reasoning. This would suggest that collaborative interaction could be not only a form of classroom participation but also a means of developing more complex forms of academic argumentation. Third, the results support process-oriented theories of writing which suggest that collaboration was not the only way to improve. Instead, the benefits of the Roundtable were more apparent when the discussion was embedded in recursive stages such as planning, revising, and editing. Students repeatedly highlighted the importance of planning to organize ideas and revising content in response to feedback. This suggests that collaborative discussion works better when it is nested in a process-oriented writing context in which idea generation, reflection and reworking take place in sequence. In theory, this evidence underscores the importance of seeing writing development as socially negotiated and procedurally structured.

Pedagogically, the results indicate that roundtable can be a feasible instructional strategy for argumentative writing in higher education settings, especially in EFL classrooms where students tend to have difficulties in terms of where to start, what to argue, and how to support their ideas (Cao et al., 2022; Huang & Jun Zhang, 2020; Landrieu et al., 2024). However, the present findings also suggest that its value lies not in group work, but in the purposeful organization of interaction. Roundtable should therefore be embedded in a clear writing sequence by teachers who want to use it, with discussion connected to specific writing goals (e.g., developing a thesis, selecting support, considering counterarguments).

The study also highlights the instructional importance of feedback-rich revision. Since revising and editing emerged as among the most valued aspects of the learning process, writing instructors should allocate sufficient classroom time for peer and lecturer feedback and should guide students in how to use that feedback

meaningfully (Alnemrat et al., 2025; Cheng et al., 2023; Lipnevich et al., 2025; Liu et al., 2023; Usher, 2025). Without such support, collaborative writing activities may remain at the level of idea exchange and fail to translate into stronger written texts. The findings further suggest that collaboration should be accompanied by explicit attention to language-level instruction, particularly vocabulary development, grammatical accuracy, and the use of evidence, since these remained problematic for many students.

One of the strengths of the present study is the degree of convergence between the quantitative and qualitative strands. The statistical improvement in writing achievement was complemented by students' own explanations of how that improvement was experienced. Findings from the questionnaire revealed that students rated planning, revising, discussion and editing positively. Findings from the interviews explained why these dimensions were important: planning reduced uncertainty, discussion broadened perspectives, revision strengthened arguments and editing raised awareness of language choices. In this regard, the mixed-methods design offered not only confirmation but also explanatory depth.

However, the method comparisons indicated that the progress was uneven across writing dimensions. Although the intervention seems to have been particularly effective in helping with conceptual and procedural aspects of writing such as idea generation and argument structuring (Li & Zhang, 2021; Pospelova, 2021), it was less successful in providing a full solution to more advanced problems relating to grammatical accuracy, lexical range, coherence and evidence selection (Elabdali, 2021; Li & Zhang, 2021; Pospelova, 2021; Wigglesworth & Storch, 2009). The quantitative data revealed improvements in writing components, but gains in language-related aspects were less robust than those in content development and organization. This interpretation is further supported by the

component-level analysis in Figure 2. The biggest gains were in structure (Organization) and coherence, and the gains in grammar (Language Use) were relatively small. These results indicate that the overall gains in writing performance were mainly due to students' greater ability to organize arguments, develop ideas logically, and maintain coherence across paragraphs. Despite this, some students' reflections still contained language-related problems. However, these did not hinder the significant progress made in the higher-order dimensions of argumentative writing as measured by the rubric.

The quantitative results showed that the pre-test score (71.63) increased to the post-test score (81.00). This pattern was also confirmed by the qualitative findings, with several students still reporting challenges with vocabulary selection, grammatical correctness, and supporting arguments with sufficient evidence. The overlap between quantitative and qualitative findings suggests that collaborative discussion may be particularly effective in fostering idea generation and argument organization. However, additional instructional support may still be needed to improve the linguistic and rhetorical aspects of writing. Thus, the results do not point to a comprehensive solution to all dimensions of writing, but rather imply that process writing based on roundtables could help some facets of argumentative writing more than others.

The overall results were positive, but some points deserve attention, as they complicate a purely positive interpretation. Interestingly, students reported strong appreciation for the roundtable's collaborative nature but also expressed uncertainty about certain higher-order writing skills. This suggests that participation and engagement do not guarantee one's full confidence in academic writing. Students may feel supported, motivated, and better overall, but still struggle with the depth of their argument, the integration of evidence, or the accuracy of their language.

An analytically noteworthy finding concerns the role of publishing, which produced contrasting signals across the two data strands. Quantitatively, publishing received the lowest mean score among all questionnaire dimensions ($M = 3.05$), suggesting that students did not perceive it as the most beneficial aspect of the intervention for writing skill development. However, qualitatively, students frequently described publishing as a stage that heightened their sense of seriousness, responsibility, and audience awareness. This apparent contradiction warrants closer examination rather than a simple averaging of the two signals.

One plausible explanation lies in the distinction between cognitive confidence and affective engagement. Students may have rated publishing lower on the questionnaire because they remained uncertain about the technical quality of their final texts (their linguistic accuracy, argumentation depth, or coherence), dimensions that collaborative discussion alone does not fully address. At the same time, the act of publishing, making their writing visible to an audience beyond the instructor, appears to have shifted their orientation toward writing as a communicative act rather than a classroom exercise. This is consistent with process writing theory, which posits that authentic audience awareness activates a qualitatively different kind of investment in writing (Hyland, 2003). In this reading, the low quantitative score and the positive qualitative response are not contradictory but complementary: they reflect two different dimensions of the same experience: competence and purpose, which do not always move in the same direction.

This finding has a practical implication. If publishing primarily serves as a motivational and orientational mechanism rather than a technical skill-builder, then its value in the writing classroom should not be measured solely by mean scores on a perception scale. Instead, teachers might

consider how to design the publishing stage to maximize its function as an authentic communicative event, for instance, by sharing essays with peer audiences, submitting to class blogs, or conducting peer presentations, while ensuring that the technical support students need to feel confident in publishing their work is provided through prior stages of revision and editing.

Another surprise was that collaboration was both a strength and a challenge. Most students liked the idea of sharing, but some noted passive members, uneven contributions, and lengthy discussions. This ambivalence matters because it shows that collaborative pedagogy is not inherently effective; its effectiveness depends on how participation is distributed and managed. The discussion structure that promotes richness of ideas can also be a source of inefficiency or frustration where there is a lack of accountability.

There are several limitations to consider when interpreting the findings. First, it is important to note that the study was conducted with a small sample from a single class, which was appropriate for a classroom-based mixed-methods design. Nonetheless, caution must be exercised when generalizing the findings to a wider population. The patterns observed may indicate characteristics of this particular cohort, instructional context, or the lecturer's implementation. Secondly, this study adopted a one-group pre-test post-test design without a comparison group. Although the gain scores were strong and statistically convincing, it is not possible to say with complete certainty that all improvement can be attributed solely to Roundtable. Other factors may have contributed, such as greater familiarity with argumentative writing, accumulated exposure to classroom practice, or effects of feedback over time. Third, the perception data were self-reported via the questionnaire and interviews. Such data were valuable for understanding students' experiences,

though they may also be biased by social desirability or students' tendency to evaluate a classroom innovation favorably. Furthermore, although the qualitative findings were rich, they cannot claim to provide equal depth of coverage of all student perspectives.

The present results open up several avenues for future investigation. Future studies may use a quasi-experimental or controlled design to compare Roundtable to other instructional strategies and to make stronger causal claims. Such work would help determine whether the observed gains are unique to the Roundtable or reflect the broader impact of process-based writing instruction. Future research could be extended to larger and more diverse samples across institutions, proficiency levels, and educational contexts. Since collaborative writing may function differently depending on classroom culture and student preparedness, a broader sampling would be useful for testing the stability of the present findings. Future studies should also have a more detailed examination of specific dimensions of writing. Instead of focusing solely on overall achievement, researchers might study the Roundtable's impact on thesis formulation, coherence, integration of counterarguments, use of sources, range of vocabulary, or grammatical accuracy.

■ CONCLUSION

The findings of this study suggest that integrating roundtable activities into a process writing approach may provide a supportive learning environment for argumentative writing in an EFL higher-education context. The results show a positive trend in students' writing performance during the implementation period, as well as increased participation in idea generation, discussion, and revision activities. These observations indicate that if writing is conceptualized as a collaborative and recursive process rather than an individual, product-

oriented process, students may be more actively engaged in developing and organizing their arguments. The study also points to pedagogical implications of integrating interaction, peer feedback, and staged writing activities to support students through the writing process. However, results should be interpreted with caution, as the research design did not include a control group and thus does not allow causal claims about the intervention's effectiveness. Also, problems with grammar, vocabulary, coherence, and the use of evidence persisted, pointing to the continued need for linguistic and rhetorical support and collaborative writing practices. In conclusion, this study suggests that process writing through roundtable discussion can be considered a potential instructional strategy to enhance students' engagement and support the development of argumentative writing skills. However, more rigorous experimental designs and larger participant groups should be applied in future research to further explore its contribution to students' writing development.

■ DECLARATION OF GENERATIVE AI USAGE IN THE WRITING PROCESS

During the preparation of this manuscript, the authors used Claude AI and ChatGPT to assist with language translation, language editing, sentence refinement, and improving the overall clarity and readability of the manuscript. All AI-generated suggestions were critically reviewed, revised, and validated by the authors. The authors take full responsibility for the accuracy, integrity, and final content of the manuscript.

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