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COLLABORATIVE WRITING STRATEGIES AS A TOOL FOR EQUITABLE ARGUMENTATIVE LITERACY AMONG IRANIAN EFL LEARNERS

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ABSTRACT

The present study was an attempt to investigate the impact of collaborative writing of Iranian learners of English as a Foreign Language (EFL) on improving their argumentative writing skills. Having administered a writing test taken from TOEFL as a pre-test, 69 EFL students from intact writing classes at the University level were assigned into three groups: collegial collaborative, sequential collaborative, and no collaboration groups. At the end of the treatment, which took 12 sessions each for 80 minutes, all groups received the post-test. Findings made it clear that learners benefit equally well from either collegial or sequential cooperation. However, no collaboration led to poor argumentation skills in the writings of the participants. In other words, the collaboration of the types analyzed can potentially develop the reasoning and argumentation skills among EFL students. The findings of the present study can provide EFL teachers with an understanding of the application of different types of collaborative writing to create a positive classroom environment.

KEYWORDS: Argumentative writing, Collaborative writing, Collegial collaborative, Sequential collaborative, writing skills development.

1. INTRODUCTION

The urge to lead a new educational era in universities led to a shift to a new paradigm, encouraging the wider use of cooperative learning (CL) strategies in classrooms. These days, the tendency to push students toward teamwork and joint activities has grown increasingly. Educational centers and mainly teachers rely on CL as an effective methodology to train students how to work with other members from other ethical and academic backgrounds respectfully, while being attentive to the group outcomes (León *et al.*, 2018). Recent discoveries suggest that cooperative activities enhance teamwork, improve academic performance, and intellectual faculties such as critical thinking, and develop interpersonal skills among students (Baena-Morales *et al.*, 2020).

That is why CL approaches have gained increasing popularity with researchers and teachers, as students learn to divide responsibilities, strengthen individual accountability, polish social skills, and generate effective peer interaction in order to achieve a common goal (Qorei, Ahmadi, & Atiqoh, 2024). CL strategies are viewed as practical methods in a higher educational context to foster a positive perspective toward the pedagogical subject, motivate students, produce a welcoming, pleasant atmosphere, and promote teamwork (Tran, 2019; Liu & Lipowski, 2021; Cechini *et al.*, 2021). It is also believed that CL strategies can be specifically useful to university students, as they can learn how to obtain academic goals (Chiecher, 2017). Examining the effectiveness of cooperative tactics in university contexts has become more common during the last two decades (Barba *et al.*, 2012). Likewise, CL has been closely studied in EFL contexts among university students. Considering that CL offers very promising results when it comes to promoting an energized, supportive, safe haven for peer interaction, EFL teachers pursue these teaching strategies to enrich the academic environment with students' output (Azizinejad, Hashemi & Darvishi, 2013; Namazidoust *et al.*, 2020; Johnson & Johnson, 1989; Hu & Hemchua, 2023).

The impacts of CL on various English language skills, such as reading comprehension and oral production, have been studied (Amin, 2020; Azizinejad *et al.*, 2013). However, the core attention here would be allocated to the application of CL on the development of writing in a university EFL context. Writing has generally been conceived to be done individually, requiring the implementation of several cognitive skills simultaneously. Yet, over the

last years, there has been a growing surge of enthusiasm in collaborative writing (CW). CW embraces the core concept of CL and is defined as a pedagogical activity engaging a group of students in the co-construction of a single document (Chen *et al.*, 2022; Storch, 2019). Previous research on CW focuses on two strands of research: a) whether CW offers new learning opportunities in second language learning, and b) explores a range of variables influencing the effectiveness of CW (Zhang & Plonsky, 2020).

Our research falls in the first category and investigates the success of the CW program on the development of critical thinking skills and argumentative writing among university students. Participants were explicitly instructed on how to plan collaboratively and engage in peer-assisted writing in groups (Landreiu *et al.*, 2024). Explicit instructions were given on how students could revise and rewrite their text individually; however, receiving their teammates' feedback on their argumentation structure was also crucial. This study, as a sequel to other research projects conducted on the usefulness of CW in the EFL context, contributes to the body of research in the realm of argumentative writing.

Very few studies have explored the incorporation of different types of CW in the improvement of argumentative writing quality, especially in the EFL context (e.g., Abbas & Herdi, 2018; Moonma *et al.*, 2021). Therefore, to address the gap in the literature, we have tried to shed light on the outcomes gained after integrating two types of collaborative writing interventions, namely collegial and sequential, into argumentative writing sessions in the EFL context. Collegial collaboration is when one person is leading; they compile the group's ideas and do the writing, whereas sequential collaboration happens when each person adds their task work, then passes it on for the next person to edit freely (Hart, 2000; Lowry, Curtis, & Lowry, 2004).

1.1. Cooperative learning (CL)

Cooperative Learning (CL) is one of the popular educational approaches in which cooperation, consistent collaboration, and interaction between teammates occur (Slavin, 1980; Slavin, 2014). Others define CL as a method that puts students with different academic and personal skills in groups to reach certain objectives (Qorei, Ahmadi, & Atiqoh, 2024). According to Dörnyei and Ushioda (2011, p. 27), "a number of related methods of organizing classroom instruction in order to achieve common learning goals via cooperation". On this course of collaborative learning, a sense of accountability between members grows, facilitated learning takes place, and information retrieval will be expedited

(Tarim & Akdeniz, 2008; Awada et al., 2019). CL focuses on learners' abilities to lead their learning journey, similar to constructivism, insisting on student-centered learning (Cheek, 1992; Yager, 1991; Gil, 2015; Lak et al., 2017).

CL has roots in Vygotsky's approach toward learning, believing that learning happens through social interactions with more competent members of the community (Vygotsky, 1978, p.128). This phenomenon is described as "scaffolding". The important point about the metaphor of scaffolding is that it not only helps the weaker accomplish the task at hand, but also enables the child to perform the task independently (Greenfield, 1984). Cooperative learning, embracing the same concept, attempts to foster an environment where students take active roles in their learning, engage in group work, and manifest the idea of a learner-centered classroom. Gillies (2016) maintains that teachers also play a pivotal role in CL, since they have to distribute adequate activities among students to involve them and set the ground for the rise of an orchestrated cooperation between students to achieve a certain goal (Topping et al., 2017).

1.2. Is CL always practical?

According to researchers, group activities serve as a stepping stone to boosted learning, as students attempt to align their performance with a common goal, monitor their peers' activity, and provide reciprocal feedback (Shafeie & Khavaran, 2017; Butera & Buchs, 2019). In line with these examples, Roger and Johnson (1994) support the same view and argue that CL consists of five elements. These include independence, increased accountability, group talks, and face-to-face interactions. CL benefits students in multiple ways as they would be responsible for each other's learning quality, and should try to elevate their peers' performance until meeting the objectives. Considering that consistent collaboration between students occurs, it is expected that oral communication skills improve; likewise, students will demonstrate motivational and improved emotional responses toward their teammates (Qorei, Ahmadi, & Atiqoh, 2024; Hartiff, 2012; Fernandez-Rio et al., 2017; Tolmie et al., 2010; Hashmi et al., 2025).

It has also been reported that cooperative learning strategies, despite their usefulness, often seem to be difficult to implement (Abas et al., 2025). Thus, various forms of CL have been formed to be implemented according to the teachers' needs and classroom settings (Buchs et al., 2017). Filippou et al. (2021) encourage teachers to gain better teacher education and improve their professional competence in order to better apply CL strategies in

classrooms (Gillies & Boyle, 2010). Following the same perspective, Alhebaishi (2019) reported that intermediate English language teachers in public schools failed to properly use CL as an efficient strategy for promoting students' learning. Yet, the students' attitudes toward the implementation of CL in classrooms were positive.

Nguyen et al. (2019) rendered different results regarding the practice of CL by teachers in classrooms. The researchers said that teachers had been practicing CL in their classrooms before as well, and they had a good understanding of CL. Their attitudes toward the application of CL were affirmative. However, it was highlighted that teachers' preference for CL would change if the number of students exceeded a certain number. Under such circumstances, controlling classrooms would become difficult, and the noise would inhibit learning. Despite these varying results on the use of CL in classrooms, it is suggested to adopt the method based on the need and contextual factors (Buchs et al., 2017).

1.3. CL and University Context

Research in CL has mostly focused on elementary and primary schools, and higher educational contexts, such as universities, would be left out of sight. Yet, a growing enthusiasm in the university context is also more commonly expressed (Carrasco & Ginger, 2011; Pegalajar & Colmenero, 2013). Mando-Lazaro et al. (2022) investigated the effects of CL on the academic performance of university students. Their findings showed that university students embraced the concept of CL and welcomed developing independent academic goals and setting a course for achieving certain objectives. Surprisingly, scholars believe that goal setting might be an indicative factor in terms of the practicality of CL among university students.

In other words, it is assumed that goals might influence students' learning and their desire to execute CL. According to Kaplan and Maehner (2020), goal setting in university classrooms is particularly useful as students realize they are contributing to an orchestrated effort to achieve a common goal. These goals could be personal or social; they range on a dynamic scale between the two ends (Chiecher, 2017). Orientation toward a goal could be determined by the teacher, and they can define which direction to take and successfully motivate students (Andreev et al., 2020). Mando-Lazaro et al. (2022) supported the idea of utilizing CL in university classrooms, considering that learning will be more goal-oriented and a more pleasant learning environment will be created (Fernandez-Rio et al., 2017; Mendo et al., 2018).

Tran (2019) encourages more implementation of CL in the university domain, as CL is instrumental in motivating university students, and teachers can use the CL strategy to energize their students and engage them in more learning activities. Thus, CL is also considered to be an effective motivating teaching strategy (Liu & Lipowski, 2021; Cecchini *et al.*, 2021). Mando-Lazaro *et al.* (2022) studied the probable influences of a cooperative learning program on the development of critical skills in university students and attested that CL has been very constructive in this regard. The authors mentioned that their program required high levels of individual accountability and interdependence among teammates, so that cooperative learning interventions would be effective on learning goals in students.

Likewise, other scholars adhere to the same positive attitude toward the implementation of CL in universities, arguing that CL improves motivation, fosters a positive perspective toward the subject, increases self-esteem, and facilitates mutual social support, group cohesion, and teamwork structure (Fernandez-Rio *et al.*, 2017; Han & Son, 2020; Liu & Lipowski, 2021). Scholars discuss that the program assigns more responsibility to students, gives them their learning authority, and enhances autonomy, which are the key elements for creating a flourishing educational environment (Amin, 2020; Han & Son, 2020).

1.4. CL and English as a Foreign Language (EFL)

The positive influences of CL on multiple aspects of students' social learning and achievements are widely acknowledged (Tal, 2018; Levontin & Bardi, 2018; Kurniawan & Firnada, 2024; Namazidoust *et al.*, 2020). Studies have also elaborated on the effectiveness of applying CL to increase students' motivations and academic achievements (Bećirović *et al.*, 2022). Researchers believe that CL can be specifically valuable when the students begin a new cycle of educational training, for instance, transitioning from elementary level to junior high school, or high school to university (Gillies, 2016). It is believed that CL has significantly contributed to the maximization of learning in higher education (Balta *et al.*, 2017; Kyndt *et al.*, 2013; Gillies, 2016).

English language learning as a form of higher education is no exception. Teachers in EFL try to create a supportive and secure academic environment where all students can have their say and freely contribute to classroom activities (Barjestesh *et al.*, 2025). EFL teaching methodologies also oblige teachers to employ strategies that tend to generate a dynamic environment where language learning is seen as a social phenomenon (Fan &

Wang, 2022). CL, as an interactive learning strategy, enjoys several positive points which are highly valued in EFL classrooms. The integration of CLT in English language learning classrooms results in the considerable enhancement of oral skills, increased intrinsic motivation, improved social behavior, and satisfactory affective responses (Azizinezhad, Hashemi & Darvishi, 2013).

In the same line of research, Bećirović *et al.* (2022) demonstrated that the incorporation of CL in EFL contexts was rewarding, and an increase in students' intrinsic motivation for language learning was observed. However, the researchers did not report any point regarding the effectiveness of CL and educational level, showing that CL is favorable for almost all educational backgrounds. Furthermore, the findings suggest that there is a bidirectional relationship between students' sense of accountability and their motivation, academic achievements, and interpersonal skills resulting from the implementation of CL. This statement pinpoints the fact that students are part of the learning chain and their characteristics can influence the level of CL's effectiveness for them.

Neo *et al.* (2012) maintained that the use of CL in EFL classrooms is conducive to a higher level of motivation, peer interactions, and socialization at a larger scale. Others also emphasize the same point and believe that employing a CL strategy can have fruitful results in terms of EFL students' motivation and their predisposition for other academic activities (Ning & Hornby, 2014; Busser & Walter, 2013). CL in the context of EFL classrooms has been studied in multiple ways, including the effects of CL interventions on the development of English language skills. For instance, Amin (2020) studied a reading comprehension classroom that was being treated by CL strategies. The researcher reported that CL has had significant results, and students' reading comprehension has improved significantly after sharing thoughts and exchanging views.

In another study, Namazidoust *et al.* (2020) undertook research that further scrutinized the effects of CL treatment on students' speaking abilities. In this project, 72 EFL learners were randomly assigned to two groups, and both groups received a particular type of CL treatment. During the post-phase of the study, it was realized that subjects of both groups had developed better speaking fluency, and CL has been pretty useful.

1.5. Writing and CL, Collaborative Writing (CW)

Recently, more studies have been conducted on the research avenue of CL and writing skills. Writing is

known as one of the difficult activities that requires both comprehension and production. Especially when it comes to essay writing, a thorough analysis of various aspects of a text is required (Istiara & Lustyantje, 2017). According to the researcher, mastering writing in EFL learners is the most difficult task, not only for generating original ideas but also for rendering ideas into a reader-friendly manner. The sub-skills involved in writing are highly complex, and the students are required to accomplish a set of essential tasks to acquire organization, planning, and critical thinking skills (Istiara & Lustyantje, 2017).

During the last two decades, scholarly attention has been devoted to CW (Chen & Lee, 2022; Storch, 2019). CW in the realm of EFL was first put forward when the scholarly paper of Swain and her colleagues was published, demonstrating the learning opportunities provided for students while doing joint activities (Swain & Lapkin, 1995; Swain, 1998). Collaborative writing is supported by the sociocultural perspective toward learning, emphasizing that the development of writing occurs through the co-construction of knowledge, sharing responsibilities, and exchanging views collectively (Chen et al., 2022). Likewise, it is reiterated that the writing production will be enhanced through sustained peer interactions (Chen et al., 2022; Pham, 2021; Storch, 2013; Storch, 2011).

In simpler terms, CW involves a group of students writing simultaneously while giving constructive feedback (collective scaffolding) on choosing a topic, setting a proper tone for the text, and organizing vocabulary (Villareal & Gil-Sarratea, 2019). Storch (2019), however, views CW as an activity that requires the co-authors to share the same responsibilities and stay involved in all stages of the writing process and contribute to the outcome. He believes that collaborative writing should be distinguished from cooperative writing in the sense that in cooperative writing, tasks are assigned and each member writes a section. However, in collaborative writing, all students should give feedback on the writing produced by the other member. Storch (2013; 2017) argues that the two terms “cooperative” and “collaborative” should not be used interchangeably in the studies.

Researchers support using cooperative learning strategies as a pathway toward reaching a higher quality performance in students (McDonough et al., 2015). They suggest that in CW procedures, each student is responsible for their own production and must be able to support the task goal. Therefore, individual accountability is enhanced and peer

interactions are more frequent. CW is regarded as a pedagogical activity that arouses reciprocal conversation among learners while co-producing a writing piece (Zhang & Plonsky, 2020). Considering that CW involves interactions, a large body of literature has also taken a social perspective toward the dynamicity of this strategy (e.g., Zhang & Plonsky, 2020; Chen & Lee, 2022).

For instance, in a study led by Chen and Lee (2022), it was found that there is a set of components (emotional, social, and cognitive) in peer interactions that appear in conflict systems. Researchers argued that these conflict elements in face-to-face CW practices can lead to higher achievements. Especially, cognitive conflicts determine improved quality and successful writing outcomes. Nevertheless, researchers also pinpointed that the simultaneous presence of cognitive conflict with other components can render opposite results, and students may encounter challenges while developing a text.

There are studies further assessing the outcomes of CL treatment and writing skills, and it is identified that writing in collaboration is conducive to upgrading critical thinking skills, pooling ideas, and developing writing pieces in terms of content, structure, and vocabulary organization (Anggraini et al., 2020; Jalili & Shahrokhi, 2017; Khodabakhshzadeh & Samadi, 2017; Moonma et al., 2022).

1.6. Argumentative writing

Fostering argumentative writing skills in students has always been of concern to academicians. As expository writing requires deep analysis of evidence, full consideration of various aspects of arguments, and problem-solving, developing effective critical thinking skills gains significance (Granado-Peinado et al., 2019; Matos, 2021). Thus, researchers have emphasized that teaching argumentation skills should become a priority in classrooms (Asterhan & Schwarz, 2016). According to Walton (1989), argumentation is an ongoing process taking place between two or a group of students who hold various viewpoints. The argumentation will lead to the strengthening or weakening of a specific stance. Studies reiterate that engaging in dialogic argumentations can result in the development of logical reasoning on both sides (Papathomas & Kuhn, 2017; Felton, Crowell & Liu, 2015).

Researchers also suggest that practicing dialogical argumentation increases ambiguity tolerance, encouraging students to consider other reasons with patience and enough contemplation, and address counterarguments while forming their rebuttals (Walton et al., 2008; Hemberger et al., 2017; Nussbaum & Asterhan, 2016). Argumentation is also

important when it comes to developing argumentative essays. In fact, collaborative discourse sets the ground for the representation of various ideas in a classroom and further peer interaction. Likewise, more opportunities would be provided for the expression of contradictory or supporting statements among students (Felton et al., 2009). Collaborative writing is viewed as an intersection connecting dialogic argumentation, argumentative writing, and other intellectual skills. It is believed that CW can act as a bridge to help students develop improved argumentations in their essays (Mathos, 2021).

Converging evidence supports the hypothesis that argumentative writing is improved as student-student discourse becomes more common, whether in the form of group or classroom discussion (Resnick et al., 2015; Hemberger et al., 2017; Sun et al., 2017). Relatively few studies have focused exclusively on the interrelationship between CW and argumentative writing (Matos, 2021; Gutiérrez, 2017; Thompson & Wittek, 2016). Reviewing the literature, it is pointed out that exchanging views and brainstorming ideas prior to performing the task raises argumentative writing quality (Larrain et al., 2020; Nussbaum & Putney, 2020). Matos (2021) reports on the beneficial results of integrating CW in writing sessions. The researchers believed that incorporating cooperative discourse in writing classrooms both enhanced individual and group writing quality. Landrieu et al. (2024) examined the effects that explicit instruction and CW may have on the students' argumentative writing performance and their self-efficacy upon developing arguments in the essays. Researchers reported that explicitly teaching students how to collaborate can have positive results, as students show an enhanced level of understanding while planning and revising the text collaboratively, writing and rewriting individually. Yet, the researcher encourages further study to shed light on the quality of collaboration and the produced text (Landrieu et al., 2024).

In the same vein of research, Granado-Peinado et al. (2023) demonstrate that assigning argumentative writing tasks to students can be very beneficial for students in terms of increasing their learning capacity. Yet, as the task requires students to integrate both supporting and contrasting positions, challenges may appear. Scientists provided four different interventional sessions for developing writing skills. The most exhaustive intervention included both explicit instruction and collaboration while developing arguments. Researchers reported that through explicit instruction and the application of CW, students could boost their argumentative

writing performance.

Furthermore, researchers mentioned that explicit instruction had been very practical in terms of argument integration. Building on the prior research, Pham (2023) also reports the same results and believes that collaborative writing positively influences the writing performance of students. Moonma et al. (2021) investigated the implementation of collaborative writing in argumentation development sessions in EFL classrooms. Research indicates that the writings produced in collaboration were of better quality, and students demonstrated higher levels of critical thinking, evidence analysis, representing information while brainstorming, and discussing their views in groups. Similar results were reported by Abbas and Herdi (2018), stating that students had resolved their issues with developing arguments in essays to a large extent and enjoyed working in pairs. Following the discussion, other findings have also been taken into account. For instance, Ghufron and Hawa (2015) report on the usefulness of CW in terms of developing argumentative writing abilities rather than direct instructions during writing lessons.

In addition, the authors mention that learners' creativity is also part of this chain. The more the student is creative in developing an argumentative essay, the higher the writing quality. However, Gutiérrez (2017) argues that despite the wide and beneficial effects of CW on argumentative essays, we should maintain a realistic view over the subject and remember that the technique will not have immediate and observable effects. The interventional sessions must take place over a period of time. Likewise, scholars such as Dicastilla and Anton (2012), Naughton (2006) encourage teachers in EFL to use first language to better convey collaborative writing principles in classes. They believe that the mere reliance of instructors on the second language may be unwise.

2. METHODS

2.1. *Participants and procedure*

220 students taking part in English writing courses in Afarinesh language institute in Tehran were administered the paper based Test of English as a Foreign Language (TOEFL) in order to select a homogenized sample in terms of their language proficiency. Out of the subjects who took the test, the eligible ones (those whose scores ranged from one standard deviation above and below the mean and consented to participate in the study; n=79) were selected to serve as the participants of the study.

A couple of factors were controlled here in order to

effectively control bias (e.g., gender). First, an equal number of students was selected from males (n=34) and females (n=35). Secondly, both groups were ensured to align with the homogeneity criteria, including age (15-25 and a mean of 20.7). Their learning backgrounds were similar, given that all participants had studied English at the institute for over the last two years at the time of the data collection. Besides, none of them had the experience

of studying or living in English-speaking countries. The participants were then randomly assigned into three homogeneous groups (Collegial Collaborative (CC), Sequential Collaborative (SC), and No Collaboration (NC)). All the conditions for the groups were exactly the same except for the method used for teaching argumentative writing. Table 1 below describes the participants of the study in detail.

Table 1: The assignment of participants into three groups

Group	Number	Gender		Treatment
		M	F	
A	24	M	12	CC
		F	12	
B	24	M	11	SC
		F	13	
C	21	M	11	NC
		F	10	

2.2. Instruments

To start with, a version of the paper based TOEFL was applied in order to help the researcher determine the students' proficiency levels. This test includes a listening section (50 items), a structure and written expression section (40 items) and a reading section (50 items). In addition, the audio script grammar was enclosed at the end.

Secondly, as a pretest and posttest of writing, argumentative topics were selected from among the standard TOEFL topics (pretest and posttest) and were applied to elicit the writing performance of the learners. Participants had to discuss different views and clarify the view they agreed with.

Finally, in this study, Jacobs et al.'s (1981) composition profile was used to score the students' performance on the writing task. Each paper was evaluated based on five components: Content 30 points, Organization 20 points, Vocabulary 20 points, Language Use 25 points, and finally, Mechanics 5 points. The assessment entailed both numerical and mastery aspects. The numerical ranges correspond to four mastery levels: excellent to very good, good to average, average to poor, and very poor. These levels were demonstrated by keywords showing specific criteria for excellence in composition (Hadley, 2003).

2.3. Treatment sessions

The first group was taught argumentative writing through the CC type of instruction, in which one person led to compilation of the group's ideas and did the writing. In addition, in the second group, in which the participants were managed by the SC method of teaching argumentative writing, each person added their task work, then passed it on for the next person to edit freely. Moreover, the NC

group consisted of participants who were to deal with the argumentative writing individually, with no collaboration at all.

Every session, learners were asked to develop an argumentative essay on the topics chosen from the IELTS Writing test. Without exception, all treatment sessions were associated with an introduction to the employed method, and the procedure to be taken in continuation. Then the participants worked with their partners to write an essay of 250 words in approximately 60 minutes.

As the research title suggests, keeping the cooperative atmosphere in the classroom and among students was of top importance. Thus, during every session, all standards were followed to ensure that the chain of cooperation between students remains intact. The group composition in the CC group was a round circle in order to make it possible for discussions and compiling of the ideas. In the SC group, on the other hand, the groups sat close to each other in a row so that the written drafts could be easily passed from the first member to the last. There was no particular format in the NC group, though, and the members sat at their regular chairs in class of their own desire.

However, both in CC and SC classes, for each group, there was an accepted common objective on which the group was rewarded for their efforts. Also, Resource interdependence was observed among group members. The phrase 'resource independence' is intended to imply that every participant has access to of available resources necessary for the task to be completed. The members' resources had to be shared with others so that the final goal was fully attained (Johnson & Johnson, 1989).

Researchers walked into the class to monitor

students' quality of performance and ensure that students were following the instructions on cooperative learning. The researcher insisted on the note that all students must contribute to the cooperative activity and reminded them that all students are accountable for the achievement. Students in the CC and SC groups undertook different roles including: Leader (who led the group in the implementation of the assignment), time keeper (who set the time and let the group know when it is time to start), or encourager (who encouraged group members to participate in discussions and share their ideas) (Johnson et al.,

1994). Accomplishing different tasks by students contributes to the inhibition of behavior problems. Students also exchanged their roles to reduce boredom and enrich the environment with more activity.

4. RESULTS

Table 2 presents the results of the TOEFL administered to the groups. The first group (CC) had a mean score of 73.47 out of 100, similarly the second group (SC) had a mean score of 72.95 out of 100, and finally the third group (NC) had the mean score of 75.10.

Table 2: Descriptive statistics for the TOEFL pretest

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CC	20	73.4700	3.17888	.71082	73.5122	76.4878	68.00	80.00
SC	20	72.9500	3.08605	.69006	74.1057	76.9943	71.00	86.00
NC	20	75.1000	2.73188	.61087	73.8214	76.3786	70.00	81.00
Total	60	73.8766	2.96357	.38260	74.4511	75.9822	68.00	86.00

Table 3 presents the results of a one way ANOVA which was run between the mean scores of the three groups. With an alpha level decided at .05 level of significance, there was not any significant

difference observed between the three groups (F=.190) which along with the randomization showed that the three groups (group A, group B, and group C) were homogeneous.

Table 3: One way ANOVA to assess the homogeneity of the three groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.433	2	1.717	.190	.827
Within Groups	514.750	66	9.031		
Total	518.183	68			

In order to see whether or not these three groups were any different in their abilities to write argumentative essays, one way analysis of variance (ANOVA) was applied. The type of argumentative writing instruction was regarded as the independent variable with three levels (there are

three groups). In addition, the posttest of argumentative essay writing was considered to be the dependent variable. Table 4 presents the descriptive statistics for the performance of the three groups in the posttest of argumentative writing.

Table 4: Descriptive statistics for the performance of the three groups

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CC	24	18.2500	1.01955	.22798	17.7728	18.7272	17.00	20.00
SC	24	16.4500	1.31689	.29447	15.8337	17.0663	14.00	19.00
NC	21	15.3500	1.59852	.35744	14.6019	16.0981	13.00	20.00
Total	69	16.6833	1.78023	.22983	16.2235	17.1432	13.00	20.00

Table 5 below presents the results of the administration of the one way ANOVA. As the table shows, the observed mean difference is significant. This amounts to saying that participants

in three groups had significantly different performances on the posttest of argumentative writing.

Table 5: One way ANOVA to compare the performance of the three groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	85.733	2	42.867	24.132	.000
Within Groups	101.250	66	1.776		
Total	186.983	68			

To find out exactly which two groups are different from each other, post hoc analysis was chosen. To perform the analysis, the researcher made use of

Scheffe test. The groups were compared two by two and the results were given in table 6 below.

Table 6: Scheffe test on posttest of argumentative writing

	(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Scheffe	CC	SC	0.80000	.42146	.108	.7407	2.8593
		NC	2.90000*	.42146	.000	1.8407	3.9593
	SC	CC	-0.80000	.42146	.108	-2.8593	-.7407
		NC	2.10000*	.42146	.040	.0407	2.1593
	NC	CC	-2.90000*	.42146	.000	-3.9593	-1.8407
		SC	-1.10000*	.42146	.040	-2.1593	-.0407

*. The mean difference is significant at the 0.05 level.

As the table shows, the difference between CC and NC groups is significant ($p = .000$). Similarly the difference between SC and NC group is also significant ($p = 0.040$). The mean difference is positive, so we can conclude that the mean in both CC and SC groups was greater than the mean in NC group. In other words, the students with either collegial or sequential methods of writing instruction had better performances than their counterparts with no cooperation at all.

5. DISCUSSION AND CONCLUSION

Present study was designed to assess the effectiveness of two types of CW on the improvement of argumentative writing skills in EFL University students. The findings suggest that learners boosted their writing performance through cooperation with either CC or SC group. Using individual writing samples and checking the outcomes during cooperative writing sessions, the findings indicated that students had significantly progressed in forming ideas, setting an academic tone for their essay, and integrating arguments. In this regard, the findings are more noteworthy, as proficiency is recognized as an indicative component in peer-assisted argumentative writing. It can be argued that students have improved more through interaction with their more capable peers. Therefore, the researchers came into this perception that EFL students need to get help and feedback from their partners in line with Vygotsky's proposed scaffolding mechanisms that facilitated the interaction. Also the use of L1 throughout the task seemed helpful in promoting communication and achievement of task goals.

From observing the class, the researchers also found some evidence of learners who corrected their own utterances, and assisted each other to find the right form. So, the researchers can claim that the learners succeeded in using the target language and the interaction strategies such as modified-interaction strategies and social-interaction strategies taught by

the teacher at the very first session. To take a sociocultural perspective, the researcher can say that the learners needed each other to accomplish the task.

The results thus support the idea that utilizing collaborative activities during writing sessions could promise a winning pedagogical strategy (Landreiu et al., 2024; Moonma & Kaweera, 2021; 2022; Resnick et al., 2015). The researcher also observed students cooperating with their partners and figured out that peers played important roles in instructing their partners and keeping them interested throughout the interaction. In their negotiations, most of the time, both participants were involved, via requests, explanations, and repetitions. These findings are also in accordance with Bećirović et al. (2022), who demonstrated that collaborative practices also improve interpersonal skills and enrich peer interactions. Similarly, Fernandez-Rio et al. (2017), Han and Son (2020) Liu and Lipowski, (2021) reiterate the same point and believe that collaborative dialogues can promote teamwork performance, group cohesion, facilitates social mutual support and teamwork structure. It is often expected that university students know how to perform in teamwork activities; however, collaboration in groups allows the students to acquire or polish the requisite skills. Peers were usually eager to cooperate with their partners. On the other hand, the researcher observed moments when the students did not get along well with each other, and were not sure of the correctness of the forms suggested by their partners, and resorted to their own lucky guesses. Therefore, the students sometimes exchanged correct knowledge, and sometimes incorrect knowledge.

The incompatibility among students is regarded as one of the factors inhibiting teachers from implementing collaborative strategies in classrooms. However, it is suggested that the rise of opposition between views is a sign of dialogical argumentation. Gradually, students learn how to strike a healthy balance between different positions and respectfully

consider their own and others' views. This is also suggested in Hemberger et al. (2017), Nussbaum and Asterhan's (2016) studies, believing that engaging in dialogues that are built upon logical arguments can enhance students' ambiguity tolerance. Overall, students learn so many social skills during their conversations and learn to better identify arguments, especially after explicit instruction. This is also well established in Landreiu et al. (2024) whose reports illustrate the importance of explicit instruction associated with joint activities. It is also assumed that the students' desire for learning new skills in a group was due to their urge to contribute to a common goal. This is also in line with Kaplan and Maeher (2020) findings, showing that setting goals in classes by teachers could be an effective way of encouraging students toward achieving an aim. Our findings pinpoint that there was a considerable improvement in students' argumentative writing procedure while developing arguments, choosing a topic, revising the text and sharing views. These points are also supported by Mando-Lazaro et al. (2022) who asserted that cooperative activities had yield a marked influence on students' critical thinking abilities in writing.

5.1. Pedagogical implications

The study suggests that the findings of this study can have practical implications for teachers and students in terms of learning and academic performance. Teachers, by equipping their students with cooperative learning techniques, can hope that students' performance may be enhanced and perform better when it comes to writing. It is suggested that CL strategies prove useful when instructors want to indicate what students are supposed to learn and focus on the special skill until they have mastered it. By introducing the wisdom of CL strategies, students become more familiar with the learning procedure

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and learn how to boost their learning opportunities. Plus, teamwork will become an inseparable part of the classroom. Therefore, collaborative writing is significant for both teachers and students in many ways. The researcher hopes that the results obtained from the present study will be applied to the language teaching setting more and help learners improve their language proficiency. It is hoped that the current study will incite more curiosity in the CL domain and inspire other scholars to elaborate on the research area.

Teachers have a vital role in raising students' awareness of CL strategies and their implications for students' educational performance. Cultivating CL strategies in the educational environment assists students in developing argumentative writing skills and staying inclined to share their perspectives with one another. Paying more attention to developing these techniques in students can help them become more argumentative.

Furthermore, the policymakers and material developers can immensely help in this regard. By creating a lot of group work activities and even materials with the theme of group work, students will be more motivated and eager to cooperate. In other words, it would be a good idea if textbooks were revised in a manner that emphasizes the use of CL strategies and caters to a wide range of students' academic needs. This can be done through multiple ways, one of which is increasing the number and type of exercises with a greater emphasis on writing techniques, especially the collaborative writing techniques. Hopefully, future research will contribute more to this area of inquiry and offer more practical methods.

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