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# Effects of Collaborative Writing on EFL Students' Paragraph Writing Performance: Focus on Content and Coherence

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#### **ABSTRACT**

This study attempted to examine the effects of collaborative writing on EFL students' paragraph level writing performance focusing on the two aspects of writing: content and coherence. Two batches of Grade 11 students at Felegebirahn Secondary School in Amhara Region, Ethiopia were selected for the study group based on the mean scores of the paragraph writing performance test given before the intervention. These two batches of students were randomly assigned into two groups: experimental (n=44) and control (n=44) using lottery system to conduct the study. The students in the experimental group were made to practice paragraph level writing tasks collaboratively; while the students in the control group were made to practice the same writing tasks individually for 12 weeks. The main instrument used to collect the data was paragraph writing test. Students' questionnaire and semi-structured interview were also used to gather data regarding students' attitude towards using collaborative writing in EFL classes. The paragraph writing test results were used to examine and compare students' paragraph writing performance before and after the intervention. T-test was employed to analyze and interpret if the paragraph writing performance tests mean differences with-in the groups and between groups were statistically significant or not. The findings revealed that the students who practiced the writing tasks or activities collaboratively have brought more significant improvements on the content and coherence of the paragraphs they produced after the training than students who practiced the writing tasks individually. It was also noted that the students in the experimental group had exhibited positive attitude towards collaborative writing. This was confirmed by majority of the respondents from the attitude questionnaire and interview data that students finally enjoyed and were motivated to write in English after their engagement in collaborative writing. It was concluded that practicing writing tasks collaboratively in EFL writing classes can improve students' performance to incorporate relevant and coherent ideas or sentences while students write paragraphs in English. Therefore, it was recommended that using collaborative writing in EFL writing lessons must continue and be adopted on wider scale.

**Key words:** Collaborative Writing, EFL Writing Skills, Paragraph Writing Performance, Content, Coherence

## INTRODUCTION

## **Background of the Study**

Writing in EFL is a primary language skill to enhance knowledge in academic and business arenas like administration and management activities of both government and non-government institutions of social life in the world. It is essential in the majority of occupations even to those which do not need a formal college or university education. In people's personal lives, it is a tool of expression, and a way of communication with family members and friends across distance and time. Most importantly, writing is a fundamental part of the school curriculum, both as an important outcome and as a means of gaining and demonstrating learning in

various disciplines (MacArthur et al., 2016, p. 1). However, paradoxically, studies indicate that students' English language writing skills performance in the world is currently deteriorating, and needs a serious concern. For example, MacArthur et al. (2016) point out that 73 % of the final year high school students in the United States performed below a proficient level in writing according to recent statistics in National Assessment of Educational Progress. They further indicate that students in Europe also experience challenges to master writing skills in both their native and second languages.

This case is not different in Ethiopia too. To illustrate this, the researcher's many years of teaching experience as an EFL Writing Skills/Sophomore course instructor at Arba Minch and Wollo Universities, and some colleges and high schools in Ethiopia, the researcher observed that significant numbers of students did not reach the intended writing assessment objectives by the end of the course/grade level. Students at secondary schools, colleges and universities in Ethiopia are required to write paragraphs and compositions both in class and in final examinations. These pieces of students' writings are normally marked and judged by their respective teachers/instructors against the criteria set based on the aspects of writing like content/unity, coherence, development, organization, accuracy, diction, etc. Yet, many teachers/instructors at different level of education complain about their students' failure to produce writings in English to the expected level mentioned in the English Syllabus as minimum learning competencies. This is supported by a lot of local studies conducted on writing skills in Ethiopia. For example, research findings by Geremew (1999) show that university students were poor at writing on a given topic and failed to appropriately support the topic of discussion using relevant information. This implies that how students' face serious challenges in EFL writing performance to include relevant contents to their writing. Likewise, Italo (1999) also says that he observed students' serious writing problems while he offered writing courses at Addis Ababa University. Most importantly, a study on high school students' writing performance by Alamiraw (2005) found out that students' writing performance is low. Alamirew also goes on saying that "most of [the students] write poorly, and a significant number of them do not write even a sentence. If they could try, it would be incomprehensible and full of grammatical errors." (p. 163).

Recent local studies like Asress (2014), Dawit (2013) and Zeleke (2013) also show that students' writing performance in English is not still improving. They state that the writing performance of university students is nowadays worsening at an alarming rate. Zeleke (2013: 8) writes that "students' writing in English is not to the level expected of them."

Similarly, Dawit (2013) also magnifies the level of writing problems of EFL students in Ethiopia by explaining that students in his writing classes were facing almost undefeatable challenges in their attempt to produce simple written texts in English.

Thus, conducting an in-depth and comprehensive research on the enhancement of Ethiopian students' EFL writing skills performance is indisputable and continues to be necessary at different levels of education. Because writing is a skill which can be improved time to time through efficient learning teaching practices across each level of education, a research is undoubtedly important to fill students' gaps of writing on time at the right stage of learning before the problems get complicated.

It is believed that different factors might contribute to such a serious problem. However, many scholars widely point out that the instructional approaches and tasks or activities used in the teaching and learning of writing skills are among the prominent factors that determine students' EFL writing skills performance. As Westwood (2008: 4) states ineffective teaching methods or approaches contribute to students' difficulty in learning to write, and more recently the teaching

method or approach has been strongly proved as a significant factor. In relation to this, Alamirew (2005: 26) writes that the approaches or techniques and tasks or activities teachers implement determine the effectiveness of the writing lesson, and students' level of writing performance. Therefore, examining whether or not using collaborative writing/tasks has significant effects on the students' academic writing skills performance, and students' attitude towards learning writing skills using collaborative writing has attracted the attention of many scholars (Storch, 2013).

Many studies in the world have found that practicing writing tasks or activities collaboratively in writing classes has a positive effect on students' writing skills performance, development of both affective and social skills (Storch, 2013, 2007; Williams, 2003; Graham, 2005). It was also supported by the research findings of Louth et al. (1993) which confirmed that students who practiced collaborative writing mostly composed better than students' those who worked individually. It was also seen that students who worked collaboratively were found to be happier with their performance than students who did the writing tasks alone. It seemed, therefore, that using collaborative writing might be an effective way of teaching and learning writing skills to EFL students, and thus may be one of a possible ways to enhance their level of academic writing skills performance.

The findings of Al-Ahmad (2003) study also proved that doing writing tasks collaboratively in EFL writing classes has a great deal of benefits compared to practicing the same writing tasks or activities individually lead by teacher-centered approach. He found that students in traditional teacher lead writing classrooms communicate solely with the teacher about their writing, but when students write collaboratively on a given topic, they can react with their classmates and learn one another. Here it was confirmed that the use of collaborative writing does not only improve the aspects of writing accuracy such as grammar, vocabulary and punctuation, but it also helps the students to establish a favorable learning social atmosphere which can create a fertile opportunity to solving students' problems by themselves within the group. This later helps the students generate ideas relevant to the topic of writing.

Additionally, Khatib and Meihami's (2015) research showed that using collaborative writing tasks or activities has a positive effect on EFL students' overall writing performance. Their study found that collaborative writing improved writing aspects like content, organization, grammar, vocabulary and mechanics. Doboa (2012) also conducted a study on collaborative writing, and the study revealed that the group produced writing texts were better in terms of fluency and complexity. This result also matches with the research findings by Mulligan and Garofalo (2011) as they found that collaborative writing brought noticeable improvements in students' writing skills performance. They further concluded that students had a positive attitude towards collaborative writing, and seemed to think that collaborative writing was helpful in EFL writing skills classes. However, Storch (2005: 155) explains that results of studies on students' attitudes towards collaborative writing are mixed and therefore, this issue needs further investigation.

Furthermore, a research by Rollinson (2005) revealed that practicing writing tasks collaboratively throughout the entire process of writing can be effective in producing students who are more independent by the end of the lesson. This is because students have attained the skills essential to idea generation, organization, self-edit and revision of their own pieces of writings. Rollinson (2005) also found out that the practice of collaborative writing supported the students to improve the content of their writings, gains in grammatical proficiency, and to develop social skills like stress reduction, time saving benefits, motivational effects, etc. Here, it is possible to understand that the use of collaborative writing has both cognitive and affective benefits to the students of the target language.

All the essence of the use of collaborative writing in EFL writing classes discussed in the aforementioned paragraphs emancipates from the theory of learning advocated by researchers like (Storch, 2013; Doba, 2012; Yong, 2006; Swain, 2000) based on Vygotsky's (1978) socio-cultural constructivist theory of learning. That means learning can be socially constructed involving the combined strengths of members of the collaborators, and finally internalized by the individual student. This is because the social interactions the students would have can provide them with a fertile opportunity to enhance Learners' Zone of Proximal Development (Vygotsky, 1978). In relation to this, Fung (2006) expresses that in collaborative writing, students are capable of reaching the level of potential development through guidance and scaffolding in collaboration with their peers. To put it another way, the social interaction in collaborative writing could help the students to move from other regulations to self-regulation through time (Yong, 2006). This is the theoretical framework which underpins this study.

In spite of all the claims about the potential benefits of collaborative writing in ESL/EFL classes, there is relatively small amount of published research woks on this topic (Fung, 2006). In other words, though the use of collaborative writing seems well supported theoretically, the number of empirical studies that have investigated collaborative writing in ESL/EFL classes is relatively small. Storch (2013) strengthens the issue by writing that there is always much about collaborative skills in research, but collaborative writing is paid attention with little thorough considerations in research. Storch (2013) further states that "the study of collaborative writing in second/foreign language classrooms is quite recent." This case is not exceptional in Ethiopia too.

As far as the present researcher's knowledge is concerned, no or little local study has been conducted at any level of education in order to examine if the use of collaborative writing has significant effects on the students' writing skills performance. This shows that there is a research gap on the use of collaborative writing in Ethiopian education system.

The present researcher is, thus motivated to conduct this study because of the failure to use collaborative writing tasks to teach academic writing skills by EFL teachers and the absence of empirical studies to test its effects in EFL classrooms in our high schools. Also, there is little or no research which has been conducted to see the impact that collaborative writing has on EFL students' academic writing skills.

Therefore, it is useful to see the effects of using collaborative writing on EFL students' paragraph level writing skills performance focusing on the two aspects of writing: content and coherence. Content refers to relevant specific details which come to support or develop the topic of discussions in a paragraph. These supporting sentences in a paragraph must be organized so that they should cohere or stick together. This refers to coherence (Langan, 2006).

#### Objectives and Hypothesis of the Study

The main objective of this study was to examine effects of the use of collaborative writing in EFL students' paragraph writing skills performance focusing on the two aspects of writing: content and coherence. The sub objectives of this study were, therefore, to:

- Identify whether students who practiced EFL writing skills through collaborative writing significantly differ in their paragraph writing skills performance regarding content of the paragraph compared to that of the control group;
- Identify whether students who practiced EFL writing skills through collaborative writing significantly differ in their paragraph writing skills performance regarding coherence of the paragraph compared to that of the control group;
- iii. Identify whether students who practiced EFL writing skills through collaborative writing significantly differ in their paragraph writing skills performance regarding both content and coherence of the paragraph compared to that of the control group;
- iv. Investigate whether students have positive or negative attitude towards practicing learning EFL writing skills through collaborative writing;

Accordingly, the study tried to prove or disprove the following alternative hypotheses.

**Ha1:** There is significant difference on the mean scores of students in the experimental and the control groups regarding their EFL paragraph writing skills performance focusing on content;

**Ha2:** There is significant difference on the mean scores of students in the experimental and the control groups regarding their EFL paragraph writing skills performance focusing on coherence;

**Ha3:** There is significant difference on the mean scores of students in the experimental and the control groups regarding their EFL paragraph writing skills performance focusing on both content and coherence;

## LITERATURE REVIEW

### **Collaborative Writing: Definitions and Concepts**

Different scholars have tried to define collaborative writing in their own ways, and in this part, the researchers present some of the definitions as follows.

According to Storch (2013, p. 2) "Collaboration means the sharing of labour (co-labour) and thus collaborative writing, in its broadest sense, means the co-authoring of a text by two or more writers." Some writing scholars (e.g. Bruffee, 1984; Harris, 1994) assert that all writing is collaborative to some extent because the writers usually write on a given topic bearing a certain reader or an audience in mind or seeking support from others at some stage of their writing. Such act makes writing collaborative though done alone by the writer himself or herself. Under such a broad definition, peer editing or peer planning would also qualify as collaborative writing.

Yong (2006) defines collaborative writing as a writing which focuses on the whole process of the writing task through shared and mutually engaged efforts of the writers. This definition entails that collaborative writing allows the students in groups to actively interact from the beginning to the end of the writing process. This makes writing in collaboration different to other group work like cooperative is its inclusion of the entire writing process till the accomplishment of the written task, and its social contexts among peers who share in the production of a single written document (Storch, 2013).

Collaborative writing comprises individuals in a harmonized attempt to do a writing task collaboratively. There is a strong shared engagement and a synchronized effort by all members of the group throughout the writing process, and also students' roles, responsibilities and contributions to text creation are not split up. In relation to this, Storch (2013, p. 3) states that collaborative writing involves a commonly negotiated and shared decision making process that can possibly create the sense of shared ownership to the text produced in groups. She further explains that the learning outcome of collaborative writing should not only refer to the collaboratively composed pieces of writings but also should include knowledge and skills which you never acquire alone unless you collaborate with partners.

As inferred from the above paragraphs, all members within the collaboration groups are intended to fully and if possible equally participate and engage throughout the writing process from pre-writing to editing. That means there would not be roles or contributions left to specific members of the group. Thus, the written text produced may be a paragraph or a composition or a report, is owned by each and every member of the group. It should be noted that the outcome of a collaborative writing task/activity is not just only the jointly produced text. It is also collective cognition including new words, improved ways of expressing ideas, knowledge of certain grammar knowledge, etc., emerging when two or more people reach insights that neither could have reached alone, and that cannot be traced back to one individual's contribution (Stahl, 2006).

#### **Features of Collaborative Writing**

According to Storch (2013) and Wigglesworth and Storch (2011) collaborative writing, as an approach of teaching writing skills, has the following three distinguishing features offered by Ede and Lunsford (1990): (1) substantive interaction in all stages of the writing process because students can work together and interact among others in the planning, brainstorming of ideas, organizing them, editing and

revising them, and this later be internalized by the individual; (2) shared decision-making power and responsibility for the text produced; and (3) the production of a single written document. From this point of view, collaborative writing is a distinct process and product. The process is one where students compose collaboratively throughout the writing process beginning from planning to editing and revision. This process is not only an exchange of ideas but negotiations which often arise as a result of a struggle to create a commonly shared written text.

The product of the collaborative writing task is the jointly produced and shared text, a text that cannot easily be reduced to the separate input of individuals (Stahl, 2006). As such the text produced is also jointly owned, with all students sharing in the ownership of the text produced. Storch (2013) further confirms this idea explaining that collaborative writing is an activity or a task where there is a shared and negotiated decision making process and responsibility for the production of a single written text, may be a paragraph, composition or a report. Here the implication is that the use of collaborative writing in writing classes mainly demands students' strict collaborative engagement beginning from pre-writing (brainstorming and generating ideas based on the writing topic) to the last stage of writing process i.e., revising.

#### **Advantages of Collaborative Writing**

Using collaborative writing in EFL writing classes has several advantages. Firstly, it may help weak students to learn more effectively when they work with strong partners (Gabriele, 2007; Winskel, 2008). As two or more students are expected to work together to compose a written text collaboratively, in each stage of the writing process such as brainstorming, organizing ideas, drafting, revising and editing, learners can get a fertile opportunity to scaffold and learn one another (Rice & Huguley, 1994). Secondly, collaboration is not necessarily unidirectional from strong to weak partners, but strong students can also benefit from the contributions of weaker students (Donato, 1988, Ohta, 1995). This is because students are seldom strong in every area, but may possess different knowledge and skills at different levels.

Furthermore, Storch (2002) also states that collaborative writing in EFL classes might help students to act socially and cognitively, and suggests that teachers should encourage learners to become involved in social activities that promote interaction and the co-construction of knowledge. In relation to this, Graham (2005) also found that collaborative writing benefited students to find new ideas together and exposed them to various opinions; encouraged them to discuss, debate, disagree and teach one another as well as helped them to practice aspects of the process approach to writing such as generating ideas. To strengthen the benefit of collaborative writing in EFL classes, Storch (2011) points out that collaborative writing can create opportunities to the students for language practice. That means the students are able to get fertile grounds to deliberate about their own and their classmates' language use when they try to create meaning.

The essence of using collaborative writing in writing lessons is that students in the collaborative groups can have a

fertile opportunity to experience themselves about how to identify relevant ideas to the topic of their writing, and also how to form sentences and order them properly to compose the written text. This collaborative engagement can also give learners a fertile learning ground to reexamine both the quantity and quality of the written text what they produce together. Regarding this, Doboa (2012) investigated that students who were exposed in collaborative writing produced better texts in terms of accuracy, fluency and complexity than that of students who practiced writing tasks individually. This is also confirmed by Williams (2012) that students exposed to collaborative writing showed important improvements regarding the aspects of writing like fluency and accuracy. This is because as highlighted by Hedge (2000) collaborative writing provides students with readers and critics of their work by their peers in the classroom. This way the students become accountable in the manner that writers are in real life, and then this accountability is a crucial incentive for clear and effective writing (Hedge, 2000).

#### **Content and Coherence in Paragraph Writing**

It is commonly defined that a paragraph is a piece of writing which constitutes related sentences based on a single central topic of discussions (Ploeger, 2000). There are also essential elements that writers take into account to produce an effective paragraph. Among these content and coherence are cases in points. Content refers to relevant specific details which come to support or develop the topic of discussions in a paragraph. These supporting sentences in a paragraph must be organized so that they should cohere or stick together. This refers to coherence (Langan, 2006). Other scholars, like Shehadeh (2011), also define content as a coverage of the writing topic based on relevant details or knowledge of subject, and coherence as organization or sequencing of ideas in a paragraph.

### METHOD OF THE STUDY

#### Research Design

The research design was mixed methods because this research involved the collection of both quantitative and qualitative data collection, analysis and interpretation methods in order to treat the research hypotheses set. The rationale behind using this design is that the combination of quantitative and qualitative approaches provides a more complete understanding of a research problem than either approach alone (Creswell, 2014). It was specifically explanatory sequential mixed methods pattern in which the quantitative data were emphasized and collected and using the pre-and post-tests in the first -phase, and then the qualitative data via semi-structured interview were collected at the end of the experiment, and analyzed in the next phase. The research was an experimental type because an intervention was done in the experimental and control groups of the study. This was mainly intended to examine if using collaborative writing in EFL writing skills classes has significant effects on EFL students' paragraph writing skills performance with particular reference to content and coherence.

## **Subjects and Sampling**

Subjects of the study were pre-university (grade 11) students in Felegebirhan Secondary and Preparatory school located in the Amhara Regional Government, Ethiopia. The school was selected for a research setting because the researcher's familiarity with the school administrator and teachers could reduce different challenges that he could experience during the course of study. Due to such and the like reasons the researcher thought that the school was a suitable setting to the study. Hence, purposive sampling was used to select the setting.

The grade 11 students were selected because this grade level was seen as a bridge between high school and university level education in Ethiopia, thus the researcher felt that it could be a critical stage to support students to improve their EFL writing skills before they join a university where they are highly required to engage in wider academic writing assignments like extended essays. There were around 184 students: 156 males and 28 females, in 4 batches, a maximum of 46 students in each class. Pre-test was given for all the students in each section, and based on the results of the pre-test, two batches of students who relatively had similar paragraph writing test results were selected for the study. Then, the already identified two batches of students based on the test results were assigned as experimental (n=44) and control (n=44) groups using simple random sampling technique specifically lottery system.

#### **Data Collection Instruments**

Paragraph writing tests before and after the intervention, questionnaire and semi-structured interview were data collection instruments used to collect data from the sample students.

The main data collection instruments were paragraph writing tests. The researcher conducted paragraph writing test before the intervention started to examine the existing paragraph writing performance of the students focusing on content and coherence, and to ensure that the students in both (experimental and control) groups have nearly similar paragraph level writing skills performance. The test was writing a paragraph on the topic "Benefits of Learning English Language". The students were instructed to write the paragraph based on the topic given. The pre-test was given to both experimental and control groups before the training commenced without giving any guidance and support to the students about writing a paragraph.

Then, an intervention (training) was conducted to the experimental group with designed collaborative writing tasks or activities of paragraph writing for 12 weeks- a semester. Finally, a post test, which was similar with that of a pre-test, was administered to the students in the experimental and control group after the training. The post-test was conducted after the employment of the intervention to find out if the students made any improvements in their academic writing skills due to the use of collaborative writing. To validate the writing tests, comments were obtained from the research supervisor and senior colleagues of the researcher.

The paragraphs the students wrote in the pre- and post-tests were marked independently by two qualified and experienced English language instructors to ensure inter-rater reliability. The instructors were given marking rubrics to examine the students' paragraph level writing performance focusing on the two aspects of writing: content and coherence. The scores were recorded on separate record sheets, and the two instructors were not allowed to write anything on the scripts, so as not to affect the marks given by their partners. Finally, the average scores of the two raters were taken for the analysis of the writing tests. Inter-rater coefficient reliability was also conducted to check internal reliability among the two raters.

The purpose of the questionnaire was to investigate whether students have positive or negative attitude towards practicing learning EFL writing skills through collaborative writing. It was also aimed to see students' overall reflection towards the use of collaborative writing in teaching and learning EFL writing skills. Among the many attitude measuring scales, Likert scale was used because it is claimed that it is the most widely used scale in social science for its reliability and ease to construct than other scales with the same number of items (Creswell, 2014)). To this effect, 5 point liker scales were prepared. Each scale in the test was given value with Strongly Agree =5, Agree=4, Undecided=3, Disagree=2, and Strongly Disagree=1 for the positively worded statements, and the scoring was reversed for the negatively worded statements. Mean and standard deviations were computed.

The items in the questionnaire were modified from previous works of researchers like (Storch, 2005, Shehadh, 2015), and the review of literature on the concept of collaborative writing in EFL writing skills classes. Though most of the items in the questionnaire were modified, a test-retest method was also used to determine the reliability of the questionnaire. The questionnaire was translated into students' first language: Amharic so as to make it easy and more understandable to the participant students.

The other data collection instrument used in this study was interview. The purpose of the interview was to further qualitatively and freely draw out the students' attitudes and reflections regarding the use of the collaborative writing in their EFL writing skills classes. To this effect, semi-structured interview questions were used. The contents of the questions were just similar with that of the questionnaire, but these questions were limited and gave the freedom to respondents to reflect what they could have in their mind confidently.

### The Writing Tasks or Activities

For the experimental group, 12 writing topics were selected to practice paragraph level writing skills performance for a semester. These writing topics and tasks were selected based on the grade 11 English syllabus and Students' textbook Most of the writing tasks/activities which were already in the Grade 11 English textbook were revised in the way that they promote collaborative writing by fulfilling the basic features or concepts of collaborative learning. Students in the experimental group practiced the writing tasks on the given

topics collaboratively for 12 weeks. Whereas, students in the control group practiced the same writing tasks on the same topics individually: simply guided by their teacher. The tasks were also delimited to be at paragraph level. Students in both groups were taught to pay great attention to their paragraph writing performance focusing on only the two aspects of writing such as content and coherence.

#### **Procedures of Data Collection**

Once the sample students were identified and the data collection instruments were identified and decided, the writing tasks or activities on the Grade 11 English textbook for Ethiopia were revised by the researcher in the way that they promoted collaborative writing. Then, the writing tasks and topics were evaluated by EFL professionals who taught EFL writing skills, and had also exposure in designing academic writing tasks or activities. Considering the comments forwarded by the professionals, amendments were made on the writing topics and tasks and other procedures included in the teaching material.

Before the experiment started, a pretest was administered for all batches of Grade 11 students at the school. The test was writing a paragraph on the topic "Benefits of Learning English Language". The students were instructed to write the paragraph based on the topic given. The pre-test was given in the first session without giving any guidance and support to the students as the test's very purpose was to examine the students' level of paragraph writing performance based on the two identified aspects of writing: content and coherence, and to identify two batches of students who had relatively similar writing performance.

After the pre-test was conducted and examine by two professionals using the prepared rubrics, two batches of students who had relatively similar mean scores of the pre-test results of the paragraph writing performance were selected as samples of the study. Then, these two batches of students were randomly assigned by lottery system as experimental (n=44) and control (n=44) groups. Then after, training about principles of using collaborative writing in teaching EFL writing skills was given for the selected teacher for five hours. The teacher was also trained to refresh about how to teach students about paragraph writing in a process approach. Here he was trained to remind about essential features of a good paragraph, and sample paragraph writing lessons, and rubrics to evaluate his or her students' paragraph writing performance focusing on content and coherence. The teacher was advised to always encourage students in the experimental group to write the paragraphs collaboratively in each stage of writing, where as he was advised to encourage learners in the control group to write the paragraphs individually throughout the process of writing using the same writing topics in the teaching material for 12 weeks in the first semester of 2019 academic year. At the end of the semester, the post test was administered to the students in both groups. The post test was a paragraph writing test on the same topic which they used to write paragraphs before the start of the experiment. The topic was "The Benefits of Learning English Language". Questionnaire to the students

in the experimental group prepared to examine about their attitude towards the use of collaborative writing in learning writing skills was employed at the end of the entire treatment. Semi structured interview to some selected students from the experimental group was also held after the intervention. The results of pre- and post-tests were rated using analytic scoring scheme based on the rubrics used to evaluate paragraph writing performance.

#### **Method of Data Analysis**

The Paragraph writing tests, with the purpose of examining students' performance in paragraph level writing skills were administered before and after the treatment sessions to both experimental and control groups of the study. The pre-test was made to identify groups of students whose EFL paragraph writing skills performance was relatively similar in both experimental and control groups. The post-test was also made to find out if students in the experimental and control groups differ in their paragraph writing performance focusing on the two aspects of writing: content and coherence.

"The Analytical Scoring Rubrics" (ASR) which is forwarded by Hyland (2003, p. 244) was used to evaluate students' paragraphs because this technique evaluates different aspects of writing such as content, coherence, grammar, mechanics, vocabulary, etc. specifically in comparison with other techniques which are holistic in nature (Weigle, 2002). The rubric was developed in line with it and given to two well-educated and experienced EFL instructors who were selected to mark the students' paragraphs. The marking of each paragraph was made based on the rubric set focusing on only the two writing elements: content and coherence, and the average marks were taken to analyze the results.

After arranging the students' results with their codes, the arithmetic mean and standard deviation were calculated to examine a group's performance and to see how much the results deviate from the mean value respectively. These were used for each group. T-test was used to ascertain differences between the pre-test and post-test conditions within the group and between each group. The data were analyzed by using SPSS version 24, and it was interpreted accordingly.

Questionnaire, having an aim to find out students' attitudes regarding the use of collaborative writing in EFL writing skills classes after intervention, was administered to students in the experimental group. Descriptive statistics like percentage was used to analyze this data by using SPSS version 24, and it was interpreted accordingly.

The following steps were also used to analyze the data gathered through semi-structured interviews from some selected students from the experimental group. Firstly, the data were transcribed and edited. Next, similar responses of each question of the interviews were categorized thematically. Finally, the results were discussed in line with the main data gathered, and then implications were drawn in line with the majority of the participants in the interview, and were discussed together with the data gathered by another instruments like tests and questionnaire.

#### RESULTS AND DISCUSSIONS

#### Results

## Independent-samples t test of students' paragraph writing performances in the pre-test

Independent - Samples T Test was conducted to examine if the students in the experimental and the control groups had similar paragraph level writing performances with regard to the two aspects of writing: content and coherence, and the total score of both of them in the pre-test. The writing results are described in Table 1.

Table 1 depicts the mean score of the experimental group (M=3.65, SD=1.37), and the control group (M=3.81, SD=.89) with regard to including contents related to the topic of discussion in the paragraphs produced by the participant students. The table also indicates that there is no significant mean difference between the experimental and control groups in terms of contents of the paragraph students wrote in the pre-test ( $t_{86}$  = 8.35, p >.05). This shows that the students assigned to the experimental and the control groups had almost similar performance in including contents related to the topic of the paragraph presented in the pre-test.

In Table 1, it is also described that the mean score of the experimental group (M=2.93, SD=1.04) and that of the control group (M=2.90, SD=.91) regarding the coherence of the paragraph in the writing test. As seen in Table 1, there is no significant mean variation between the experimental and control groups in keeping the coherence of the paragraph in the pre-test ( $t_{86}$ =.02, p >.05). This indicates that the students in the experimental and the control groups had almost similar performance in maintaining the coherence of ideas or sentences within their paragraph writing in the pre-test.

As seen in Table 1, it is demonstrated that the mean score of the experimental group (M=6.59, SD= 2.28), and the mean score of the control group (M=6.72, SD=1.8) regarding the total result of both content and coherence of the paragraph writing in the pre-test. Table 1 also depicts that there is no significant mean variation between the experimental and control groups with regard to the total evaluation of both content and coherence of the paragraph students' produced in the pre-test ( $t_{86}$ = 2.77, p>.05). Thus, it can be concluded that the students assigned to both the experimental and the control groups had similar performance regarding including relevant contents and maintaining proper flow of ideas within the paragraph in the pre-test.

Therefore, the results of Table 1 indicate that participant students in both groups were in the same level of paragraph writing performance regarding the writing aspects such as content and coherence at the beginning of the study, or before the commencement of the intervention. It is true that students performed similarly with the total obtained mean scores, and the mean scores obtained independently by each of the writing aspects: content and coherence used to evaluate the paragraph.

# Independent-samples t test of students' paragraph writing performance in the post-test

Independent - Samples T Test was made to find out if there is a statistically significant variation between the students in

the experimental and the control groups regarding their paragraph level writing performance focusing the two aspects of writing such as content and coherence, and the total score of both aspects of writing in the post-test. Table 2 demonstrates the results.

Table 2 reveals the mean score of the experimental group (M=6.81, SD=1.94), and that of the control group (M=5.00, SD=.80) regarding students' performance of including contents related to topic of discussion in their paragraph writing in the post-test. As seen in Table 2, there is significant mean difference between the experimental and the control groups in including relevant contents in their paragraph writing in the post-test  $(t_{86}=47.87, p<.05)$ . This shows that there is statistically significant difference between the experimental and the control groups in relation to students' performance to include contents related to the topic of discussion while writing the paragraph in the post-test.

Table 2 also indicates that the mean score of the experimental group (M= 5.00, SD=.80), and that of the control group (M=3.90, SD=.85) with regard to organizing ideas appropriately in their paragraph writing in the post-test. It is seen in the table that there is a statistically significant difference between the experimental and the control groups concerning their performance to logically organize ideas while writing the paragraph in the post-test ( $t_{86}$ = 12.44, p <.05). Thus, it is possible to learn that students in the experimental group have shown significant improvements of their performance in maintaining proper flow of ideas within the paragraph in the post test. That means students in the experimental group had performed better than students in the control group regarding keeping the coherence of the paragraph.

The aforementioned Table 2 demonstrates the total mean score of the experimental group (M=12.59, SD=3.42), and mean score of the control group (M=8.90, SD=1.49) with regard to examining students' total performance regarding content and coherence of the paragraph written in the post-test. As described in the table, there is a statistically significant variation between the experimental and the control groups with regard to students' performance taking into account the total scores of both content and coherence of the paragraph in the post-test ( $t_{86}$ = 14.40, p<0.5). This indicates that the total mean scores of the experimental group improved more

significantly than that of the control group. This implies that students in the experimental group had better performance regarding both incorporating contents related the topic of discussion, and maintaining proper order of ideas with in the paragraph they produced than that of students in the control group.

In conclusion, as seen above, there is a statistically significant difference between the experimental and the control groups with regard to both content and coherence of the paragraphs writing performance. It can also be concluded from Table 2 that students' performance has improved regarding the aspects of writing like content and coherence. Hence, we can conclude that students' in the experimental group have shown more significant improvements regarding their performance in relation to the two aspects of writing such as content and coherence of the paragraph in the post-test.

## Paired-samples t test of students' paragraph writing performance

Paired-Samples T Test was used to examine whether there is a statistically significant variation between the pre and post-test mean scores of the experimental and the control groups concerning students' performance of paragraph level writing against the aspects of writing such as content and coherence, and the total scores of paragraph writing performance. The results are shown in Table 3.

Table 3 depicts the results of the Paired-Samples T Test of the performance of the experimental and the control groups to include relevant contents in their paragraph writing. The table shows the pre-test mean score of the experimental group (M=3.65, SD=1.37), and the post-test mean score of the group (M=6.81, SD=1.94). This shows that there is a statistically significant difference between the students' pre and post-test mean scores regarding their performance to include relevant contents in their paragraph writing ( $t_{43}$ =26.02, p<.05). This implies that, after the training, the students significantly improved their performance to write paragraphs that include substantive contents.

The preceding table also reveals the mean score of the control group (M=3.81, SD=.89) in the pre-test, and mean score of the group (M=5.00, SD=.80) in the post-test. This

**Table 1.** Independent-samples t test of students' paragraph writing performances in the pre-test

	Max. Score	Experimental Group (n=44)				Control Group (n=44)				F	df	t	p
		M	SD	Min.	Max	M	SD	Min.	Max.				
Content	10	3.65	1.37	1	7	3.81	0.89	2	6	8.35	86	-0.64	0.52
Coherence	10	2.93	1.04	1	6	2.90	0.91	1	5	0.02	86	0.10	0.91
Total	20	6.59	2.28	2	13	6.71	1.8	3	11	3.58	86	-0.32	0.74

**Table 2.** The independent samples t test of students' paragraph writing performance in the post-test

	Max. Score	Experimental Group (n=44)				Control Group (n=44)				F	df	t	p
		M	SD	Min.	Max	M	SD	Min.	Max.				
Content	10	6.81	1.94	3	9	5.00	0.80	3	9	47.87	86	5.72	0.000
Coherence	10	5.00	0.80	4	8	3.90	0.85	2	8	12.44	86	6.38	0.000
Total	20	12.59	3.42	7	17	8.90	1.49	5	17	26.05	86	6.53	0.000

indicates that the difference between the students' pre and post-test mean scores with regard to their performance to discuss relevant ideas in their paragraph writing is statistically significant ( $t_{43}$ = 13.47, p<.05).

As seen above, participants of the study in both the experimental and the control groups significantly improved their performance to include relevant contents in their paragraph writing after the training. It is, however, observed that the mean score of the experimental group in the post-test exceeds that of the control group with a mean difference of 1.81, and the difference is statistically significant too as seen in Table 4.

Table 4 shows the results of the Paired-Samples T Test of the performance of the experimental and the control groups to maintain proper flow of ideas within the paragraphs they produced. The table shows the pre-test mean score of the experimental group (M=2.93, SD=1.04), and the post-test mean score of the group (M=5.77, SD=1.73). As seen in the table, the students' performance of keeping appropriate flow of ideas within their paragraph writing is significantly improved after the intervention ( $t_{43}$ =23.4, p<.05).

The table above also demonstrates the control group mean scores (M=2.90, SD=.91) on the pre-test, and mean scores (M=3.90, SD=.87) on the post-test. This indicates that there is a statistically significant difference between the students' pre and post-test mean scores with regard to the coherence of the paragraphs( $t_4$ =13.75, p<.05). This means the students showed a statistically significant improvement to organize ideas in logical orders when they wrote the paragraphs.

It is seen in the table above, after the experiment, both of the groups significantly improved their performance to maintain the proper order of ideas in their writing. But when we compare the post-test mean scores of the groups, the experimental group exceeds that of the control group with a mean difference of 1.87, and this difference is statistically significant as seen in Table 5.

Table 5 above depicts the results of the Paired-Samples T Test of the total scores of both content and coherence of the paragraph writing performance of the experimental and the control groups. As indicated in the table, the experimental group has pre-test mean score (M=6.59, SD=2.28), and post-test mean score (M=12.59, SD=3.42) regarding students' performance in relation to the cumulative results of both content and coherence of their paragraph. This indicates that the students significantly improved their performance regarding both the content and coherence of their writing, i.e., to include relevant contents, and to organize contents appropriately, after the training ( $t_{43}$ = 28.14, p<.05).

As we can see from Table 5, the control group has the mean scores (M=6.72, SD=1.64) in the pretest, and the mean scores (M=8.90, SD=1.49) in the post-test. This shows that there is a statistically significant difference between the pre and the post-test mean scores of the students with regard to the total scores of students' performance in both content and coherence of the paragraph they produced ( $t_{43}$ = 16.14, p<.05). That is to say, after being taught the writing lessons, the students significantly improved their performance both to include relevant contents, and to organize ideas in a proper order in their paragraph level writing skills.

As discussed in the above paragraphs, participants in both the experimental and control groups brought statistically significant improvements regarding their cumulative performance of both including relevant sentences and organizing ideas or sentences properly within their paragraph. However, when the post-test mean scores of both groups are compared, the experimental group exceeds that of the

Table 3. The paired-samples t test results of students' performance regarding contents in the paragraph writing

	Pretest				Post-test			t	p
	n	M	SD	n	M	SD			
Experimental Group	44	3.65 24	1.37	44	6.81 67	1.94	43	26.02	0.000
Control Group	44	3.81 71	0.89 517	44	5.00 57	0.80 386	43	13.47	0.000

Table 4. The paired-samples t test results of students' performance regarding coherence of the paragraph

	Pretest				Post-test			$\frac{\mathcal{S}^{-1}}{t}$	
	n	M	SD	n	M	SD	,		1
Experimental Group	44	2.93 24	1.04 940	44	5.77 67	1.73	43	23.40	0.000
Control Group	44	2.90 71	0.91 517	44	3.90 57	0.85 386	43	13.75	0.000

Table 5. The paired-samples t test results of students' paragraph writing performance in both content and coherence

	Pre-test			Post-test			df	t	p
	n	M	SD	n	М	SD			
Experimental Group	44	6.59	2.28	44	12.59	3.42	43	28.14	0.00
Control Group	44	6.72	1.64	44	8.90	1.49	43	16.14	0.00

control group with a mean difference of 3.69, and this difference is statistically significant as seen in Table 5.

## Students' attitude towards learning eft writing skills through collaborative writing

The data of the attitude questionnaire were analyzed using SPSS version 24 to see if the students in the experimental group have a positive or negative attitude towards practicing learning EFL writing skills lessons through collaborative writing tasks. Table 6 displays the results of the statistical analysis.

Table 6 demonstrates that 77.27 % of respondents had positive or favorable attitude towards the use of collaborative writing in their EFL writing classes. As seen in the table, the number of students who responded between 75 and 100 (3/4 of 150) is 6. This number covers 13.63 % of the total respondents. It implies that these students have negative or unfavorable attitude about the use of collaborative writing tasks in their EFL writing lessons. It is also seen in the table, 4 students who scored below 75 (150/2, average score) is 4. This takes 9.09 % of the total respondents of the questionnaire. These students have neither positive nor negative attitude about learning writing skills through collaborative writing. As majority of the participants' responses (77.2%) shows that students have positive or favorable attitude regarding the use of collaborative writing tasks in teaching and learning EFL writing skills. The data from students' interview was also similar with it as many of the students explained that they liked and enjoyed the use of collaborative writing tasks/activities after intervention.

## DISCUSSIONS

It is demonstrated in tables from the results of the paragraph writing tests in the post-test that the students in the experimental group significantly improved their paragraph writing performance on the aspects of content and coherence after the training. This implies that the use of collaborative writing in EFL writing classes benefited the students in improving their performance to include sentences which meaningfully support the topic of discussion in the paragraph. Students in the experimental group also performed better in writing well-arranged sentences within the paragraph than students in the control group. This result is consistent with the research results of scholars like Rollinson (2005) and Storch (2013) that they explained using collaborative writing supported the students to improve the content and the

**Table 6.** Students' attitude towards the use of collaborative writing in efl classes

Results	Number of	Attitudes		
	Frequency Percentage			
101-150	34	77.27%	Positive	
75-100	6	13.63%	Negative	
<75	4	9.09%	Neutral	
Total	44	100%		

coherence of their writings. Swain (2000) also states that students who are engaged in collaborative writing can notice gaps in EFL writing production and then test new hypotheses regarding language and literacy acquisition. As a result of this social interaction, the students can jointly construct performance which can outstrip their individual competence (Swain, 2000). Thus, the study results exhibited on students' progress on the content and the coherence of the paragraphs produced after intervention. This could be resulted from the substantial social interactions that the students had for the last 12 weeks when they were engaged in the collaborative writing. It was also confirmed by Storch (2005) that collaborative writing in EFL lessons supported the students to share various opinions, to teach one another and to practice aspects of process writing in group collaboration that in turn helped the students to produce relevant and well coherent pieces of written texts. This study has also similar findings with the works of William (2012) and Doba (2012) as they confirmed that students who were exposed to collaborative writing composed better texts with regard to content and coherence of their writings. In relation to this, Fung (2006) also confirmed that students are capable of reaching the level of potential development through guidance and support which they get from classmates in collaboration with their peers.

Social interactions in collaborative writing can not only help the students to enhance knowledge and skills in writing, but also they have affective advantages for the students. For example, according to Ramies (1987) and Rollinson (2005) collaborative writing can provide students with different affective benefits like lowering anxiety associated with accomplishing tasks individually, minimizing students' stress and maximizing their self-confidence and attitude as well.

As described in the sub-objectives of the study, this study also aimed to examine the students' attitude, which is one of the affective domains in EFL writing in particular, in language learning at large, towards using collaborative writing after the training. The finding revealed that majority of the students had positive or favorable attitude towards the use of collaborative writing in teaching and learning EFL writing skills as displayed on Table 6. It was also confirmed by the data from students' interview as many of the students explained that they liked and enjoyed the use of collaborative writing. They felt that collaborative writing supported them to generate and compare ideas, and to learn from each other different ways of expressing their ideas on the given topic of writing. This implies that if students get convenient time and support from their teacher, they enjoy and feel happy in involving collaborative writing. This would entirely support the students to improve their overall writing performance. These results of the study match with findings of Louth et al. (1993) and Mulligan and Garofalo (2011) which stated that students had mostly a positive attitude towards collaborative writing in EFL writing lessons. Additionally, the finding of this research was also in consistent with Roskam's (as cited in Storch, 2013) study. It found that most of the students in the longitudinal study preferred working writing tasks collaboratively to working alone. The students' justification was that their partners' comments and suggestions helped

to improve the text and that they had experienced more by working with their friends than they would have by working individually. Howe ever, scholars like Stoch (2013) also commented to conduct more research about the attitudes of students to collaborative writing so as to gain a better understanding of students' observed behaviors and language learning results of collaborative writing because attitude is not stable, and there is also mixed study results on attitude.

#### CONCLUSIONS AND RECOMMENDATIONS

The main objective of this study was to examine if the use of collaborative writing in EFL writing skills classes has significant effects on students' paragraph writing skills performance with regard to the two aspects of writing: content and coherence. To this end, T-Test was used to examine if there was significant mean difference among the two groups.

Independent-Samples T Test computed revealed that the experimental and the control groups had similar paragraph writing skills performance with regard to content and coherence, and the total mean scores of both content and coherence of their paragraph in the pre-test. The Independent-Samples T Test conducted for the post-test also showed that there is a statistically significant difference between the paragraph writing performance of the experimental and the control groups regarding the two aspects of writing like content and coherence, and regarding their performance in line with the total results of both content and coherence of the paragraph.

Moreover, Paired-Samples T Test conducted described that, after the training, the experimental and the control groups significantly improved their paragraph writing skills performance with regard to content and coherence. It was also found that there was a statistically significant difference between students of both the experimental and the control groups regarding their performance taking into account the total mean scores of both content and coherence of the paragraph. When the mean scores of students' performance in the two aspects of writing: content and coherence was compared, the post mean scores of the experimental group more significantly exceeded than that of the control group in all cases. This is due to the intervention used during the training in the experimental group i.e., the use of collaborative writing in the EFL writing classes.

Finally, from the qualitative data gathered from students through interview and open-ended questionnaire, most of the respondents confirmed that completing writing tasks collaboratively helped them to get ride off the stress and fear they had towards writing in English language, and they felt that it rather enhanced their attitude to write in English. This matches with Rollinson (2005) research result that confirmed collaborative writing helped students to reduce stress and to develop their attitude towards writing. Almost all of the respondents replied that they enjoyed writing collaboratively because it gave them a fertile ground and freedom to talk about the topic of discussion, and to think and to brainstorm the topic with their classmates. They confirmed that collaborative writing created fertile opportunities for the students about how to order ideas within their writing.

Based on the research findings mentioned above, it is possible to conclude that the use of collaborative writing in EFL writing skill classes has pivotal roles in enhancing students EFL writing skills like paragraphing. Especially such type of writing significantly improve students' performance of selecting and including contents related to the writing topic, and incorporating appropriate flow of ideas or sentences within the paragraph. Therefore, textbook writers should consider incorporating significant number of collaborative writing tasks which encourage students to work collaboratively in each phase of the writing process while they design and prepare textbooks. Most importantly, EFL teachers should encourage students' practice collaborative writing in each stage of the writing process. For the effective and meaningful results of such kind of writing practices at the classroom, support for both teachers and students can play a significant role. Such supports can be provided through offering varied trainings on how to properly implement collaborative writing in EFL writing lessons. Thus, collaborative writing can be used as one alternative methodology in the classroom in which a pair, small group or many students work in unison to complete a writing task. This can be later seen as a cheerful way of enhancing students' performance and confidence in EFL writing. Further research should be conducted on the effectiveness of using collaborative writing tasks if it enhances students' performance regarding other writing aspects such as grammar, vocabulary, mechanics and students over all writing performance at paragraph level, and even larger texts like essays in teaching and learning EFL writing skills in Ethiopia.

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