The Effects of Reflective Teaching on College of Teacher Education Students' Paragraph Writing Performance: Experimental Study

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Abstract

The purpose of this study was to investigate the effects of reflective teaching on college of teacher education students' paragraph writing performance. From the 5 colleges in Southern Region, Hossana College of Teacher Education was selected by convenient sampling as the researchers could easily select participants devoid of trouble. Out of 126 second year English major students, 60 students (26 males and 34 females) were selected by simple random sampling. Then 30 students for each group, control and experimental, were also assigned by lottery method. Out of 13 English teachers, 1 teacher was selected through purposive sampling to train experimental group by considering his expertise on 'Basic Writing Skills". Experimental design was used for this study. The pretest and posttest were the data collection tools. Pretest was administered before the experiment on paragraph writing skills. After the intervention, control and experimental groups were administered the posttest. Data were analyzed quantitatively and employed mean, STD, and independent sample t-test. After pretest data analysis, the results were made known that there was no a statistically significant (as p⬚0.05) difference on students' paragraph writing performance between the control and experimental groups. However, the posttest results revealed that there was a statistically significant difference (as p⬚0.05) on students' paragraph writing performance between the control and experimental groups. Thus, from the results, it can be concluded that the majority of students in the experimental group had better performance on their paragraph writing skills due to the effects of reflective teaching.

1. Introduction

1.1 Background Study

In today's world, education is more challenging than ever before, so education is more important than ever before. In this regard, there are many aspects of teaching associated with students' positive learning outcomes, including their knowledge, skills, and attitudes. According to Sanders (2000); Ashraf, Samir and Yazdi (2016), one of the most important factors contributing to students' success is the reflection and attitude of teachers to improve their students' learning. However, some people in the field of education are unfamiliar with reflective teaching and may reasonably think that it is a different practice where we find the time and place to be alone and to think. Reflection is a skillful process performed by groups. All in all, reflection asks experts to stop, slow down so that they can recognize, analyze, and ask what they are doing. It tells them to relate theory to practice, to explore the old and new teaching experience, and to describe the situations they have encountered (Leitch and Day, 2000).

Kemmis (1994), quoted in Ahmad et al., (2013), argued that student progress would not be possible without teachers having the ability to apply their skills in the learning process. This creativity can be developed through reflective practice; in addition, teachers' ability to think critically, plan, organize, view and create will be enhanced by reflection. A variety of resources will be provided to students who will learn and experience them through reflective teaching. In this regard, reflective teachers are needed to improve student achievement during study. It is for these reasons that great teachers will manage the education system. Thus, the skill of the teacher becomes an important part of increasing the quality of education; this depends largely on the quality of the teacher and his or her ability to reflect in the classroom.

According to Main (1985), reflective teachers use high-level thinking and problem-solving skills that are important for students' learning development in the learning and teaching process. Similarly, Mccleod, Barr, & Welch (2015) argue that the practice of reflection is a process of paying attention to what is happening at work, and has deeply considered the impact of personal, cultural, and social speculation on what is happening. Therefore, the researchers may say that the practice of reflection requires the ability to think critically and gain a deeper understanding of students' problems in English as a Foreign Language (EFL) classes, especially in writing. Therefore, it can be said that reflective teachers

should be able to plan, create and organize the learning process in the EFL classroom in order to improve their student writing performance.

As to writing, it is more than just producing accurate and complete phrases and sentences. Hedge (2005: 10) stated, "Teaching writing is about directing students to produce complete pieces of communication, linking and developing information, ideas, or arguments of a particular student or group of students." In this regard, the ability to access communicative writing skills is a major part of language development and academic achievement among students at all levels of the educational system. Therefore, according to Mukulu et. Al. (2006), writing is considered to be the most important skill required by students to improve their growth, critical thinking habits, and academic achievement. And currently, all aspects of modern life such as government, education, industry, commerce, healthcare; to name a few, depend not only on oral communication but on written communication as well (West, 1988: 19). As have been mentioned above, one can see that learning to become a skilled writer can help students to cope with their educational needs so that they can be more effective in their studies and in their professional settings.

Similarly, English language writing skills, both in the case of English as a Second or Foreign Language (L2), are critical in promoting academic, professional, and personal achievement for students. Emphasizing this view, Assefa (2007: 2) suggested, "Writing skills are essential for academic achievement and written work provides students with tangible evidence of language development." He added that the purpose of teaching writing skills at Addis Ababa University has always been to help students succeed academically. Likewise, Geremew (1999) argues that one must write in order to meet the changing needs of society and to pursue its own interests. Therefore, it could be inferred that writing skills are paramount for the multi-faceted purposes: academically, socially, scientifically, and so forth.

However, learning to write in foreign language (FL) classes such as Ethiopia seems to be a very difficult skill for language learners to acquire in educational contexts (Italo, 1999: 9). And this can be argued that learning to write in another language or second language is one of the most difficult tasks students face but few people can be said to know it fully. Writing, therefore, is a challenging skill in a foreign language class. To address the difficulties EFL students confront, English teachers through self-reflection, through self-observation, self-analysis, group discussion, and self-assessment can build and reshape classroom language teaching and learning, for example, paragraph writing (Kumaravadivelu, 1994; Porter, et al., 1990; Klapper, 2000). Kumaravadivelu (2002) also believed that reflective teachers use 'classroom-oriented action research' and 'problem-solving activities' in order to enhance their learners' learning. Similarly, Moon (2006) noted that we reflect critically in order to learn something, or we learn because of reflection. Pennington (1992: 47) emphasis that reflective teaching as "deliberating on experience and it is becoming a dominant paradigm in ESL/EFL teacher education programs worldwide. She further proposes a reflective development orientation as" a means for (1) improving EFL classroom processes and outcomes, and (2) developing confidences, self-motivated teachers and learners. Giving reasons, Moon (2006) sets the following practical reasons when teaching English language skills through reflection. These are: learning from our experiences; considering and evaluating our emotions, reactions, and responses in more depth; evaluating situations in different ways; acquiring the skills to move forward and making progress both personally and professional ly; exploring gaps in our knowledge; looking for ways to adapt the relationship between theory and practice. In short, one can successfully develop his/her ability to teach or learn English language skills, for example, paragraph writing skills, through reflective teaching.

1.2 Statement of the Problem

In Ethiopia, students in higher education are expected to meet the five performance standards set by the Ministry of Education, (MOE, 2010). One of which is teachers' and students' reflective practices in order to reconsider their teaching, learning, beliefs, values, and strategies in EFL classes. However, from Jeylan(2007);Mulugeta (2009);Hussien(2006);Dereje (2009) recommendations and from the researchers' observations and long teaching

experiences of "Basic Writing Skills", English teachers at the College of Teacher Education (CTE) would not give emphasis to use reflective teaching in EFL classroom. Because teachers at the college are change resistors, they stand firmly to employ conventional teaching method rather than using reflective teaching, i.e. the newly teaching method, in EFL classes. So, as to the researcher's belief, the method of instruction is partly responsible for students' failure in paragraph writing performance. In effect, a wide spread complaint is being heard from public (Afework, 2007). And to cope with the challenges, English teachers should try to employ reflective teaching in EFL writing classes at Higher Education Institutions.

1.3 Significance of the Study

Thus, researchers from the review of literature and from their experiences are aware that the effects of reflective teaching on students' paragraph writing in EFL classes would be significant in many ways. At the outset, teaching students to write paragraph through reflection can be helpful in developing reflective thinking. Reflective teaching can also help English teachers and students to think about their teaching and learning to write, read, speak, and listen through reflection (Kumaravadivelu, 1994). It will also provide English teachers and students to improve their own views, group discussion, video lessons, and journal writing practices. Besides, reflective teaching can help English teachers and students to self-evaluate each other in small groups so that they can be reflective practitioners which help them grow professionally. Moreover, reflective teaching may have an impact on educational agendas of MOE so as to improve the quality of English language teaching across the country at various tertiary institutions in general and to have higher quality teaching paragraph writing skills at colleges of teacher education (CTE) in particular (MoE, 2010). Finally, the current study can also be a valuable resource for some researchers to continue to study the subject on a larger scale.

1.3 Objective of the Study

The reflective teaching has not been used in the context of Ethiopian colleges yet; as its effect is unknown, this study aimed to investigate the effects of reflective teaching on students' paragraph writing performance. It is hypothesized that there is a positive effect on the use of reflective teaching in a teacher's college for the success of students' paragraph writing. It is, therefore, these factors that have led researchers to investigate the effects of reflective teaching on students' paragraph writing performance at Hossana College of Teacher Education. Thus, this research aimed to address the following research questions:

1. Will there be a statistically significant improvement in the students' paragraph writing performance in the posttest in terms of unity, topic sentence, adequate development, coherence, conclusion, and language unity in the experimental group due to the effects of reflective teaching?
2. Which groups' paragraph writing performance (the control group writing under teacher controlled method and the experimental group writing based on reflective teaching) will have a statistically significant difference, if any, in the posttest in terms of unity, topic sentence, adequate development, coherence, conclusion, and language unity?

2. The Methods And Materials

2.1 Study Context

The study was conducted at Hossana College of Teacher Education (HCTE) from October 1st to November 30, 2020. HCTR is one of the colleges found in Southern Region, Hossana Town. It is situated 232 kilometers away from Addis Ababa, the capital of Ethiopia. The college has been training pre-service students from year one to year three for more than 20 years. It was selected by convenient sampling method due to four reasons, Dörnyei, Z. (2007). At the first place, researchers can easily reach the study participants at a given time. Next, the proximity of the college would save the

researchers' time to get some logistic support and other accesses at their convenience. Thirdly, as all teachers at the college are the researchers' colleagues, they are willing to participate for the purpose of the study. The fourth reason for choosing the college is "the paragraph writing skills" as part of "Basic Writing Skills" course have been taught as a foreign language (FL) to students who are in their second year of diploma program.

2.2 Population and Sampling Techniques

The target populations of the study were second year English major students in the Department of English. In 2020, there were three sections with a total of 126 students. Of which 60 students were selected by random sampling as each student has equal chance of being selected, Bernard, H. Russel, (2002). Next, the researchers assigned thirty students (n = 30) in the experimental group and the remaining thirty (n = 30) into the control group based on their pretest scores using the afore mentioned sampling method. Thirteen (n = 13) English teachers in the college considered as rich resources and expertise in teaching 'Basic Writing Course' for years, of which one teacher (n = 1) was selected by purposive sampling (Bernard, H. R., 2002; Cresswell, J. W., & Plano Clark, V. L., 2011). The selection was made purposely based on English teacher's efficiency evaluated by students, peers, department head, and academic vice dean out of 40%, 20%, 20%, and 20% respectively as per the rubrics set by the college and by his informed consent to participate in the study.

2.3 Materials and Activities

The experimental students were trained about paragraph writing skills through reflective teaching for eight weeks. In fact, the control group has practiced various exercises that are available in the module with strict and fast training rules, by questioning and answering only. These exercises were not designed to expose students in control group to practice reflectively as opposed to that of the experimental group training for which the paragraph activities were contextualized with the content so that students could reflect in pairs and in small groups.

The Basic Writing Skills module (Eng. 225) which was complied by Winner and Fitsum (2012) which was aligned with the syllabus prepared by Ministry of Education of Ethiopia, MoE (2010) was used for training purpose. The module is currently in use teaching material at the college to train second year English major students. From this module, researchers conducted paragraph writing test (pretest) that include one narrative and one descriptive. The first part of the pretest was to rewrite the paragraph errors given in brackets about "somebody", which exposes participants to rewrite a paragraph by correcting mechanics and subject-verb agreement errors. In the second part, each student is supposed to rewrite "about him/her" about a descriptive paragraph by including his/her height, weight, and character.

Actually, the trainer was taking full responsibility to train participants while the researchers were taking the role of observation and giving constructive feedbacks. The time interval for intervention was two months, from October 1st to November 30th. After the termination of the intervention, the researchers conducted the posttest that included one narrative and one descriptive paragraph writing tasks from the course module (Eng.225). The first task of the posttest was to make students rewrite a paragraph free from mechanics and subject-verb agreement errors. The second part was to make students rewrite a descriptive paragraph about "The Five Big Hotels in Hosanna City." For effective paragraph writing, each student needs to use all transitional devices such as right, left, middle, near, first, second, third, fourth, finally, and therefore. Finally, students' posttest has been assessed based on a 5-point marking rubric. The first two sections of the posttest have been assessed in terms of subject-verb agreement(SVA), capitalization (CAP.), and word-order (WO) while the second two paragraphs of posttest were being assessed in terms of topic sentence (TS), paragraph unity (PU), paragraph coherence (PC), paragraph adequate development (PAD), language use (LU), and conclusion (CON)…(See Appendix A & B).

2.4 Data Collection Tools

The researchers used quantitative data collection tools which have been adapted in relation to research objectives and the review of literature. Many studies are available which have shown that pretest or posttest model helps to monitor student progression and learning throughout a course or program (Felix A., 2016). This technique is widely used at many educational setups to test the success of a teaching session, like experimental training. Therefore, the tools specifically used were the pretest before the experiment and the posttest after the intervention.

2.5 Design and Procedure

The design of this research is experimental. By adapting, Campbell, D., & Stanley, J. (1963), the researchers have pursued the following (test administration, training, test correction) procedures chronologically to run the experiment from the beginning to the end. At the outset, the pretest and the summary of training contents were validated by the selected two English teachers who are well experienced and expertise in writing course. Next, the paragraph writing skills test (pretest) was administered for both experimental group (EG) and control group (CG) to evaluate participants' background knowledge before the intervention; the pretest was corrected by the selected English trainer and by the researchers based on the rubrics set. Then, the selected English teacher as trainer was trained by the researchers as to how he went about to handle the intervention *(See Appendix A)*; student participants were also empowered their awareness on the intervention training, tests, expectations, ethics...etc. Then, the participants in experimental group were trained through reflective teaching by *using classroom strategies like journals, videotaping lessons, peer observations, students self-evaluation, lesson evaluation, feedbacks* while the control group was trained by the conventional method of teaching by *using only questioning and answering by hard and fast rules* for eight weeks. After the intervention was terminated, the validity of posttest was determined by the selected English teacher. They forwarded their comments and recommendations on the test items and instructions. And the researchers tried to make some changes on the test items. Then, posttest was administered to both EG and CG to evaluate what changes to take place on the dependent variable, i.e. on students' paragraph writing performance, due to the effects of reflective teaching. This was done by the researchers and the trainer. Then, the raters (the researchers and the trainer) used the same rating scale (rubric) used for pretest to correct posttest prior to the application of SPSS version 20 to compute the raw data of posttest which then is subject to quantitative analysis. Next, the validity of the test scores were determined by the two English teachers who are expertise in writing courses at the college. And then, the reliability of pretest and posttest were computed by Pearson correlations to determine r value. Finally, all of these procedures helped researchers to ensure the reliability and validity of the study.

2.6 Data Analysis Procedure

First, the Statistical Package for Social Science (SPSS) version 20 was used to compute the collected data. Next, researchers used Descriptive and Inferential Statistics to compute students' pretest and posttest of the control and experimental groups. Then, they agreed to utilize, the mean, standard deviation, independent sample t test and paired sample t test of EG and CG pretest and posttest scores, for they produce a more balanced representation and relationship between two or more variables which significantly reduces the biases and errors found in interpretations (Ali and Peebles, 2013). Next, the researchers analyzed and discussed data thoroughly. Finally, conclusions and recommendations were made based on the findings.

2.7 Validity of Tests

The pretest and posttest scores were validated by two English teachers who are well experienced and expertise in writing courses at the college. The team inspected the tests and forwarded their comments pertaining to the familiarity, clarity, adequacy, relevance, and difficulty level of the tests. They finally suggested that tests should encompass sub-skills and basic elements of paragraphs. So, the researchers, based on the very comments, modified some items and included sub-skills and elements of the paragraph in the test.

This part tries to answer the basic research questions "a" and "b" aforementioned. Prior to the reflective teaching method, pretests were used to obtain reference data (baseline scores) for students' paragraph writing performance. Two purposes were served by these reference data (baseline scores). The first purpose was to see if the two groups (control and experimental) were equivalent and that there were no differences in paragraph writing performance between them. Furthermore, the pretest findings were compared to the posttest results after the participants had completed the experiment to determine the treatment's effects. To analyze the pretests, descriptive and inferential statistics, independent samples t-test, and paired samples test were used.

3. Analyses And Findings Of The Pretest And Posttest

This part tries to answer the basic research questions "a" and "b" aforementioned. Prior to the reflective teaching method, pretests were used to obtain reference data (baseline scores) for students' paragraph writing performance. Two purposes were served by these reference data (baseline scores). The first purpose was to see if the two groups (control and experimental) were equivalent and that there were no differences in paragraph writing performance between them. Furthermore, the pretest findings were compared to the posttest results after the participants had completed the experiment to determine the treatment's effects. To analyze the pretests, descriptive and inferential statistics, independent samples t-test, and paired samples test were used. 3.1 Analysis of Pretest Results of Control and Experimental Groups Before the intervention of the study, all participants (60) of the study were asked to write paragraph, which was taken as a pretest. The participants had one and half hours to write the following title: "Write a Descriptive Paragraph about You". The paragraphs were assessed by English teacher, a paragraph writing trainer through reflective teaching, and the researchers. The secondary purpose, as mentioned in the post intervention data collection section, was to compare the pretest with the posttest, which consisted of paragraphs produced after the participants had completed the experiment to evaluate the treatment's effects. It is critical to verify that the experimental and control groups have similar English writing abilities before the experiment. The results of this analysis are summarized in this part, beginning with overall writing performance in terms of the five measuring components (See Appendix A). 3.1.1 Overall Paragraph Writing Performance The overall writing performance of the pretest is assessed by adding all of the average (mean) scores of the five dependent variables scored by the two raters in terms of their relevance (paragraph unity, topic sentence, adequate development, paragraph coherence, conclusion, and language unity). The experimental and control groups' paragraph writing performance was compared using descriptive and inferential statistics and an independent samples t-test in terms of overall paragraph writing performance. As the average mean score in the above table shows, in terms of the overall paragraph writing performance, the participants of the control group (N = 30) had an average mean score of 4.60, while the participants of the experimental group (N = 30) had an average mean score of 4.79. The analysis of the descriptive and inferential statistics indicated that both the control and experimental groups had almost equal performance. The results of the independent samples t-test indicated no statistically significant differences at the point p⊡ 0.05 in the overall paragraph writing performance between the control and the experimental groups (t=-.338, p = .737) even though the average mean score of the experimental group is slightly higher than that of the control group. 3.1.2. Paragraph Writing Performance in Terms of Unity In order to achieve the unity, a writer must stick to the point. A paragraph is unified when it states only one central idea that is developed by all other statements in the paragraph. (Stephen Bailey, 2011). In this variable, a participant could receive a maximum of 4 points and minimum of 1 point. In terms of unity, the experimental and control groups' paragraph writing performance was compared using descriptive and inferential statistics and an independent-samples t-test. The above table indicated that in terms of unity, the participants of the control group (N = 30) had an average mean score of .76, while the participants of the experimental group (N = 30) had an average mean score of .85. The analysis of the descriptive statistics indicates the mean score of the experimental group, in regards to

unity, is better than that of the control group. However, the results of the independent samples t-test, obtained from the pretest indicated no statistically significant difference in the writing performance between the control and the experimental groups (t=-.876, p = .386). 3.1.3. Paragraph Writing Performance in Terms of Topic Sentence Analysis of the topic sentence of the paragraphs focused on "taking the controlling role of sentences in a paragraph as it is the central idea of the paragraph" (Johnstone, 2002). In this component, a participant could get a maximum of 4 points and a minimum of 1 point. The experimental and control groups' paragraph writing performance in terms of topic sentence was compared using descriptive and inferential statistics and an independent-samples t-test. According to the above table, the participants of the control group (N = 30) had an average mean score of 1.25 while the participants of the experimental group (N = 30) had an average mean score of 1.14 in the topic sentence of the paragraph. The analysis of the descriptive statistics indicates the mean score of the control group, in regards to topic sentence, is better than that of the experimental group. However, the results of the independent samples t-test indicated no significant difference in terms of topic sentence between the control and experimental group (t = .810, p = .422) although the average mean score of the control group was slightly higher than that of the experimental group. 3.1.4. Paragraph Writing Performance in Terms of Adequate Development Analysis of adequate development in the paragraphs focused on "tracing the full development of the ideas for readers so they will understand the assumptions, evidence and reasoning the writer used or not leaving any significant questions in readers' minds unanswered " (Brundage and Lahey, 2007). In this variable, a participant could obtain a maximum of 4 points and a minimum of 1 point. The experimental and control groups' paragraph writing performance in terms of adequate development were compared using descriptive and inferential statistics and an independent-samples t-test. As shown in the above table, in terms of adequate development, the participants of the control group (N = 30) had an average score of .76, while the participants of the experimental group (N = 30) had .81. The average mean score indicated that the experimental group outperformed the control group in adequate development. Based on the information given in the above table, the results of the independent samples t-test, obtained from the pretest, indicated there were no significant differences in the writing performance in terms of vocabulary usage between the control and the experimental groups (t=-.369, p = .713). 3.1.5. Paragraph Writing Performance in Terms of Coherence Analysis of the coherence of the paragraphs focused on the "maintaining the balance of ideas in a varied and rhythmic pattern (through coordination, subordination and repetition...) to have a smooth flow from sentence to sentence within a paragraph" (Schifrrin, 1987). In this variable, a participant might receive a maximum of 4 points and a minimum of 1 point. The experimental and control groups' writing performance in terms of coherence were compared using descriptive and inferential statistics and an independent samples t-test. As shown in the above table, in terms of coherence, the participants of the control group (N = 30) had an average mean score of .76, while the participants of the experimental group (N = 30) had .81. Even though experimental group a bit outperformed than that of the control group, the results of the independent samples t-test obtained from the pretest indicated no significant difference in the writing performance in terms of coherence between the control and the experimental groups (t=-.731, p = .468). 3.1.6. Paragraph Writing Performance in Terms of Conclusion Analysis of the conclusion of the paragraphs focused on "The last sentence of the paragraph whether or not it restates the main idea of the paragraph and indicates why the topic is important" (Schifrrin, 1987). In this variable, a participant could get a maximum score of 4 and a minimum score of 1. The experimental and control groups' paragraph writing performance was compared in terms of conclusion using descriptive statistics and an independent samples t-test. The above table shows that, with regards to conclusion, the participants of the control group (N = 30) had an average mean score of .65, while the participants of the experimental group (N = 30) had an average score of .64. The average mean score of the two groups indicated that both the control and the experimental groups almost equally performed in conclusion. Moreover, as presented in the above table, the results of the independent samples t-test, obtained from the pretest, indicated there is insignificant difference in the paragraph writing performance in terms of conclusion between the control and the experimental groups (t = .83, p=. 934). 3.1.7. Paragraph Writing Performance in Terms of Language Use Analysis of the language use of the paragraphs focused on

"right use of vocabulary, syntax, grammar, punctuation, and mechanics" (Brundage and Lady, 2007). In this variable, a participant could get a maximum score of 4 and a minimum score of 1. The experimental and control groups' paragraph writing performance was compared in terms of language use using descriptive and inferential statistics and an independent samples t-test. The above table shows that, with regards to language use, the participants of the control group (N = 30) had an average mean score of .55, while the participants of the experimental group (N = 30) had an average score of .64. The average mean scores of the two groups indicated that the experimental group outperformed than that of the control group in language use. Moreover, as presented in the above table, the results of the independent samples t-test, obtained from the pretest, indicated there is insignificant difference in the paragraph writing performance in terms of language use between the control and the experimental groups (t=-.047, p=. 299). 3.2.2 Analysis of the Post-intervention Data The posttests were used to compare the paragraph writing performance of the two groups (control and experimental) after 16 weeks of training. Descriptive and inferential statistics, paired-samples t-test, and independent samples t-test were used to analyze the results. 3.2.2.1. Analysis of the Posttests The two raters rated the posttests of the two groups (See Appendix B). Once the raters have completed the grading, the average mean scores of each dependent variable were computed. All the mean scores of the variables were entered and organized in an excel spreadsheet. The data were then imported into SPSS for analysis. The researcher used the overall mean scores of all the 60 students' posttest scores rated by the two raters. In the following sections, each research question is tested against the collected data. 3.2.2.2 Testing Research Question One The first research question is 'Will there be a statistically significant improvement in the students' paragraph writing performance in the posttest in terms of unity, topic sentence, adequate development, coherence, conclusion, and language unity in the experimental group due to the effects of reflective teaching?' The purpose of this research question was to investigate if the experimental group's paragraph writing performance (for their overall paragraph writing performance in terms of unity, topic sentence, and adequate development, coherence, conclusion, and language unity) has improved in the posttest compared with their pretests. To answer the above research question, descriptive analysis and paired samples t-tests were used to investigate any statistically significant difference in the posttest findings compared with the pretest results of the experimental group. The following is a presentation of the descriptive and inferential statistics computed for the final scores on the posttest compared with the pretest for the control and experimental groups regarding their overall writing performance (unity, topic sentence, adequate development, coherence, conclusion, and language unity). As the descriptive and inferential statistics showed, the average posttest mean scores of the participants showed improvement in the six components of paragraph writing. This showed that implementing reflective teaching by reflection-in- action, reflection-on-action, and reflection-for-action helped participants to improve their paragraph writing performance in the posttest. A paired samples t-test was conducted to explore the effects of reflective teaching on students' paragraph writing performance in unity, topic sentence, adequate development, coherence, conclusion, and language use in the posttests. Participants in the posttests showed better performance in all variables except conclusion in their posttests. Then, there were statistically significant differences at the p ⬚.05 level in the scores, except conclusion, of the posttest and the pretest in all components as shown in the above table. Therefore, participants in the experimental group have shown statistically significant improvement in their performance in all components (unity, topic sentence, adequate development, coherence, and language use except conclusion) on the posttest. In conclusion, there were statistically significant differences at p⬚.05 level in scores of the posttest than the pretest in all variables except conclusion as p⬚.05 level. One major explanation for the experimental group's improvement in their overall paragraph writing performance compared to their pretest results is that reflective teaching provided the participants with exposure to edit, comment, discuss and revise their own and peers' drafts reflectively in EFL class. This finding is supported by studies conducted (Kumaravadivelu, 2002). The second research question is "Which groups' paragraph writing performance (the control group writing under teacher control method and the experimental group writing based on reflective teaching) will have a statistically significant difference, if any, in the posttest in terms of unity, topic sentence, adequate development, coherence, conclusion, and language use?" The

objective of this question was to look at the difference between students' paragraph writing performance in the control group (face-to-face /conventional paragraph writing instruction) and the experimental group (reflective teaching paragraph writing training) on the posttest in terms of unity, topic sentence, adequate development, coherence, conclusion, and language use. Descriptive and an independent samples t-test were employed to answer the study's second question. Given that there was no significant difference in their mean scores on the pretest at the start of the experimental, it is reasonable to assume that any significant difference in their mean scores on the posttest is due to the intervention. The descriptive and inferential statistics derived for the final scores on the posttest for both groups are presented below. 3.2.4 Overall Writing Performance (Posttests) This section shows the average mean scores and independent samples t-test results of both groups in terms of unity, topic sentence, adequate development, coherence, conclusion, and language use. The above table reveals that participants from both groups showed almost similar paragraph writing performance in unity (m = 1.186) of the experimental group and (m = .863) of the control group. To see whether there was a statistically significant difference between the two groups in terms of unity, an independent samples t-test was conducted. Results of the analysis showed that participants in the experimental group performed better (m = 1.186) compared to participants in the control group (m = .863), and there was statistically significant difference at the p ≤0.05 level in both groups' scores (t=-.4.201, p = 0.000) as shown in the table above. The above table shows that the experimental group performed better (m = 1.574) than the control group (m = 1.071) in writing paragraph topic sentence. The average mean scores of the two groups showed that there was a significant difference between the control and experimental groups in paragraph writing performance due to the effects of reflective teaching. An independent samples t-test was conducted to explore the effects of reflective teaching on the students' paragraph writing performance with particular attention of the topic sentence writing in the posttest. Though the mean scores of the two groups showed different results (M = 1.071 and 1.574), there was statistical significant difference at the p≤0.05 level in both groups' scores in a topic sentence of the paragraph (t=-4.347, p = 0.000). The above table shows that the experimental group (m = 1.076)performed better than that of the control group (m = .723) in writing coherent paragraph. An independent samples t-test was conducted to explore the effects of reflective teaching on the students' paragraph writing performance in terms of coherence in the posttest. Therefore, there was statistically significant difference between the control group and experimental group at the p≤0.05 level in terms of writing coherent paragraph (t=-4.192, p = 0.000). The above table reveals that the mean score of the experimental group (m = .926) is better that the mean score of the control group (m = .698) with regards paragraph conclusion. However, according to an independent samples t-test conducted to explore the impact of reflective teaching on the students' writing performance in conclusion in the posttest, participants in both groups didn't show better performance in conclusion. As a result, there were no statistically significant differences at the p≤0.05 level in both groups' scores in conclusions (t=-2.158, p = 0.35). The above table shows that the experimental group (m = .987) performed better than that of the control group (m = .667) in using language appropriately in writing paragraphs. An independent samples t-test was conducted to explore the effects of reflective teaching on the students' paragraph writing performance in terms of language use in the posttest. Therefore, there was statistically significant difference between the control group and experimental group at the p≤0.05 level in terms of using language in writing paragraph (t=-4.102, p = 0.000).

4. Discussion

The results of the pretests revealed that there were no statistically significant differences in the dependent variables in overall writing performance in terms of unity, topic sentence, adequate development, coherence, conclusion, and language use between the control and experimental groups. The results showed that there was no a statistically significant difference between the two groups in terms of all variables. Furthermore, the mean score of the experimental group appears to be slightly higher than the mean score of the control group in six dependent **variables** (overall writing performance in terms of unity, topic sentence, adequate development, coherence, conclusion, and

language use). The first research question addressed whether participants in the experimental group showed improvement in their overall paragraph writing performance in terms of unity, topic sentence, adequate development, coherence, conclusion, and language unity in the posttests compared with their pretests. The means of the experimental group's overall writing performance in terms of unity, topic sentence, adequate development, coherence, conclusion, and language unity showed that students' overall writing performance has shown improvement. This indicates that reflective teaching could help students to improve their overall paragraph writing performance in terms of the aforementioned components. The results of this study showed that using reflective teaching to write a paragraph helped students enhance their overall writing performance across all components. This was to be expected, as researches suggest that paragraph writing through reflection in general and by using journal writing, peer observation, videotaping lesson report, students' feedback, in particular, increase students' writing performance (Kumaravadivelu, 2002; Moon, 2006).

The second research question addressed 'which group's writing performance (the control group writing with face-to-face instruction or the experimental group writing with reflective teaching) will show statistically significant improvement in the posttest regarding unity, topic sentence, adequate development, coherence, conclusion, and language unity?' For unity, topic sentence, adequate development, coherence, and language unity, the results showed that there were statistically significant differences at the $p < 0.05$ in both group's scores. The average mean scores showed that the experimental group performed better than that of the control group. There were statistically significant differences at $p < 0.05$ level in both groups in terms of unity, topic sentence, adequate development, coherence, and language unity on the posttest except conclusion. Even if experimental group students did not perform well (did show significant difference) in writing paragraph conclusion, it is worth mentioning that failing to find statistically significant results does not mean that the results of reflective teaching in all components are unimportant or negative, yet it brought about tangible change (Kumaravadivelu, 1994; Porter, et al., 1990). Therefore, from the results mentioned above, writing using reflective teaching has improved the participants' overall paragraph writing performance in terms of unity, topic sentence, adequate development, coherence, and language unity except in writing paragraph conclusion.

5. Conclusions And Recommendations

5.1 Conclusion

The use of methods in educational contexts, particularly in the EFL field, has expanded, and many English language teachers are attempting to incorporate it into their courses. The purpose of this study was to address two research questions about the effects of reflective teaching on students' paragraph writing performance. Despite the fact that there are no statistically significant differences in overall writing performance between the two groups, the findings of this study provide insight into the fields of English language teaching and instructional methods. So using reflective teaching into EFL writing lessons will increase students' performance in a variety of areas. Paragraph writing via reflective teaching appears to be effective and beneficial in 1) enhancing students' paragraph writing quality, 2) increasing students' awareness that paragraph writing can be developed by rewriting, 3) reducing wrong use of language and 4) improving overall paragraph writing performance (Moon, 2006; Pennington, 1992; Klapper, 2000). As a conclusion, EFL teachers should tread carefully when incorporating reflective teaching into their courses. While reflective teaching has been shown to be beneficial, using it without caution could impair the learning process. This research could help future researchers and EFL teachers in better understanding and incorporating reflective teaching at various levels of education.

5.2 Recommendations

This true experimental study was conducted at Hossana College of Teacher Education on second year English major students. The study examined the effects of reflective teaching on college of teacher education students' paragraph writing performance. The findings generated several suggestions for future researchers who will be interested in reflective teaching versus face-to-face instruction.

The following are suggestions generated from the current study.

1. The results from this study suggest that additional research is needed to examine reflective teaching versus face-to-face instruction approaches carried out in various contexts to support or reject the findings of the current study;

2. Researchers are advised to expand the period of the experiment, include a larger number of participants, and include a sufficient number of paragraph writing activities and assignments to explicitly examine the difference between the two writing approaches.;

3. Researchers may include additional variables, such as gender, age, and technology experience to understand the correlation between these variables and paragraph writing improvement via reflective teaching versus face-to-face writing instruction;

4. Future researchers may also investigate the perception of students and teachers about the effectiveness of reflective teaching on students' paragraph writing performance compared with that of face-to-face writing;

5. EFL teachers are called upon to use reflective teaching for students to improve, specifically their paragraph writing skills;

6. English teachers should be well trained on the effective application of reflective teaching as to how to assist students, particularly female students, at different stages of the writing process, with particular reference to prewriting and revision, which seems to be more challenging than other stages of writing.

Abbreviations

CG
Control group
EG
Experimental group
EFL
English as a Foreign Language
HCTE
Hossana College of Teacher Education
L2
Second language
R1
Rater 1
R2
Rater 2
TE

Teacher education

Declarations

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Authors' contributions

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References

1. Afework Gebretsadik. (2007). Status of School-Based Teachers' Professional Development: A Case Study of Selected Schools in Tigray. Unpublished MA Thesis, AAU

2. I. Ahmad, H.B. Said, A. Zeb, S. ur Rehman, S. Ahmad, W. Khan (2013). How reflective practice improves teachers' classroom teaching skill? Case of community based schools in district chitral, khyber pakhtunkhwa. Academic Research International, 4(1), 73

3. N. Ali, D. Peebles (2013). The effect of gestalt laws of perceptual organization on the comprehension of three-variable bar and line graphs. Human factors, 55(1), 183–203

4. H. Ashraf, A. Samir, M.T. Yazdi (2016). Reflective teaching practice in an EFL context: A qualitative study. International Journal of English Linguistics, 6(7), 48

5. Assefa Zeru. (2207). Exploring Issues in the Teaching of Expository Writing at the Undergraduate Level at Addis Ababa University, Ethiopia. PhD Thesis. Central Institute of English and Foreign Languages, Haydrabad India (Unpublished)

6. E. Babbie, *The practice of social research*, 12th edn. (Wadsworth, Belmont, CA, 2010)

7. E.R. Babbie, *The basics of social research*, 6th edn. (Wadsworth, Cengage Learning, Belmont, CA, 2014)

8. H.R. Bernard, *Research methods in anthropology: Qualitative and quantitative approaches*, 3rd edn. (Alta Mira Press, Walnut Creek, CA, 2002)

9. C. Blythe, A Constructivist Approach to Grammar: Teaching Teachers to Teach Aspect. Mod. Lang. J. **81**(1), 50–66 (1997)

10. D. Brundage, M. Lahey (2007). Acting on words: An integrated rhetoric, reader, and handbook. 2nd Edition, in press. Toronto: Pearson

11. D. Campbell, J. Stanley (1963). <background-color:#FFD9B3;ivertical-align:baseline;>Experimental and quasi-experimental designs for research</background-color:#FFD9B3;ivertical-align:baseline;>. Chicago, IL: Rand McNally

12. J.W. Cresswell, V.L. Plano Clark, *Designing and Conducting mixed method research*, 2nd edn. (Sage, Thousand Oaks, CA, 2011)

13. N.K. Denzin, Y.S. Lincoln (2000). <background-color:#FFD9B3;vertical-align:baseline;>Handbook of qualitative research</background-color:#FFD9B3;vertical-align:baseline;>(2nd ed.). London: Sage Publications Ltd.

14. D. Dereje Daksa, Kebede, Gemechis Teshome, *Practices and Challenges on Reflective Teaching: an Investigation of Second Cycle Primary Schools (5–8) EFL Teachers' in South West Cluster Zones of Oromiya Regional State* (Basic and Applied Research (IJSBAR), International Journal of Sciences, 2017)

15. Dereje Taddesse (2009). ApractitionerInquiryintopre-serviceEFLReflectivePracticumofHaramaya'sUniversity:AConditionofInabilitytoReflectanddeterminatesofReflection. Unpublished PhD Dissertation, Addis Ababa University

16. Z. Dörnyei, *Research methods in applied linguistics* (Oxford University Press, New York, 2007)

17. P. Duff, *Case study research in applied linguistics* (Lawrence Erlbaum Associates, New York, 2008)

18. A. Felix (2016). Pre/Post-Testing to Evaluate the Effectiveness of Online Language Programs. JLTR. 4 (1): 176

19. Geremew Lemmu (1999). Astudyontheacademicrequirements<bvertical-align:super;>:</bvertical-align:super;>FourdepartmentsinfocusinAddisAbabaUniversity.Unpublished PhD Dissertation. Addis Ababa: Addis Ababa University

20. T. Hedge(2005). <background-color:#FFD9B3;ivertical-align:baseline;>Writing.</background-color:#FFD9B3;ivertical-align:baseline;>Oxford: Oxford University Press

21. B.B. Holli, R.J. Calabrese, J.O. Maillet, *Communication and education skills for dietetics professionals*, 4th edn. (Lippincott Williams and Wilkins, Philadelphia, PA, 2003), doi:10.1046/j.1365-277X.2003.00482.x

22. Hussein Jeylan, Which one is better: Saying student teachers don't reflect or systematically unlocking their reflective potentials: A positive experience from a poor teacher education faculty in Ethiopia. Australian J. Teacher Educ. **31**(2), 12–28 (2006)

23. Italo Beriso.(1999).Teacher Versus Peer-correction on Revision of Students 'Writing. Unpublished PhD Thesis, AAU

24. H. Jeylan Wolyie (2007). Experience gained through engaging student teachers in a developmental reflective process. Teacher Development: An international journal of teachers' professional development, vol.11

25. C. Kinginger, *Toward a Reflective Practice of TA Education* (Inc, 1995)

26. K.E. Johnson, P.R. Golombek (2002). <background-color:#FFD9B3;ivertical-align:baseline;>Teachers' Narrative Inquiry as Professional Development</background-color:#FFD9B3;ivertical-align:baseline;>. Cambridge, UK: Cambridge University Press

27. J. Klapper (2000) Training candidate teachers and foreign language assistants in UK universities: A reflective approach B. Rifkin Ed. Mentoring foreign language teaching assistants, lecturers and adjunct faculty. AAUSC issues in language program direction (p.P. 143–172). Boston: Heinle

28. F.A. Korthagen, Two modes of reflection. Teach. Teacher Educ. **9**(3), 317–326 (1993)

29. B. Kumaravadivelu(1994).*The post method condition*: (E)merging strategies for second/foreign language teaching. TESOL Quarterly,<background-color:#FFCC66;vertical-align:baseline;>28</background-color:#FFCC66;vertical-align:baseline;>(1), 27–48

30. B. Kumaravadivelu, *Beyond methods: Macrostrategies for language teaching* (Yale University, New Haven, Connecticut, 2002)

31. R. Leitch, C. Day, Action research and reflective practice: Towards a holistic view. Educational Action Research **8**(1), 179–193 (2000)

32. A. Main, Reflection and the development of learning skills, in *Reflection, turning experience into learning*, ed. by D. Boud, R. Keogh, D. Walker (Kogan Page, London, 1985), pp. 91–99

33. S.L. McKay, *Researching second language classrooms* (Routledge, New Jersy, 2006)

34. G. McLeod, J. Barr, A. Welch, Best Practice for Teaching and Learning Strategies to Facilitate Student Reflection in Pre-Registration Health Professional Education. *An Integr. Rev.* Creative Educ. **6**, 440–454 (2015). doi:10.4236/ce.2015.64044

35. MoE(2010). Competencies for Secondary School English Language Teachers. Addis Ababa

36. J.A. Moon, *Reflection in Learning and Professional Development: Theory and Practice* (Kogan Page, London, 2006)

37. E. Mukulu, H. Indangasi, P. Mwangi, C. Gecaga, N. Okanga, *KCSE revision English. Nairobi* (Kenya Literature Bureau, 2006)

38. Mulugeta Teka (2009). EvaluationofimplementationoftheparadigmshiftinEFLteachereducationinEthiopia.Unpublished PhD Dissertation, Addis Ababa University

39. J. Nolan, T. Huebner, Nurturing the reflective practitioner through instructional supervision: A review of the literature. J. Curriculum Superv. **4**(2), 126–143 (1989)

40. M. Pennintgton (1992). Reflecting on Teaching and Learning: A development Focus for the Second Language Classroom. In Perspective on Second Language Teacher Education. Ed.s. J. Flowerdew, M. Break, and of Hong Kong

41. W.L. Sanders, Value-added assessment from student achievement data: Opportunities and hurdles. J. Personnel Evaluation Educ. **14**(4), 329–339. <background-color:#CFBFB1;uvertical-align:baseline;>https://doi.org/10.1023/A:1013008006096</background-color:#CFBFB1;uvertical-align:baseline;>(2000)

42. Schiffrin, *Discourse Makers* (Cambridge University Press, 1987)

43. D.A. Schon, *The Reflective Practitioner* (Basic Books, New York, 1983)

44. <background-color:#5B96A2;vertical-align:baseline;>Stephan Bailey</background-color:#5B96A2;vertical-align:baseline;>(2011). Academic Writing. A Handbook for International Students (3rd Ed.). New York: Taylor and Francis Group Publisher

45. S. Taylor, G.J. Asmundson, *Treating health anxiety: A cognitive-behavioral approach* (Guilford Press, New York, NY, 2004)

46. W.W. West (1988). <background-color:#FFD9B3;ivertical-align:baseline;>Developing writing skills</background-color:#FFD9B3;ivertical-align:baseline;>. Newton, Massachusetts: Allyn and Bacon

47. Winner and Fitsum, *Basic Writing Skills. Teaching Module for Second Year English Major Students* (Arba Minchi College of Teacher Education, 2012)

48. M. Zare, F. Behjat, S.J. Abdollrahimzadeh, M. Izadi (2013). Critical thinking and Iranian EFL students' listening comprehension. International Journal of Linguistics, <background-color:#FFCC66;ivertical-

align:baseline;>5</background-color:#FFCC66;ivertical-align:baseline;>(6), 12–21

https://saskliteracy.ca/wpcontent/uploads/2019/07/CircleOfLearning_rubric_for_well_written_paragraph.pdf

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Tables

Table 1 to 14 are available in the Supplementary Files section.

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