

Research Article

# Effect of a Systematic Functional Linguistics Approach and the Teaching Learning Cycle on Writing Skills of EFL Undergraduate Students

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## Abstract

Academic writing remains one of the most significant skills for students in tertiary education, often due to a lack of explicit instruction regarding genre and register. While conventional teaching methods frequently emphasize on memorization of rules, the Systemic Functional Linguistics (SFL) approach emphasizes how language choices are shaped by communicative purposes. A key manifestation of this approach is the Teaching and Learning Cycle (TLC), a pedagogical model designed to scaffold student learning through collaborative modeling and guided practice. Understanding whether this strategy can produce measurable gains in writing proficiency is essential for developing more effective literacy interventions. Thus, the primary objective of this study was to assess students' academic writing skills by implementing the Teaching and Learning Cycle (TLC), a strategy informed by the Systemic Functional Linguistics (SFL) approach to language. It was hypothesized that this instructional strategy would lead to measurable improvements in students' writing. To investigate this, the researcher employed a mixed-methods design, combining an action research approach with a non-randomized one-group pretest-posttest design. Data was collected through pretests and posttests, which served as the main instruments for assessing students' writing improvement following the intervention. The test results were analyzed using SPSS software. First, the Intra-Class Correlation Coefficient (ICC) was calculated to determine inter-rater reliability across the three test occasions. Then, Repeated Measures ANOVA was conducted to examine changes in student performance over time. Data was presented in tables and converted into percentages to clearly illustrate progress. The findings indicated that the use of the SFL-based Teaching and Learning Cycle significantly improved students' paragraph writing skills.

## Keywords

Academic Writing Skills, Teaching learning Cycle, Systemic Functional Linguistic Approach

## 1. Introduction

Writing is an important communication skill for students' success in their academic life. It is the most fundamental productive skills for students to master because it is a thinking

tool used for critical thinking and learning in all disciplines. It is a skill required for employment in most sectors. The im-

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portance of being a competent writer is not limited to employment rather, this skill transcends years of schooling and can contribute to an individual's understanding of content across all subject areas [9]. Thus quality of writing instruction of students are a recurring concern and theme among many researchers recently. This stems from writing being such a foundation skill for the society's day to day life in every institution.

Further, it is known that language develops through social experience and students need experience with the kinds of writing tasks and genres that will be required of them so that they can develop an advanced level of literacy necessary in school contexts. This is especially important for EFL students who speak a language other than English at home as in Ethiopian context. These EFL students must become proficient in English to be competitive with their English-speaking peers for access to higher education [11]. Though it is crucial skills, many EFL students struggle with writing, producing unclear and disorganized texts even in their post-graduate level writings.,

However, an SFL perspective of language as a resource for making meaning contributes to a re conceptualization of writing [15, 17] Writing is not the demonstration of lexical and syntactic knowledge; nor is it a cognitive process of deploying good writing strategies. Rather, writing is a goal-oriented communicative activity [20]. From an SFL perspective, learning to write involves learning to make choices from the language resources in constructing meaning for specific purposes, audience and contexts [31]. Further more, SFL-based writing instruction emphasizes teaching forms in context, aiming at helping learners become aware of how a specific form is creating particular meaning relevant to a writing task [5].

As a way of supporting teachers in making the genre and register features transparent for students, Martin and his colleagues began collaborating with teachers in the 1980s to develop an SFL-based approach to designing curriculum and instruction [6-8, 26, 34]. This approach, known as "the Teaching and Learning Cycle" (or the Curriculum Cycle) brings together a Hallidayan conception of language as meaning making and a Vygotskian perspective of learning as a socially-mediated activity.

In the SFL genre framework, students understand the literacy of a target genre in context and learn how to read and write through explicit scaffold writing instruction, in what is known as the teaching-learning cycle [28]. It is a pedagogical framework for scaffolding academic writing through deep and critical thinking tasks, academic discussions, interactive reading, and language development [33, 34]. The TLC applies the principle "guidance through interaction in the context of shared experience" [11, 25]. This principle refers to the guidance provided by teachers in talking, reading, and writing about a specific text in the context of a shared experience—a common text, movie, or reading. This means that students write about something that they shared as an activity. It has since spread globally as educators see how the quality of their students'

writing improves through the framework's intentional, language-focused support that simultaneously builds deep content knowledge.

### 1.1. The Problem Context

This study emerged from Professional and personal experience in teaching a writing skills course (*Basic Writing Skills, Enla1012*) to Ethiopian students studying for their Bachelor of Arts Degree in English Language and Literature. According to the syllabus, the course contents involve basic writing skills beginning from sentence-level writing skills to paragraph-level writing and essay-level writing skills. Ultimately, the course aims at arming the students with the fundamentals of *Academic Writing Skills*. The syllabus claims, upon completing the course, students will be able to write a well-structured senior essay demonstrating effective academic writing skills. The course is most often given to the students in their second year.

However, professional experience in the testing and assessment of the students over the past ten and more years indicates that even when the students write their senior essays in their third or fourth year, the vast majority still demonstrate serious basic writing skills deficiencies. We identified the following major and common deficiencies in their senior essays:

The students demonstrated several key difficulties related to thematic organization and discourse coherence in their writing. Specifically, they exhibited an inability to generate relevant themes stemming from their own life experiences. This difficulty extended to the level of information flow within a paragraph, where they showed an inability to make clear distinctions between old information (theme) and new information (rheme), frequently confusing these elements together. Furthermore, their writing lacked effective textual cohesion, as they struggled with the linking of themes using appropriate discourse markers. Beyond basic linking, students also had an inability to adequately build, support, or clarify the central themes of their arguments. On a macro-level, this thematic confusion manifested as an inability to appropriately set paragraph dividers when structuring a longer piece of writing, indicating a lack of grasp on structural organization.

Furthermore, asked to reflect on and write or talk about their English writing competence, aspirations and challenges, the students dominantly exhibit mystification of what 'writing' means and how they can improve their skills, i.e., that they usually argue they are 'not born with' the intelligence for writing in English.

### 1.2. Objectives

Prompted by this problematic background, we hypothesized that the Teaching Learning Cycle (TLC) strategy of teaching academic writing skills informed by Systemic Functional Linguistic (SFL) approach to language might improve the students' agency to practice and acquire an adequate level

of the fundamentals of *academic writing skills*. Thus, the intent of this study is to test whether the Systemic Functional Linguistic (SFL) approach with a Teaching Learning Cycle (TLC) strategy will improve the students' agency to acquire an adequate level of fundamentals of academic writing skills. Yet, from the outset, we are noteworthy of the fact that we would confront with a myriad of challenges in our trial of implementing SFL TLC. Yet, we were interested in empirically testing it which might nourish our understanding in-depth of the challenges as well as the opportunities.

## 2. Methodology

### 2.1. Research Approach and Design

This research is aimed to investigate the effectiveness of implementing Systemic Functional Linguistics Approach (SFL) with Teaching Learning Cycle. It is assumed that this strategy could improve students' writing skills. To that end the study used an explanatory sequential mixed methods design, which involved collecting and analyzing quantitative data in the first phase of the study and qualitative data collection in the second phase. According to [21] this mixed-methods design was adopted because quantitative data facilitated overarching insights about the research problems as in this study context, analysing participants written essay, while qualitative data refined and explained those results by examining participants' perceptions and views more profoundly through interview and observation.

Further, to achieve its purpose the study employed an action research approach combined with a non-randomized one-group pretest-posttest design [22, 27] A non-randomized one-group pretest-posttest design is a research design where a single group of participants is measured on a dependent variable before (pretest) and after (posttest) the implementation of an independent variable (treatment or intervention).

### 2.2. Research Setting and Participant

The study was carried out in Jijiga University with English major students in an EFL classroom. Jijiga University is one of the relatively younger universities in Ethiopia. The university began its Bachelor of Arts degree in English Language and Literature, which lasts four years, in 2006.

### 2.3. Sampling Technique

The 2023 second-year students were selected to take part in the intervention. The total population of the study consists of 28 students. Among them 21 are male and 7 of them are female. From these population all students were participant for this study as the number is manageable.

Three factors led to the selection of these students as a sample: first, they are all second-year English majors in the Eng-

lish Department; their estimated English proficiency is intermediate, indicating that they are able to understand and discuss Halliday's SFL theory in their EFL writing. Second, it is believed that they have attended basic linguistics courses because they are majoring in English at the university. As a result, learning SFL increases their understanding of linguistics. Thirdly, the researcher is aware of the difficulties they have while teaching writing because these kids are from the class where she has been in charge of teaching English writing skills. In order to improve the students' writing abilities, the researcher chooses to conduct an action research project using the SFL approach and the Teaching Learning Cycle as a tools.

### 2.4. The Implementation Process of the Action Research Procedures

This study was conducted by adapting [22] Action Research Model. The following phases of the study process were followed for a semester: preliminary investigation, action plan, implementation, and reflection. The duration of the action research project is crucial for defining its boundaries, even though it is brief, constrained, and connected to curriculum-mediated behaviors in the contemporary educational system.

*Conducting preliminary investigation:* In the first phase of the action plan procedure, the individual writing problems of the students were examined based on the researcher's observations of the class and the pre-test that was given prior to the start of the action plan. After that, the researcher created a plan of action to effectively address these issues.

*Developing an action plan:* In this phase preparing lesson plans, creating teaching materials, and establishing success criteria were all part of the extensive job preparation. These predetermined standards served as the foundation for assessing the performance of the SFL TLC implementation. If the students demonstrated a notable development in unity, coherence and text organization, as well as motivation during writing lessons following the intervention, the action would be deemed successful. Writing objectives, requirements, instructions, and the topic lists were carefully made to implement SFL TLC in the class. The topics were chosen from the suggested topics in the textbook and from current issues designed by the teachers, namely, living with parents Vs living in the campus, how to overcome the fear of presentation, and the benefit and drawbacks of the use of social medias.

*Implementing the action plan:* The implementation period was one semester. In this stage, students were required to produce an argumentative essay about "living with parents vs. living on campus" during the first week of Pre-SFL teaching writing, which refers to the writing lessons that took place prior to SFL instruction. These writings served as the pretest. In addition, an overview of SFL teaching intervention covering course content was carried out beginning in the second week. Especially, the Teaching Learning Cycle was implemented as a pedagogical tools. Further, in the middle of the intervention activities were given to students with the same

topic but with TLC practice. The writing activities were conducted consecutively using the four TLC stages in the classroom.

Though the TLC has gone through modifications over time [13, 25] the focus of the model has remained constant. The TLC takes writers through the phases of deconstructing mentor texts, joint construction, and independent construction, allowing students different points of entry and enabling teachers to start at any one of these phases [11].

In the first steps of this teaching learning cycle: building students' understanding about the field; involves both teacher and students in focusing on background knowledge of a topic in order to build more knowledge and language around that topic [19]. The aim of building the field and setting context is to critically orient students to the target text and build up their knowledge of the subject area so they will have something to write about [30]. The second step involves deconstructing model texts using functional metalanguage to name genre and register features; The aim of this step is to make visible to students the stages of the target text and their functions in that text, as well as the key language features. In this step, students should become familiar enough with the genre that they can pull it apart and put it back together, understanding why particular bits go where they do, and how particular language features work to achieve the genre's purpose [14].

Jointly constructing texts; The joint construction step of the TLC involves the teacher and students building up a new topic in the field, typically related to the topic of the deconstruction text. The teacher then leads the students in the writing of an instance of the target text.

Independent construction: it is gradually apprenticing students to produce written texts more independently by providing less scaffolding as students become more knowledgeable users of a particular genre over time, they start developing their own text [6, 10, 25, 29]. Therefore, TLC aims to provide students with teacher interaction, guidance, and support as students go through these phases.

While implementing the above stages of TLC, the teacher adjusted her teaching to accommodate the students linguistic needs by identifying gaps while the teaching learning going on. Lastly, Post SFL teaching writing was conducted: With the knowledge of SFL TLC and the course contents, the students were required to write an essay on the cons and drawbacks of the use of social medias. Among the different activities conducted in before and after intervention, only the pre intervention, the mid intervention and the post intervention essay were included for this research purpose.

*d) Reflecting on the process:* Then the teacher gave them feed backs by pointing out what they did well and what they failed to do. Not only the teacher but they were also given feedback by their peers. Finally, the researcher conducted the interviews with the students in order to investigate their attitudes towards the employment of SFL TLC in enhancing their writing skills. The outcomes were then evaluated in order to determine whether or not the next cycle was required, taking

into account the previously indicated criteria for a successful strategy. The choice to go on to the following action research cycle would be made if the success criteria were not satisfied.

## 2.5. Implementation, Monitoring, Gathering Evidence and Analysis of Data

To monitor and test the trial over the semester, pretest, mid-test and post-test were carried out to collect the main data. Besides, interview and observations were used to support the main data. Data collected during pretest, mid-test and posttest were analyzed first to assess whether there are changes in the students' writing performances. Attention was also made to determining how the students' beliefs, perceptions, and awareness were reflected in their actual writing products. Monitoring how the participant students improved their lexicogrammatical choices and rhetorical skills in terms of genre-appropriate lexical and grammatical richness, was considered as tokens and indicators of change.

The whole data collection process lasted for one semester (1 hour per periods for 3 hours for a week), which was in semester I of the academic year 2023. It was especially required of the students to generate several writing assignments. These included essays that students had produced both prior to and following their introduction to SFL instruction. In order to achieve this goal, the researcher examined the general understanding of SFL among the students as well as their perceptions of the TLC method and the efficacy of the classroom intervention using all available data collection instruments.

The data analyses are separated into two sections. The first section examines the students' pre- and post-teaching essay findings to determine how the SFL TLC implementation affected their writing before and after the writing lessons. The purpose of the second section is to examine the knowledge and implementation of SFL TLC by means of student interviews, as well as the attitudes of the students toward this implication in writing classes. Besides, data analysis was done with the help of SPSS and in comparing the pretest and post test results and inter rater reliability were conducted to test the reliability of the tests which were rated by two raters. The cohesiveness, unity, word choice and arrangement of ideas in students' compositions were the sole aspects of the writing assessment that were the subject of the data analysis. As a result, the analysis began with reading the essays written by the students to see if they had improved between before and after the interventions.

In order to support this group of L2 students, this experiment was carried out in an EFL classroom. The researcher for this project is an EFL teacher who has been instructing students using SFL approach for one semester. Students written assignments did not meet the required standard at the start of the intervention. Therefore, this research aimed and motivated by those scenarios to help these students develop their writing skills and raise their awareness of different types of texts to meet the required standard described in the curriculum.

To that end the SFL approach of Teaching Learning Cycle,

an action research was conducted for one semester. The concept of SFL TLC was incorporated in the teaching material for the course Basic Writing Skills. First the baseline study was conducted to understand students' level of writing skills before the intervention and it was scored out of 10%. In the second activity, concepts of SFL were given. Though they have some background knowledge on linguistics prior to their linguistics courses, SFL was a new concept for them. Therefore basic concepts of SFL & the TLC was introduced. Teaching materials were prepared. Thus, courses were delivered not only about SFL but also contents of the course were discussed harmoniously.

The teaching evaluation was conducted mainly in to two phases having different activities. The base line activity was scored and used as a pretest result. However after the intervention different writing tasks were given to students. Students produced five activities at different times until the end of the semester. However two activities were selected and scored as a mid test and post test activities in addition to the pretest. Throughout the process of collection and scoring data, SFL writing scoring rubric were prepared and each manuscripts (Paragraphs) were rated based on the rubrics set first. To avoid subjectivity two- raters were involved in the rating process. First as an instructor of the course and as a researcher, students' manuscript was rated by the classroom teacher (also the researcher), second, it was rated by colleagues to make the result reliable. In addition, in analyzing the test result of the students, SPSS data analysis tools were used. First to check inter rater reliability the Intra class Correlation Coefficient (ICC) statistical tool were used in all the three test results of the students. Secondly, Repeated Measure ANOVA data analysis tools were used to asses if there is improvements between the pretest and the post tests.

Based on the above assumptions, the inter-rater reliability analysis was computed using ICC statistical tool. Intraclass Correlation Coefficient is a helpful statistic for both intrarater and interrater reliability testing. Interrater reliability is a concern to one degree or another in most large studies due to the fact that multiple people collecting data may experience and interpret the phenomena of interest differently due to the variability among human observers. Well-designed research studies must therefore include procedures that measure agreement among the various data collectors.

As a rule, researchers should try to obtain at least 30 heterogeneous samples and involve at least 3 raters whenever possible when conducting a reliability study. Under such conditions, it will be suggested that ICC values less than 0.5 are indicative of poor reliability, values between 0.5 and 0.75 indicate moderate reliability, values between 0.75 and 0.9 indicate good reliability, and values greater than 0.90 indicate excellent reliability. However for this research, two raters were

participated in assessing students writing manuscript. As part of the reliability analysis, SPSS computes not only an ICC value but also its 95% confidence interval.

## 2.6. Ethical Considerations

Ethical approval for this research project, entitled "Enhancing Writing Skills of EFL Undergraduate Students: Applying a Systemic Functional Linguistics Approach in Non-Randomized One Group Pretest-Posttest design," was formally granted by Jigjiga University Research Ethics Review Committee (JJU-RERC). The proposal was reviewed based on standard ethical guidelines, and the committee's decision confirmed that the research procedures would "pursue all the valuable ethical standard principles to protect human and animal subject against risk and harm while doing research." The research procedures were therefore performed in compliance with all relevant institutional and international ethical standards concerning human participants. The study was approved on October 02, 2022, prior to the commencement of data collection, with Project Registration/Reference Number JJU-RERC/014/2022.

Following the procurement of ethical approval from the University Research Ethics Review Committee (JJU-RERC), written informed consent was secured from all participating undergraduate students. Consent was obtained directly by the principal investigator, on October, 2022, immediately prior to the beginning of data collection. All participants were provided with a detailed information sheet outlining the study's purpose, procedures, potential risks and benefits, and their absolute right to withdraw at any time. A signed copy of the consent form was collected from each participant and kept for record-keeping purposes.

## 3. Results

The central purpose here is to apply SFL and TLC approach using action research, and identify its impact and effectiveness on the participant students' writing skills development during and after a semester of teaching intervention. Therefore, first quantitative data obtained through pretest and post test were discussed followed by qualitative data generated from interview and observation.

### 3.1. Pretest and Post Test Data Analysis

Based on the above principles, the result of this study shows that there is significant agreement between rater 1 and rater 2 in the analysis of the pretest with 0.843 agreement level, which indicates good reliability as shown below.

**Table 1.** *Intraclass Correlation Coefficient Result Pretest.*

	Intraclass Correlation <sup>a</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.728 <sup>b</sup>	.493	.864	6.360	27	27	.000
Average Measures	.843 <sup>c</sup>	.660	.927	6.360	27	27	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.

The ICC in the above table shows both average and single measures. Compared to single measures (.728), the ICC for average measures is higher at .843 and this implies that the average measures have more consistency. The confidence intervals for average measures are (.660,.927) while single measures are (.493,.864). The range of values that the ICC is most likely to fall inside is displayed by these intervals.

The results of an F-test are displayed in the "F Test with True Value "0" section. To determine whether the ICC deviates considerably from zero, the F-test is employed. There is consistency in the measurements if the ICC is different from zero, as indicated by a significant F-test (p-value < 0.05). The p-value in this instance is .000 for both the average and single measures. This shows that the meas-

urements for both kinds of measures show statistically significant consistency.

In general, the data points to a high degree of measurement consistency for both average and single measures. Therefore based on the result shown above it can be inferred that the pre test score of students are reliable for proceeding the rest analysis of the results with value of ICC: 0.843, 95% F test: Significant (p < .001); Confidence Interval: 0.660 to 0.927. The average of several measurements shows a very high degree of agreement (ICC of 0.843 is within the "very high agreement" range). Because of the relatively tight confidence interval, the estimate has a high degree of precision.

Further the output result for both the mid test and post test result produced .896 and .730 consecutively as shown below.

**Table 2.** *Intraclass Correlation Coefficient Mid Result.*

	Intraclass Correlation <sup>a</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.812 <sup>b</sup>	.634	.908	9.639	27	27	.000
Average Measures	.896 <sup>c</sup>	.776	.952	9.639	27	27	.000

Two-way mixed effects model where people effects are random and measures effects are fixed.

Similar to the ICC result of the pre test, the Intraclass Correlation Coefficient (ICC) result of the post test one is 0.896 which shows a considerable amount of agreement between the two raters. In addition, Cronbach's Alpha is another measure of reliability, and agrees with the ICC here about the high level of reliability between the two raters. Further, the results of the

ICC analysis indicate a high level of reliability for both single and average measures. The average measures demonstrate even greater reliability, suggesting that averaging multiple measurements can enhance the precision of the assessment. These findings are statistically significant, supporting the confidence in the reliability of the measurement process.

**Table 3.** *Intraclass Correlation Coefficient Post Test Result.*

	Intraclass Correlation <sup>a</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.528 <sup>b</sup>	.200	.750	3.238	27	27	.002
Average Measures	.691 <sup>c</sup>	.333	.857	3.238	27	27	.002

Two-way mixed effects model where people effects are random and measures effects are fixed.

As can be seen in [Table 3](#), the ICC values of 0.528 for single measures and 0.691 for average measures indicate moderate to good reliability. This suggests that there is a reasonable level of consistency in the measurements, but there's still room for improvement. Therefore, it can be concluded that the inter-rater reliability result in the pretest, post test one and post test two shows considerable amount of agreement and it is acceptable to proceed the study.

Further, the other main concern of the study is to evaluate whether there is improvements in the writing skills of selected

students compared with the result obtained in the pretest and posttest one and posttest two result. This were also computed using Repeated Measure ANOVA as it is used when the same measure is taken from participants at more than two time points (to study single group of people over time). Then the result of the output data shows that there is significant improvement in the test result of students from Pre test to post test results both in rater 1 and in rater 2 as shown below.

*Rater 1*

**Table 4.** *Descriptive Statistics.*

	Mean	Std. Deviation	N
SFL pre	4.5357	1.42678	28
SFL Mid	5.7500	1.07583	28
SFL Post	6.3571	1.09593	28

The table shows descriptive statistics for three distinct study time points (before, mid, and post). As it can be seen in the table, the mean scores rise from pre (4.5357) to mid (5.7500) and finally to post (6.3571) using SFL approaches of language teaching. This shows that teaching writing skills applying SFL TLC has been becoming better over time. The score distribution around the mean is measured by the standard deviation.

The standard deviation in this instance drops from pre (1.42678) to mid (1.07583) and then stabilizes at post (1.09593). The notion that test results have improved is further supported by the lowering standard deviation numbers, which indicate that the scores moved closer together around the mean as the evaluations went on supporting the conclusion of improvements in the test results.

**Table 5.** *Mauchly's Test of Sphericity<sup>b</sup>.*

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	Df	Sig.	Epsilon <sup>a</sup>		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Time	.965	.927	2	.629	.966	1.000	.500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

Measure: MEASURE\_1

A statistical technique called Mauchly's Test of Sphericity is used in repeated measures ANOVA to determine whether the sphericity assumption is true. The assumption of sphericity states that all potential pairs of within-subject conditions have equal variances of differences. Repeated measures ANOVA findings that are not correct can be caused by sphericity violations.

The Mauchly's W value in the given output is 0.965, and the corresponding p-value is 0.629. The orthonormalized transformed dependent variables' error covariance matrix being proportional to an identity matrix is the test's null hypothesis. In analyzing the data, the null hypothesis can not be rejected if the p-value is higher than the selected significance

level, which is usually 0.05. This implies that the sphericity assumption is satisfied, suggesting that the variance of all the difference between all possible pair of with in subject condition are equal. On the contrary if the P- value is less than the significant level, the hypothesis will be rejected as it indicates violation of the assumption of sphericity.

In this instance, the p-value of 0.629 indicates a significant deviation from the 0.05 threshold, indicating that the assumption of sphericity has not been violated. As a result, we can continue with the repeated measures ANOVA analysis without having to make any adjustments.

*Rater 2*

**Table 6.** Descriptive Statistics.

	Mean	Std. Deviation	N
SFL Pre	3.9286	1.15241	28
SFL Mid	4.7143	1.18187	28
SFL Post	5.3571	.82616	28

Using the information supplied for the measure at various intervals: The mean value at time 1 is 3.929, and the standard error is 0.218. The mean's 95% confidence interval is between 3.482 and 4.375. Secondly, the mean value at time 2 is 4.714, and the standard error is 0.223. The mean's 95% confidence interval is between 4.256 and 5.173. At time 3, the standard error is 0.156 and the mean value is 5.357. The mean's 95% confidence interval is between 5.037 and 5.677. Based on the statistics, it seems that the mean values increased during the course of the three time points. In comparison to the mean value at time 1, the mean values at times two and three are higher. Furthermore, there may be large variances in the means because the 95% confidence intervals do not overlap between the time points. Pairwise comparisons or a repeated measures ANOVA can be used to test whether the changes

between the time periods are statistically significant in order to further establish whether there is a statistically meaningful improvement.

In a statistical test, a p-value is a metric that indicates how strong the evidence is against the null hypothesis. Setting a significance level (often 0.05) in hypothesis testing allows us to assess if the findings are statistically significant. Thus the observed data is thought to be improbable to have happened if the null hypothesis were true when the p-value is less than the significance level. As a result, the alternative hypothesis will be accepted and the null hypothesis will be rejected.

Thus, in this instance, the null hypothesis is supported by evidence, as shown by the p-value of 0.033 (less than 0.05). This implies that the tests which is being compared might have seen some notable advancements.

**Table 7.** Mauchly's Test of Sphericity<sup>b</sup>.

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	Df	Sig.	Epsilon <sup>a</sup>		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Time	.769	6.815	2	.033	.813	.857	.500

Measure: MEASURE\_1

Tests the null hypothesis that the error covariance matrix of

the orthonormalized transformed dependent variables is proportional to an identity matrix.

This is the table that shows the output of the ANOVA analysis and whether there is a statistically significant difference between group means through a series of times. It can be seen that the significance value is 0.033 (i.e.,  $p = .033$ ), which is below 0.05. and, therefore, there is a statistically significant difference in the mean length of time before intervention and after SFL TLC intervention. Further the improvement of test result of learners are true both in rater 1 and rater 2 with significant level of...629 for rater 1 and .033 for rater 2. Therefore, it can be said that teaching writing using SFL TLC in EFL Classroom has a paramount benefit for the betterment of students academic writing development.

### 3.2. Interview Data Analysis

From 28 Second year English department students 7 Students were selected for conducting interview. Since the researcher is the course instructor, interview with selected students were- conducted by another instructor to increase trustworthiness. Here the result & interpretation of the interview is used to support in triangulating the result which was obtained in the pretest & posttest.

The data obtained in an interview contains 3 major parts. The first section of the interview is about students experience of learning writing tasks in their previous grades. In this regard most of the students responded that they don't practice writing activity in the classroom prior to the current status except focusing on elementary level of writing activities which mainly focusing on activities like gap filling. Students do not have opportunities of learning writing skills at school. In addition, majority of the students emphasized that at school teacher mostly focus on teaching grammar & vocabulary mainly and some times reading skills & doing comprehension questions. These are some of the activities at primary & secondary level of students learning experience of English subject.

From this point of view, it can be inferred that poor writing skills of EFL learners at tertiary level is due to their poor background of learning writing tasks at school. This is the main motivating factor that invited the researchers to implement SFL Teaching Learning Cycle and to assess if there would be improvements on students writing skills.

In the second phase of an interview, concepts of SFL were raised & students were asked whether it helped them in developing their writing skill. Majority of students agreed that with the intervention they enjoyed the classroom interaction and reflected that the TLC involves a teaching method with certain procedures and it is highly participatory. The SFL TLC involves four stages & learner actively involved in all stages of producing a text and finally involve in an individual production of the text.

One of the student replied that "since we discuss the topic and contents in the first 3 stages of the Teaching Learning Cycle, the final stage, that is individual construction of the text,

is very easy for us to produce the text. Besides, the TLC familiarizes the topic (field of discussion) so students share and contribute their ideas in producing the text. In the final stage, bringing ideas which is discussed in the classroom together with the teacher is very effective."

### 3.3. Challenges of Implementing SFL TLC in Writing Instruction

Teaching writing using Systemic Functional Linguistics Teaching Learning Cycle is not without limitations. As a researcher and course instructor, teaching the concept of SFL was difficult for students to understand as it is very broader concept. However, I tried to focus on the basic concepts of SFL and emphasized on methods of implementing the concept for practical activities using the TLC as a tools.

Further, students were asked in an interview whether there is challenges in an implementation of SFL TLC as teaching writing. Most of the students responded that the method is not challenging rather it is very interesting and participatory. However though SFL TLC is a promising theory & pedagogical tool in helping learners producing quality text, it is not without limitations. In the third section of an interview one of the student reflected his opinion that "it may make learners dependent because the TLC method provides each and every detail contents of the topic under discussion, and all the idea are contributed by all the students in the classroom and it may make learner's always to depend on this method". Similarly the other participant also reflected that "SFL TLC is to some extent time taking for teachers." Further he explained that "students produce the text individually after the 3 stages of the TLC discussed. That is, independent work is the last stage and for all topics doing all these stages may be time taking for teachers but for students it is very helpful".

Similarly, the last tools used for this research was classroom observation and it was conducted by another instructor to avoid subjectivity. First observation checklist were prepared for assessing attitude and motivation of students during intervention period. Besides, how the interaction between students and students with teachers during the implementation of SFL TLC were assessed. Finally, it is observed that students were motivated in the classroom interaction and participated in all of the stages of the Teaching Learning Cycle.

## 4. Discussion

This study was driven by an interest in how Halliday's Systemic Functional Linguistics (SFL) and the Teaching and Learning Cycle (TLC) could be applied to improve the writing proficiency of second-year English majors. The investigation is framed by two interconnected research questions: 1) To what extent does the SFL-informed TLC improve students' essay writing skills? And 2) What are the students' attitudes toward implementing this SFL-based approach in their writing lessons?

The following discussion elaborates on the findings related to these questions. Textual analysis reveals that students developed a functional understanding of SFL theory and the TLC model, which was reflected in their writing. For example, after engaging with the four stages of the TLC, students produced significantly more effective essays than they did prior to the intervention. This improvement aligns with several previous studies in the field.

In support of the above findings, recent research has highlighted perspective emphasizing a significant problem with mainstream teachers' lack of training in how to integrate language and literacy instruction effectively into disciplinary teaching [12, 16, 18, 24, 29] and conversely, the effectiveness of the use of SFL teaching Learning cycle in their classroom instruction. In order to facilitate learning, teachers need to hold a broad and extensive understanding of language and the specific academic language demands of their respective content areas [32]. Globalization and the increasingly diverse learning environments around the world have drawn attention to the need for educators to be prepared in linguistic competences [23].

A number of scholars recent years have also adapted SFL and SFL-based pedagogies to support multilingual learners and their teachers in responding to new curriculum mandates and high stakes accountability. [16] conducted a case study in a MA-TESOL program to explore how ten international candidates designed curriculum informed by SFL theories. Their findings indicate that the participants shifted from a decontextualized sentence level, form-focused understanding of grammar to a functional understanding of lexico-grammatical and discourse semantic features of texts.

Further Maria Brisk and teachers of the Boston Public Schools have investigated the potential of SFL to support bilingual learners in their academic writing [1-4]. They have explored the application of an SFL pedagogical approach to the teaching of report writing in primary grades. Integrating SFL into professional development supports development of teachers' awareness of text organization and the expected configuration of language resources of academic genres. This can result in students' producing texts with more emphasis on organization, audience awareness and textual cohesion.

Furthermore, research from a range of educational contexts demonstrates how even young children can develop critical thinking abilities while participating in text-related discussions. SFL has been used by numerous researchers to improve the growth of critical language awareness in schools across the globe at various levels and in various circumstances. This is especially important for those who are learning a second language. According to [35], "any learner, whether reading in a first, second, or other language, is, from the earliest stages, potentially both making meaning from texts, and engaging in critique." Her adult students are assisted by the pedagogy she describes in identifying authorial voices, incorporating their own cultural background knowledge into the reading, and de-

veloping a reading orientation that acknowledges the possibility of multiple interpretations, not all of which are equally valid. She emphasizes that the SFL grammar is ideal for adopting a critical viewpoint on text because it is fundamentally a social grammar [35].

Regarding the students' attitudes towards the employment of the SFL-based TLC approach in writing lessons, their responses prove that the students grasp good knowledge of the SFL approach and the four stages of TLC. Very positive attitudes and motivation were shown by the students towards the conceptualization SFL TLC on essay writings. Most of the students developed a practical knowledge of SFL and shared interest in learning SFL while some students stated that they encountered difficulties in understanding SFL concepts.

## 5. Conclusion and Implications

This research was conducted to investigate the effectiveness of using Systemic Functional Linguistic approach and the Teaching Learning Cycle in improving writing skills of the second-year English major students, as well as to explore their attitudes towards this teaching technique. From the findings of the study, some conclusions have been drawn. First, regarding the effectiveness of employing the method, it can be concluded that the students made significant improvement in their writing competence compared with the result obtained in the pretest.

Despite some arising difficulties due to the constraints of time and materials, limitations in this paper are inevitable. First the teaching of SFL and its TLC as a method of teaching writing were difficult to fully understanding the concepts. However, in general, the implementation of the tool has positive outcome towards improving writing skills of learners especially in the areas of unity, organization of ideas and using connecting devices. Second, with the limited sample and time constraints, generalizing the finding of this study to other groups may not be appropriate. With the hope of assisting the EFL students to develop their writing skills, this paper has demonstrated that applying SFL theory and the TLC method as a useful and practical teaching method in EFL writing.

Based on the findings of the study, some pedagogical implications are suggested as follows: first, based on the benefits of SFL TLC, teachers should provide the students with details of SFL theory and the TLC model as essential input during writing process. Second, although SFL theory does offer an effective method for the EFL writing teaching and learning process, students sometimes have difficulties in understanding the theory as well as some SFL terms. The question raised by this study is a trial of intervention strategy or action research that transforms the problem of writing. More research using controlled trials is needed to provide a detailed analysis of the relevance of using this approaches for further application.

Therefore, students should be given a chance to have a brief discussion of the concepts of SFL TLC and draft their writings in a group before they practice their composition individually.

With the above suggestions, the researcher hopes that applying the SFL approach and the TLC to teach writing will enable EFL students to effectively build quality texts and to master their lexico-grammatical selections in order to convey message successfully when writing texts. The current study proves to be an affirmative indicator of teaching writing using SFL TLC to enhance the writing skills of EFL students. Therefore, teachers of English should build students' SFL awareness and the TLC, which helps raise an awareness of better text organizations and sharpen students' writing competence.

## Abbreviations

SFL	Systemic Functional Linguistics
TLC	Teaching Learning Cycle

## Author Contributions

**Hiwot Admasu Zeberga:** Conceptualization, Data curation, Formal Analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Visualization, writing- original draft, Writing – review & editing

**Dereje Tadesse Birbirso:** Conceptualization, Formal Analysis, Methodology, Project administration, Resources, Supervision, Writing – review & editing

**Abera Admasu Endashaw:** Conceptualization, Methodology, Project administration, Resources, Supervision

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## Conflicts of Interest

The authors declare no conflicts of interest.

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