

Examining the Effect of Flipped Learning on Proficiency in English Writing Grammar via Inflectional Morphemes

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Abstract—The study aimed to understand the underlying effects of flipped learning on students' English as Foreign Language (EFL) writing skill. For this study, proficiency of writing knacks of EFL has been examined mainly by using inflection morphemes based on experimental research work. Two sets of intact classes were chosen as participants for this research study. These classes were randomly assigned to different groups, namely control group and experimental group, with a total sample size of 126 EFL students. During the eight-week time, the control group (a non-flipped learning) and the Experimental Group (a flipped learning) were taught traditional writing instructions and flipped learning, respectively. The inflectional morphemes were used in three phases: pre-, mid, and post-test. The test named Repeated Measure Analysis of Variance (RM-ANOVA) was used to analyze data. The research findings show that the flipped learning students have outnumbered their counterparts, i.e., non-flipped learning, in terms of EFL students' language writing proficiency development for inflectional morphemes. The research findings have proposed some general recommendations on EFL writing instructions for decision-makers, academia, and other interest groups.

Index Terms—flipped learning, EFL proficiency, inflectional morphemes, writing

I. INTRODUCTION

For the past several decades, researchers in the domain of the English language have been curious to explore language teaching practices to advance skills and competency of the English language for non-native speakers across the globe. This is significantly important in the context of changing times as well as the emerging needs of the students. Efforts have been made to encourage the student community to use collective and distinct activities inside and/or outside of the classroom (Wu et al., 2017; Chuang et al., 2018). One of the standard methods is flipped learning, which is an innovative teaching process that has drawn the attention of several academic intelligentsia in the context of English as a non-primary language (Zou & Xie, 2019; Wang et al., 2018). The lectures in traditional classes generally take place after students' homework. On the contrary, class activities are carried out before students' homework in the flipped learning (Chen et al., 2017; Karabulut-Ilgu et al., 2018). In the flipped learning environment, pupils are provided with digital pre-class work to complete in their flexible time without due stress and deadlines to further prepare for classroom activities (Leis et al., 2015). In this way, students will have more time to carry out class activities, which will eventually help them learn, contribute, and grow by leaps and bounds (Chen et al., 2017; Gannod et al., 2007). However, traditional lectures have been considered better in disseminating and imparting information but have not sufficiently contributed to improving values, personal development, and growth that require the active participation of the students (Bligh, 2000). Because of this, students showed limited interest in classroom learning, which has also hampered their learning growth (Andrews et al., 2011). Traditional lectures are "continuous exposition by the teacher" (Bligh, 2000, p. 63). This states that teachers in lecture-oriented classes have significant control over students, but having improper student involvement leads to unsatisfactory results. In this process, students become more receivers and thus do not effectively contribute to or engage with teaching methods. Their learning growth becomes slow and limited to taking down notes and asking redundant questions. Students from Asian countries primarily rely on teachers as their main source of information. In this conventional teaching method, students lose interest and become less active (Lee & Wallace, 2018). At the same time, the concept of a flipped learning environment is emerging as a new teaching practice wherein students complete their assignments before their class, which helps them get better prepared for subsequent classroom sessions. In this approach, the instructors get closely engaged with students in several activities, such as problem-solving, facilitating them to complete their work before time and using the knowledge obtained from such assignments (Chuang et al., 2018). Hence, flipped classrooms are becoming increasingly effective methods for ensuring active participation of students and accomplishing classroom activities (Hao, 2016). Several studies have been conducted to assess the effectiveness of a flipped classroom setting on EFL at the university level (Adnan, 2017; Turan & Goktas, 2018). However, this research work has been confined to focusing on understanding the following aspects (Doman & Webb, 2014; Webb et al., 2014).

- To assess the attitude and views of the students towards flipped learning environment

- To determine the various techniques and tools used to carry out a flipped learning environment
- To demonstrate procedures for implementing a flipped learning environment

The research exploring the effects and showing comparative analysis based on experimental work has been limited. The research on this issue demonstrated that students in flipped classrooms are almost always better off than their counterparts in non-flipped classrooms in terms of grammatical accuracy, language proficiency, and learning processes.

In addition, the learners in flipped learning environment had positive attitudes regarding the curriculum as they were given access to the course content and video clip materials, unlike non-flipped learning students who were lectured directly. Moreover, the students quickly completed their assignments during class time, whereas non-flipped learning students lagged significantly. Some literature shows flipped classrooms' role on EFL students' writing proficiencies (Su Ping et al., 2020; Wu et al., 2020; Zou & Xie, 2019). For instance, Wu's et al. (2020) assessment of flipped learning on EFL students' writing skills based on pre-test, mid-test, and post-test shows their better writing proficiencies. In the work of Ekmekci (2017) that drew a comparative analysis to show the writing proficiencies in non-flipped and flipped learning, the results suggest that flipped learning assisted students in improving their writing abilities and performing better than their non-flipped classroom fellows.

Besides the above literature work, there have not been any studies conducted so far that demonstrate effects of flipped classroom space on eight indispensable writing components such as '-s' for plurals, '-s' for possession, '-ing' for progressive, '-s' for third person singular present, '-ed' for past tense, '-en' for past participles, '-er' for comparative adjectives, and '-est' for superlatives. Moreover, such research work is unique and holds great insights for university teaching of EFL. To bridge this gap, the current study aimed to draw comparisons to come out with the findings that show the impact of the flipped learning strategy on EFL learners/students from Saudi Arabia. This work will determine the writing proficiency using inflectional morphemes based on experiment research design. The findings are expected to contribute towards building more efficient and effective ways of teaching methods to improve the student's writing skills in the usage of inflectional morphemes in the context of EFL writing. The results envisage providing technical recommendations to deal with the needs of the EFL learners' writing abilities using technological assistance.

II. LITERATURE REVIEW

This study has chosen the Output driven/Input-enabled (OD/IE) model as it drives students to pursue input, which further enables them to create Output (Wen, 2008). For this purpose, authentic output activities assist in the augmentation of grammatical proficiencies of the students. Students are also required to be supported by task-based inputs to improve their intake abilities, and output aid is also necessary for upgrading their language abilities, followed by instant feedback mechanisms (Wen, 2013).

This theory advocated that the emphasis must be on comprehensible/understandable output, considered the effective tool in the proposed model. It also stresses that the best outcome may be achieved when students are exposed to more lucid input (Wen, 2015). In flipped learning on grounds, this model is widely used. Students in flipped learning spaces are primarily given content and required materials (i.e., video clips) before their class hours (i.e., clear input), followed by proper facilitation to produce desired results during class time only. In this way, the amalgamation of technological and interactive classroom activities becomes an essential component of the flipped learning environment that appropriately aligns with the OD/IE model (Bishop & Verleger, 2013).

Moreover, in a flipped learning space with the assistance of the OD/IE model, teachers act as facilitators /instructors, and learners get the chance to assess on their own as well as their fellows. One of the many other reasons for using the proposed framework in the current study is that the OD/IE model aligns with ELT in university education (Wen, 2014). It has been observed that students who do not have sufficient time for English language studies in academic institutions barely accomplish noble academic success. However, employing the OD/IE model assists learners meaningfully in universities to achieve adequate output-based tasks (Wen, 2014). This model is used in both flipped and non-flipped learning environment as part of this study.

A. Flipped Learning

This concept inverts the students' everyday classroom tasks and homework. "Inverting the classroom/learning space basically refers to the events that used to take place inside those spaces traditionally but now have shifted to outside the classroom (Lage et al., 2000, p. 32). Flipping means as Strayer (2012, p. 171) stated "moves the lectures outside the classrooms and uses learning activities to move practice with concepts inside the classroom". McLaughlin et al. (2016) states that a flipped learning environment consists of three core elements: a). pre-class tasks b). in-class tasks, and c). assessment process.

Several pre-class tasks that include audio and video materials (such as podcasts, videos, annotated notes etc.) can be used in the flipped way of instructions (O'Flaherty & Phillips, 2015, p. 87). The in-classroom activities may include several engaging techniques centered around students and independent activities (Han, 2015), for example, various collaborative activities such as presentations, evaluation process by peers and/or self, and solving problems in the group (Kim et al., 2014). O'Flaherty and Phillips (2015) say that class activities consist of team-led and panel discussions, expert-led deliberations, different roles, presentations, group discussions, and student debates (p. 87).

In the words of Hamdan et al. (2013), flipped learning environments have features that can assist learners in their academic success. The first letter of FLIP denotes, F, which stands for flexible or adaptable environment, signifies both online and in-personal learning. Here, learning is centered around students who can participate actively and engage in collective activities meant for their language learning growth. The audio and video tools are the pillars of intentional content for students before class time. For the professional educator, the final word, P, denotes a professional environment where students are constantly observed and under rigorous vigilance. Instructors can also give feedback and promptly evaluate the students' performance.

Willey and Gardner (2013) proposed that activities outside the classroom, such as reading or query-based interventions, can be carried out. They added that students should be motivated to engage in dialogues and in their formative evaluation to determine their learning growth. Like so, the learning environs in a flipped learning environment is oriented to students considering their learning needs and aspirations.

Shimamoto (2012) also claimed that a flipped classroom requires conceptual and pedagogical expertise, particularly in delivering digital content and materials. As per Egbert et al. (2015), the educator and instructor must consider students' proficiency level, experiences, needs and aspirations and then support flipped instructions. Lee (2013) suggested that flipped classrooms require a flexible environment, altered learning culture, and content with a more intentional target, and the professionals must have the requisite expertise for designing such a flipped classroom workplace.

B. Studies on Writing in Flipped Learning Context

The flipped learning environment model has been gaining attention from various new-age education systems as it has shifted from the traditional approach to a more modern method emphasizing students' academic nobility and linguistic skills and majorly focusing on English language learning with writing skills. In the words of (Boyraz & Ocak, 2017; Tseng et al., 2008), this pedagogical approach is becoming increasingly crucial by engaging students in several learning activities, particularly through digital tools, mainly outside their classroom, thus creating an enabling environment for potential learning growth. The approach (Ebadi & Rahimi, 2019) is also essential given that it addresses challenges associated with mastering linguistics skills such as task achievement, togetherness, cohesion, grammatical errors, and glossary. It also navigates ways for learners who find foreign languages daunting (Xu & Qi, 2017). Several empirical research studies suggest that a flipped classroom effectively enhances students' writing proficiency. For example, Wu et al. (2020) illustrated the improvement of EFL students towards grammatical skills, while Zou and Xie (2019) pointed out that digital tools used in flipped learning significantly enhance writing skills, motivation, and critical analysis compared to traditional methods.

The work of Ebadi et al. (2017) produced a comparative analysis of flipped vs non-flipped learning environments and claimed that the use of audio and video tools contributed to long-term effects on EFL fellows on their critical thinking as well as foreign language tests (i.e. IELTS, TOFEL) writing skills. In the research work of Skehan (1998); Ellis & Barkhuizen (2005); and Housen et al. (2012), when assessing student learning proficiencies, it is equally important to consider the flipped learning's features, multifaceted nature of L2 writing skills etc.

Based on the above research work, flipped classroom effects have been articulated well; however, a major area that remains untouched is understanding its influence on inflectional morpheme.

C. Objective of the Research

Based on the literature review, the proposed work is under-researched, highlighting the immense requirements to assess the effects of flipped learning considering inflectional morphemes in the context of EFL. The research shows that the comparative analysis is also grossly inadequate, further reiterating the need for the same to produce different sets of research work. In this research, the following question is the central matter of concern that will help analyze and draw comparisons between both target groups. The key research question is as follows, which this proposed research work attempts to answer:

Q. How effectively has the flipped classroom developed students' writing skills using inflectional morphemes compared to a non-flipped classroom?

III. METHOD

A. Participants

A sample of a total of 126 students was selected using convenience and random sampling techniques in this study. The rationale for choosing this sampling technique is the accessibility, flexibility, and availability of the participants from the selected place. In this work, the target audience belongs to a homogenous group, so the researcher adopted both convenience and random sampling. The participants are undergraduate students with their ages ranging between 19 – 23. Each of the two classes/groups was designated as an Experimental Group (N=63), also called a flipped classroom or learning or space or environment, and a Control Group (N=63), a non-flipped classroom or learning or space or environment. The selected groups were given three instruction sessions once a week until eight weeks. The instructor had prior experience in conducting such work. The participants were given general explanations on flipped classrooms to avoid any confusion later.

The Oxford Placement Test (OPT) was administered to both target audiences to ensure uniformity before the treatment (Dave, 2004). An autonomous samples t-test was carried out using OPT mean scores to examine the variations between groups. The research findings show that the chosen audience is of almost similar competence regarding their language proficiency before they were part of this research study. For this, a 50-minute writing performance test was conducted on both target groups, and the result showed no significant difference ($p = .626 > .05$).

B. Instruments

OTP controlled the participants for their English language proficiencies or skills. OPT, consisting of 100 points, evaluated EFL learners' grammatical knacks regarding inflection morphemes. For checking the instrument's reliability, the Alpha of Cronbach was applied, demonstrating 0.78 as the reliability index for the entire test, and for the subsections, the reliability indices range from 0.72 to 0.76.

The test was conducted in three phases, and the writing competencies of both target groups were used to check to adopt three 50-minute writing stories based on pictures. These pictures for the test were chosen based on the students' background, and thus, the topics for writing which were chosen during the intervention were not considered barriers to the participants' writing proficiency.

C. Flipped Learning

The learning assignments were prepared beforehand in video format for the flipped learning environment. The different sets of videos for visualization and presentations were extracted from YouTube and adapted accordingly. The length of the video was limited to 5 - 15 minutes. The participants were instructed to see the videos and finish the worksheet in advance. Furthermore, the educator was encouraged to engage with students in certain types of group work tasks. The worksheet assignments and group tasks in the flipped learning environment ensured that learners watched the videos during pre-class hours.

In order to cover all the materials, a total of 24 sessions were conducted in which a significant portion of learning materials was transformed into digital lectures given before the class hours. The flipped learning environment took nearly 75 minutes and required triple phases of writing tasks. The first stage was to check the worksheet in which several questions were asked on the content of the videos, requiring 15 mins. The second phase took nearly 50 mins, wherein participants jointly read the intended sections in smaller groups alongside writing activities. In the span of 50 minutes, participants were able to finish about two writing assignments/tasks. For the final phase, participants were briefed on the problems, topics, and video materials for the following sessions in a 10-minute timeframe. In this way, the participants have not had after-classroom work, which is usual in non-flipped classrooms. They were given a chance to watch the videos of the following sessions instead.

D. Non-Flipped Learning

The non-flipped learning group was equipped with all the materials and content provided to the flipped classroom group, barring videos. Instead, the digital content was explained to them inside the classroom. The participants were required to complete the assignments as homework after post-class hours. A 75-minute writing procedure was also undertaken for this group. Video content was presented to them through PowerPoints in a 15-minute session instead of showing videos. The participants worked collectively to finish worksheet-related assignments in nearly 15-min minutes. The participants took 30 minutes to complete the writing tasks. Participants were needed to give more time, think thoroughly about the work of their fellows, and provide comments/revisions. They were also required to revise their collective writing work (which was nearly completed during class time) twice. It was also required through them to make documentation of their updated collective writing work in preparation of the closing post-test in the end.

The non-flipped learning did not include several activities before class such as watching video talks. The participants could finish their entire writing work in 24 sittings. In comparison, participants in the flipped learning environment prepared in advance for the writing-related tasks as they had already watched the digital content and videos and had more time (i.e., 50 minutes). On the contrary, the non-flipped classroom group took more time to prepare the writing tasks and finish the assignments /worksheets (i.e., 40 minutes). Students had limited periods for writing-related work during class sessions (merely 35 minutes). In this, non-flipped participants achieved almost one collective writing task per sitting, while their counterparts accomplished two per session. The performance of flipped classroom students can be improved with greater effectiveness. Two-thirds can reduce their time in the classroom compared to conventional teaching methods and course content.

E. Data Collection

The collection of data was conducted with three timed stories based on three pictures, one in the beginning as the pre-test, meaning the first day of the first week; the second one at the halfway of the intervention as the mid-test, meaning the last day of the fourth week, and third one towards the final intervention as post-test.

Jacobs et al. (1981) used rubric scoring to determine the score obtained by the participants' writing stories, followed by analytical scoring procedures. This scoring system consisted of a 100-point scheme primarily for grammar but we have adopted according to the objective of current study (i.e., inflectional morphemes). Two independent trained scoring rubric raters were used to mark all three timed test-written essays. Marks were assigned to the stories based on

pictures to ensure inter-rater consistency. The two rates assigned scores were subject to Cohen's Kappa's inter-rater reliability test. As to the index of reliability, it worked out to be obtained at 0.79, indicating satisfactory inter-reliability between the two raters.

F. Data Analysis

In order to assess the impact of flipped and non-flipped learning on the participants' writing performance, a repeated measure called ANOVA (RM-ANOVA) was used. This statistical tool has been chosen to examine students' competency and draw comparative analysis using different testing strategies such as pre-test, mid-test, and post-test. This tool has been selected because it provides accurate multiple test scores for several conditions. RM-ANOVA with a focus on within-subjects comparison can effectively determine the impact of the instructional methods on a similar set of target participants over time. This is also unique in differentiating each participant to avoid subjectivity, thus increasing the statistical analysis potential of the test. The dependent and independent variables were used to analyze the instructional method (i.e., flipped or non-flipped learning) plus the scores from the three timed writing based on pictures that were administered pre-, during, and post-intervention. Finally, RM-ANOVA is also suitable for the proposed research design, provided it enables understanding how instructional methods influence the students' performance.

IV. RESULTS

Repeated measure analysis of variance was employed with two target groups and three tied assessments. This study found that the critical effect of groups $F(2, 160) = 24.593, p = .001, \eta^2p = .284$ showed higher scores for flipped classrooms as an experimental group than control group non-flipped learning space/classroom. The result suggested that learners' performance in terms of proficiency in grammar (i.e., inflectional morpheme) was increased in the flipped classroom compared to the non-flipped learning space/classroom (table 1). Furthermore, this analysis also showed a significant main effect of three assessments $F(2, 160) = 51.150, p = .001, \eta^2p = .452$, showing higher scores for the post-test over mid and pre-test. The post-hoc analysis, which involves examining data after an experiment has been conducted, utilizing the Tukey procedures, a statistical method for comparing multiple groups, revealed compelling evidence that the assessment scores experienced a noteworthy improvement subsequent to the implementation of the flipped classroom instructional approach, $t(9) = 4.137, p = .018$. Furthermore, an extraordinary two-way interaction was recognized between the two groups (experimental and control) and the three assessments (pre, mid, and post-test), $F(2, 160) = 40.295, p = .014, \eta^2p = .394$, revealed the results that the flipped learning as an experimental group impact on the students' writing by improving score for mid-test and post-test. In contrast, the control group, a non-flipped learning, did not increase the score significantly for mid-test and post-test compared to the flipped learning.

TABLE 1
SHOWS THE MEAN VARIATION OF EXPERIMENTAL AND CONTROL GROUPS

Estimates				
Groups	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Flipped Classroom	36.862	.768	35.327	38.398
Non-Flipped	32.513	.892	30.730	34.297

TABLE 2
SHOWS THE MEAN VARIATION ACROSS ASSESSMENTS

Estimates				
Assessments	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Pre-test	31.365	.781	29.805	32.925
Mid-Test	35.349	.786	34.790	37.909
Posttest	38.349	.788	34.790	37.909

TABLE 3
SHOWS THE IMPACT OF GROUPS ON ASSESSMENTS

Groups * Tests					
Groups	Tests	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Flipped Classroom	Pre-Test	30.778	.945	28.890	32.666
	Mid-Test	34.905	.856	38.193	41.616
	Posttest	39.905	.856	38.193	41.616
Non-Flipped	Pre-Test	31.952	.944	30.065	33.840
	Mid-Test	32.794	1.031	30.734	34.854
	Posttest	34.794	1.031	30.734	34.854

V. DISCUSSION

According to Wen's Output-driven/Input-enabled (OD/IE) model (Wen, 2008), the study investigated the participants' writing performance in different scenarios like flipped and non-flipped learning settings. The findings contributed to the understanding that flipped learning participants were better than their fellows in non-flipped learning regarding writing tasks. In tune with the findings, Ebadi et al. (2017) articulated that in a flipped learning environment, students performed well mainly due to instructional methods used in teaching methods. One of the critical possible rationales for these findings may be attributed to the homework given to participants of different target groups.

The EFL learners had their homework done separately post-class hours as the assignment was independent. The participants have not had any peer support or evaluation from their teachers due to their limited or non-existent interactions with them. The participants were also not able to evaluate their work on their own. Thus, the Output-driven/Input-enabled model by Wen (2008) that advocated putting feedback mechanisms in place was realised to be put in place in non-flipped learning settings.

Contrary to the above, the results of flipped learning space participants show that they have had their homework done before class tasks with the assistance of digital means. They were also aware of the next classroom topics and things because of videos they saw at home (Faulkner & Green, 2015; Leis et al., 2015). Thus, they could easily connect with pre and post-class activities at their convenience. The participants of this group had more opportunities to interact with the fellows, peers, and instructors (Mehring, 2014) because they had the chance to watch videos in their free time. Therefore, based on Wen's (2008) model, the output could be a starting point, further motivating them to do different class activities. Hence, as Wen's (2008) model suggested, the feedback mechanisms could be placed along with Wen's (2013) task-based inputs in the flipped classroom environment. These instructional procedures have proven successful in helping participants study individually with significant enthusiasm and thus become more independent ELF students.

However, the participants showed that interest and high motivation in a flipped classroom can be directly and/or indirectly attributed to technological aids (Wanner & Palmer, 2015) provided to them (Chen et al., 2017; Usama, 2023), resulting in their better performance. In this study, the high motivation of students in flipped learning space is linked to using technology-based devices and tools inside and outside the classroom. The study of Chen et al. (2017) shows that the learners in the flipped classroom usually spend more time on before-class activities, which eventually helps them perform better in-class activities. In flipped interventions, the engagement rate of the students has been more significant, along with better performance in completing their class work and assignments in time. They were also assisted with proper feedback mechanisms (Wen, 2013).

Regarding the motivation level of non-flipped learning students, they have not shown as much motivation as their counterparts mainly because they have not had their pre-class work but after-class assignments. This has caused limited preparation for following class activities. In addition, the class activities have not sufficiently contributed to engaging students due to their lecture-based orientation. One of the models proposed by Dornyei and Otto (1998) related to second language learning motivation, the participants would assess their learning experience of the language to determine their success rate and decide whether they would like to continue with that or give away. In the presumption of Dornyei and Otto's (2007) model, the students will become highly motivated in classroom activities and engage with the learning process if they can evaluate their weaknesses and strengths. This is the case presented in the current study for flipped learning environments.

VI. CONCLUSION

To conclude, the researcher has explored and analyzed the impact on the writing competency of the learners/students both in flipped and non-flipped learning settings by giving different scenarios for inflectional morphemes. The study's findings would be helpful for the benefit of policymakers, academia, and other interested groups. If applied after policy changes, it is envisaged that findings would immensely benefit the teaching and student community in enhancing their writing skills in flipped learning.

EFL educators must subsequently motivate EFL learners to use a flipped learning environment. The teachers must be made aware of the procedures to conduct procedures and methods for a successful flipped wiring classroom contributing to writing proficiency. For this purpose, EFL teachers can change the teaching style by giving students instructional materials before class time along with authentic output activities for appropriate and quick writing performance. Furthermore, the EFL students can also be motivated to check video clips as soon as possible to prepare for future class activities. They can also be encouraged to see videos thoroughly at their convenience to find out issues and flag problems in following class activities.

The present study has attempted to cover one aspect (i.e., inflectional morphemes) of writing proficiency in the ELF context; however, some limitations can be addressed in future research work. One of the limitations is the small sample size, which does not offer sufficient generalization of the research findings. It is expected that a larger sample size can be adopted in future research work, which will help generalize the results. The external factors, such as the strict policy of the chosen university random sampling, were not feasibly appropriate; this can be addressed in future work to ensure the validation of the findings. A qualitative approach can also be employed to understand and assess the attitudes and views of the learners towards flipped learning spaces. This ensures that qualitative and quantitative data collection

findings and subsequent analyses harmonize fairly. Moreover, EFL research may replicate this study and schedule follow-up meetings or interviews with the respondents to assess their attitude toward flipped learning settings.

The study was limited to assessing the writing performance through test strategy and drew comparison between both groups. The pre-test was controlled to observe the critical variations between target groups. Thus, it is recommended that future research work may carry out additional delayed for post-tests to examine the lasting effects on both classrooms on their writing proficiency. In this study, only bachelor's degree level students from the Arts stream were chosen; however, a variety of other academic levels and other language skills can be included in future work. As the participants are natives of Saudi Arabia, future researchers may include a target audience from other geographical regions, primarily those whose English is not their first language but given second language status.

In the present study, the instructional materials shared with EFL students were selected by researchers/instructors so that they could study for the next class. Future research work can give students the freedom to choose learning materials and interests to avoid subjectivity. The study of their selected materials can help the researchers better understand the effects of flipped classroom learning and conduct a comparative analysis of writing skills using qualitative and quantitative techniques.

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