

Flipped Classroom: An Effective Methodology to Improve Writing Skills of EFL Students

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Abstract

This study proposes a flipped classroom methodology in the context of a group pre/post-quasi-experimental study to improve the writing skills of EFL students, with a particular emphasis on writing topic sentences, supporting sentences, concluding sentences, adjectives, adverbs, and sentence structures correctly. The research sample consisted of 25 EFL (English as a Foreign Language) students studying the course titled “Technical Report Writing,” adopting flipped classroom methodology. The effectiveness of students' writing skills before and after the experiment was evaluated by researchers through pre- and post-experimental exams. Results for the post-test were influenced by the dependent-sample t-test. It was determined that the flipped classroom remarkably improved EFL students' writing abilities. Other EFL teaching and learning challenges may be addressed through implications with the additional study into flipped classroom approaches.

Keywords: dramatic improvement, EFL students, flipped classroom, writing concerns

1. Introduction

Flipped classrooms are an emerging approach in which teaching (theoretical part) takes place at home using technology and practice, and assignment creation takes place in the classroom with teachers and other classmates (Lage, Platt, & Treglia, 2000). Teachers provide students in class with active support in writing paragraphs, solving writing problems, and dealing with the technical aspects of writing. Through the use of classroom games and activities, flipped classrooms encourage student participation in group discussions and problem-solving. (Triantafyllou & Timcenko, 2014). Therefore, the flipped model is an embodiment of active learning (Hamdan, McKnight, McKnight, & Arfstrom, 2013). Flipped learning is a model that views students as active participants in planning their own education (Albert & Beatty, 2014).

Students in an EFL situation, especially in KSA, face several challenges in writing classes. EFL and ESL primarily focus on improving the writing skills of students taking 151 Technical Writing Course. The course title itself predicts that it involves complex and multidimensional tasks such as formulating a concept, drafting, revising the write-up, and rectifying mistakes (Richards & Renandya, 2002). It is commonly acknowledged that several EFL students find writing to be a difficult task (Soltanpour & Valizadeh, 2018). Moreover, writing paragraphs is the most crucial task in a technical writing class. It tests the cognitive abilities of the writer because it requires thinking, language skills, and a trained memory (Kellogg, 2001). The cognizance of perceptions related to writing, such as topic sentences, supporting sentences, concluding sentences, and using adverbs, adjectives, and sentence structure correctly results in writing better paragraphs. Additionally, authors have to review and edit multiple times what they write, making writing an intimidating task.

Writing paragraphs that satisfy one of the objectives of the technical writing course is difficult for EFL students in Saudi Arabia. A paragraph in itself is a combination of many components like a topic sentence, supporting sentences, concluding sentences, various grammatical components, etc. Due to the fact that it enables adequate assessment of many variables, paragraph writing is necessary for technical writing courses. It is also concerning because, despite this, students rarely receive higher grades in technical writing courses. Researchers contend that traditional teaching techniques, a lack of student enthusiasm, a lack of time for practice in class, and a lack of awareness of the value of English as a global language for oral and written communication are the main causes of this issue.

To help students become adept writers and improve their writing skills, several EFL teachers consider creative ways to improve their English writing skills. One such example is flipped teaching/learning which has lately gained popularity as an innovative way to make better use of classroom time, interact and engage in active learning (Adnan, 2017). Blended learning is compliant with the flipped model. According to Staker and Horn (2012), blended learning is an interactive process in which students gain knowledge from both online resources and traditional textbooks. As part of the flipped classroom format, teachers share videos of their lessons with students. Students can watch the video at home and understand the theoretical part. It provides students with the freedom to watch the video over and over again until they develop a good understanding of the respective concepts. Students then attempt the exercises in class with their classmates (as part of collaborative learning) and teachers assist them in facing challenges while writing topic sentences, supporting

sentences, and concluding sentences. Teachers guide them in inserting adjectives and adverbs correctly in a sentence and writing a proper sentence structure (as part of writing a paragraph), especially in a technical writing class. In this method, teachers are merely facilitators who encourage students to collaborative learning and resultantly they take charge of their learning. As a swimmer cannot learn to swim until he or she jumps into the water, the same is the case with a writing class as they cannot learn to write until they practice it themselves. The flipped classroom encourages a student-centered class for writing paragraphs.

As Triantafyllou and Timcenko (2014) emphasized, “flipped classrooms can be beneficial for students” (p.1), this research implements a flipped-classroom approach to address students’ writing issues due to several advantages associated with it. Unfortunately, there are very few flipped classroom researchers in Saudi Arabia despite the several benefits it encompasses. Al-Harbi and Alshumaimeri (2016) assert, “However, one promising approach that uses technology in teaching, the flipped classroom strategy, had not yet been studied in the EFL Saudi Arabian context” (p. 60). And they further state, “While the flipped classroom strategy has shown success elsewhere, it had never been tried in the context of Saudi culture and the Saudi education system” (p.61). That was a real motivating factor for the research in Saudi Arabia. Flipped classroom method yielded very positive results when it was implemented at the PY Unit of Najran University. This research is based on the following objectives:

1.1 Objectives of the Study

1. To diagnose writing problems of EFL students with special reference to topic sentences, supporting sentences, concluding sentences, adjectives, adverbs, and sentence structures
2. To identify substantial transformations in students' write-ups after employing flipped classroom method

2. Literature Review

Flipped learning/teaching is a pedagogical strategy that challenges conventional ideas of classroom learning. Unlike a traditional classroom, in a flipped classroom, students are accustomed to familiarizing themselves with the topic before class and deepening their understanding through problem-solving exercises during class (Shih & Huang, 2020; Wang & Qi, 2018).

There are various kinds of flipped classrooms, including the discussion model and the role-reversal model. According to Demirel (2017), these models may be appropriate for subjects like language that is relevant to the situation. They also make it possible to use technological tools to help teach various facets of language. Students learning progresses as they employ technology in their everyday life. According to Wells, de Lange, and Fieger (2008), technology has altered how teachers and students teach and learn. Because of this, teachers are constantly looking for unusual ways to employ technology to enhance the learning of their students (Koehler, Mishra, Hershey, & Peruski, 2004). Whenever possible, technology has been used in the classroom because technology offers multiple opportunities for language teachers (Seljan, Banek, Špiranec & Lasić-Lazić, 2006).

In a significant study, Qadar and Arslan (2019) investigated the influence of flipped classrooms on EFL learners’ writing skills in Iraq. 66 students of Salahaddin University from the Department of English, Faculty of Linguistics, participated in this study. Using mixed methods, the researchers indicated that experimental students wrote better than control students. Students’ attitudes to the flipped classroom were positive.

In their 2019 publication, Rahman, Yunus, and Hashim compiled research on flipped classroom instruction in Malaysia. The researchers found 19 research articles on flipped classrooms. According to their findings, the majority of these investigations yielded insightful results, and FCI (flipped classroom instruction) was highly praised by both students and teachers. They came to the conclusion that the FCI ought to be implemented across the board in schooling.

In another remarkable study, Al-Harbi and Alshumaimeri (2016) applied FCI junior high school students to English grammar tool students. The researcher uploaded a video of the lesson to her Edmodo website before teaching it to the experimental group of students. The control group students were taught through the traditional approach. Students' opinions regarding the use of FCI were favorable. The experimental group's post-test outcomes were also excellent.

None of the above-mentioned researchers looked at how using flipped classroom techniques to promote L1 writing affected students at Najran University, notably the PY unit, which has the highest proportion of EFL students. As a result, the study becomes more significant. The following research questions are addressed by this paper.

2.1 Research Questions

1. What are the writing problems faced by EFL students?
2. Are there any substantial transformations in students' write-ups after employing the flipped classroom?

3. Methodology

3.1 Research Design

The study followed the quasi-experimental method to achieve the study objectives. It employed a one-group pretest-posttest design. The effectiveness of any particular treatment on particular learners can be determined using this method (Creswell, 2009). The method involved:

- A pretest for both groups.

- The conduction of the experiment for both groups.
- A post-test for both groups

The purpose of this study was to find writing problems among EFL students. After applying the flipped classroom method, the researcher observed the differences in students writing performance.

3.2 Sampling

This research was carried out during the preparatory year of Najran University. Twenty-five (Level 2) students were selected using convenient sampling.

3.3 Data Collection Tools and Procedures

- Assessment checklist

A checklist for evaluating students' writing abilities was developed by researchers. The checklist is split into six categories: topic sentences, supporting sentences, concluding sentences, adjectives, adverbs, and sentence structure.

- t-test

The researchers employed paired-sample t-tests to illustrate the significance of the variance between the pre-test and post-test means, as shown in Table 3. There is significant difference between the means. Two-Tailed hypothesis, the sample proportion (denoted by π) is not equal to a specific value which is represented by π_0 .

$$H1 : \pi \neq \pi_0$$

3.4 Validity (Assessment Checklist)

Six specialists (from the English Department at Najran University) were given the assessment checklist to evaluate its face validity. The evaluation checklist was updated in light of their suggestions and feedback.

The assessment checklist's six domains—topic sentences, supporting sentences, concluding sentences, adjectives, adverbs, and sentence structure—were included in the final version.

- Reliability (Assessment checklist)

Researchers used an empirical sample of fifteen students to apply the assessment criteria. Another experienced researcher also evaluated it. The stability of the correctors (observers) was calculated through the Holste equation = the percentage of the number of times of agreement / (the number of times of agreement + the number of times of disagreement). The reliability coefficients for the assessment checklist are shown in Table 1.

Table 1. The assessment checklist’s reliability coefficients

No	Issues of Writing Domains	Number of agreements	Number of disagreements	Reliability coefficients
1	Topic sentence	13	2	0.87
2	Supporting sentences	12	3	0.80
3	Concluding sentences	13	2	0.87
4	Adjectives	11	4	0.73
5	Adverbs	12	3	0.80
6	Sentence Structure	13	2	0.87
	Total	74	16	0.82

The assessment checklist's coefficient factor, as shown in Table 1, is (0.82). The assessment checklist's accuracy is indicated by its high percentage.

Additionally, the flipped classroom approach was also applied in the classroom using the following process.

- i. Students were instructed to read the six writing topics: Topic Sentence, Supporting Sentence, Concluding Sentence, Adjectives, Adverbs, and Sentence Structure at home.
- ii. The researchers who are also the teachers also uploaded some videos on the same topics in LMS for students to watch before they come to the class.
- iii. When the students came to the class, teachers addressed their doubts on the same topic and clarified many of the doubts. Teachers got sufficient time to practice as the students had already read about the topics at home.

Teachers especially focused on facilitating the class while students were writing. Teachers implemented the following tasks:

1. Assign a topic and ask the students to write a topic sentence.

- Based on the topic sentences, students were guided to write the supporting sentences.
- Based on the topic and supporting sentences, students were motivated to write a concluding sentence.
- Motivated EFL students to write simple sentences while using adjectives and adverbs properly.
- Encouraged students to write the correct sentence structure: subject-verb agreement, sequencing the different parts of a sentence correctly, etc.
- Offered feedback to EFL students' write-ups.
- Reviewed the write-ups as acquired by EFL students.
- In order to determine whether the flipped classroom approach is beneficial, researchers conducted a test (post-test). The students' writing skills have greatly increased.

However, because of the limits of this study, further writing problems could not be addressed.

3.5 Data Analysis Methods

The study's exploratory samples, consisting of fifteen students, were subjected to the assessment checklist. Another experienced researcher also provided their opinion. The stability of the correctors (observers) was calculated through the Holste equation = the percentage of the number of times of agreement / (the number of times of agreement + the number of times of disagreement) as shown in Table 1. The importance of the difference between the pre-test and post-test means was demonstrated by researchers using paired t-tests, as shown in Table 3.

4. Results

4.1 Findings from Study Question 1: What Are the Writing Issues Faced by EFL Students?

Table 2 shows the checklist that the researchers used to assess the writing difficulties of EFL students. They focused on the topic sentences, supporting sentences, concluding sentences, adjectives, adverbs, and sentence structure.

Table 2. Samples of writing to help teachers recognize students' writing problems

Table 2 displays three different samples (poor, good, and best) of each category namely topic sentences, supporting sentences, concluding sentences, adjectives, adverbs, and sentence structure. The samples show that students are very weak in English. They cannot identify and discriminate among different grammatical items. However, after implementing the flipped classroom method, students improved their performance as shown in the samples.

Domains	Writing Problems as Diagnosed		
	Sample 1 (Poor)	Sample 2 (Good)	Sample 3 (Best)
Topic Sentence			
Supporting Sentence			
Concluding Sentence			
Adjectives/ Adverbs			
Sentence Structure			

4.2 Research Question 2 Results

The significance of the differences between the means on the pre- and post-tests was determined by the researcher using a t-test of the paired samples, as shown in Table 3.

Table 3. T-test (paired samples) to demonstrate the significance of differences in the means of the study sample's scores on the pre and posttests

Domain		Mean	Std. Deviation	t	df	Sig. (2-tailed)	Effect size	level
Topic Sentence	Pretest	1.68	1.3	-15.501-	24	.000	3.2	large
	Posttest	4.01	1.120					
Supporting Sentence	Pretest	1.65	1.036	-10.024-	24	.000	2.00	large
	Posttest	3.93	1.352					
Concluding Sentence	Pretest	.81	.957	-3.589-	24	.001	0.72	large
	Posttest	1.76	1.332					
Using Adjective	Pretest	3.33	1.376	-5.599-	24	.000	1.13	large
	Posttest	4.85	.474					
Using Adverb	Pretest	1.85	1.180	-8.089-	24	.000	1.63	large
	Posttest	4.44	.822					
Sentence Structure	Pretest	1.17	.899	-11.339-	24	.000	2.28	large
	Posttest	4.49	1.194					
Total	Pretest	10.46	2.647	-16.783-	24	.000	3.37	large
	Posttest	23.45	3.178					

Table 3 shows that the means of the pretest and post-test tests differ statistically significantly. The level of significance ($\alpha=, 0.05$) and confidence interval (95%), support the post-test with a sizable effect size.

5. Discussion

The analysis demonstrates the value of flipped classroom initiatives for improving student performance. A t-test (paired sample) was employed in this research. This demonstrates that there is a statistically significant difference between the mean writing performance of the pre-and post-tests ($t=16.783$; $p0.05$). The student’s performance has improved considerably as a result of the flip classroom concept.

These findings align with other research that has revealed favorable opinions of flipped classrooms (Abdulla et al., 2019; Amiryousefi, 2017; Bergman & Sams, 2014; Doman & Webb, 2017; Haghghi, et al., 2019; Huynh & Nguyen, 2019). The findings of the current study also concur with those of Ekmekci (2017) and Abdulla et al. (2019), who showed how flipped classrooms could improve EFL learners' written skills.

In writing practice, the proposed methodology is based on flipped classroom methodology and provides a systematic framework for identifying difficulties, collecting data, creating unique ideas, improving them, and testing the final results. The researchers also found that when writing about their subjects, participants engaged in more discussions and negotiations. This enabled them to better understand the topic and share new perspectives, thereby improving their writing quality.

This study concurs with another study by Alghasab (2020) who agreed that flipped classrooms improved students' ability to write a correct topic sentence. In this study, 50% of students believed that adopting a flipped classroom had improved their use of grammar in written assignments. As the experiment for the current study continued for the entire semester, it provided the participants with enough opportunity to improve their writing skills through consistent practice. There is a major difference in the write-ups of students after employing the flipped classroom method. The study supports Iyitoluand Erişen (2017), who studied the impact of the flip model on the overall academic performance of pre-university students in EFL and related skills. Six independent sample t-tests were conducted, and the results showed that the implementation of flipped models had a significant impact on overall EFL performance and overall sub-skills.

The flipped classroom method proved to be very effective in teaching grammatical items to students. Students improved in using adjectives and adverbs correctly. They also improved in writing correct sentence structure that involves many grammatical items.

Yang's 2017 study, which included two teachers, 57 students from three secondary schools, two band schools, and two secondary schools, is supported by the research. This study has demonstrated the suitability of flipped classroom instruction for the instruction of English grammar. Students in the experimental group showed an overall favorable opinion toward the flipped classroom.

When Basal applied this strategy in 2012 to improve advanced reading and writing abilities, students from the University of Yildz's Faculty of Foreign Languages provided favorable feedback. In a study, Umutlu (2016) used a flipped classroom model of English composition lessons at the State Preparatory University to examine different modalities of video. Because of this, the six individuals in the experimental group's written performance outperformed that of the control group.

Students found the flipped classroom more innovative, encouraging, and creative. As students had already read and watched the videos related to topic sentences, supporting sentences, concluding sentences, adjectives, adverbs, and sentence structure, they liked this procedure of teaching as it was something new and exciting for them. Resultantly, they improved their writing skills. The study concurs with Haghghi et al. (2019) that demonstrate that teachers using the innovative techniques of the Flip Classroom motivates students to invest more time and

effort in their writing classrooms and improve their writing skills.

The study supported the flip classroom's positive effects on education in the EFL environment, with a number of educational repercussions. At first, using flip classrooms to teach EFL writing is a good idea. Students' writing performance seemed to benefit from the use of flip classrooms in writing classes because it seems to boost motivation and enhance the learning environment (Alghasab, 2020).

6. Conclusion and Recommendation

The researcher deduces from this finding that the flipped classroom approach enhanced the writing abilities of EFL students. Blended learning as part of flipped classroom method can be attributed to this result. Dramatic improvement in the performance of students testifies to the method's suitability in an EFL setting. It is also recommended to conduct further research to examine how the flip-classroom approach affects other forms of EFL writing, such as writing for blogs, magazines, and emails.

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