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The Effect of Teaching Grammar Through Flipped Instruction on EFL Learners' Expository Writing

Hooshang Javanbakht[1], Masoomeh Salehi[2], Mahdieh Shafipoor[3]

1. Master of TEFL, English Department, Shahr-e-Qods Branch, Islamic Azad University, Tehran, Iran
jalil.javan49@gmail.com
2. Assistant Professor of TEFL, English Department, Shahr-e-Qods Branch, Islamic Azad University, Tehran, Iran
mas.salehi84@gmail.com (corresponding author)
3. Assistant Professor of TEFL, English Department, Shahr-e-Qods Branch, Islamic Azad University, Tehran, Iran
ma.shafipoor@gmail.com

Abstract

The current research aimed to explore how teaching grammar via flipped instruction impacts the expository writing of Iranian EFL learners. For this purpose, 64 out of 75 Iranian male EFL learners were chosen as the study sample by administering the Oxford Placement Test (OPT). The intermediate-level participants who were selected were randomly divided into an experimental group and a control group. Subsequently, both groups underwent a pretest in English composition writing. The learners in the experimental group were tasked with watching and studying materials related to the target instruction through WhatsApp Messenger prior to attending class. The control group received grammatical instruction through the same textbook, supplemented by viewing relevant video clips or listening to audio recordings in class using traditional teaching methods. After 14 sessions of instruction, both groups were given a posttest. The findings from the Mann-Whitney U Test comparing the writing scores revealed a statistically significant difference between the control and experimental groups, with the experimental group performing better. Consequently, it is recommended that EFL teachers implement flipped instruction for grammar teaching, as it creates a dynamic and interactive learning environment that overcomes the constraints of time and space.

Keywords: audio files, mobile-assisted language learning, technology-enhanced learning, video files, WhatsApp

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1. Introduction

The increasing use of email, text messaging, and social networking as a means of informal communication has changed people's modes of writing. Writing is a significant experience by which learners acquire the ability to share their feelings and ideas and also persuade other individuals (White & Arndt, 1991). Weigle (2002) asserts that writing is a process of creating a text as a communicative bridge to fill the gap between the reader and the writer.

In addition, many learners have to write in English to perform their academic tasks. Writing is the most common way of evaluating the learners' performance in the second or foreign language, and often the students' ability to write is a prerequisite for their successful performance in exams. A useful piece of evidence of learners' success or failure is their writing ability, and teachers can find the confusion and problems of the students through their writing and speaking. For students, writing acts as a vehicle of personal discovery or creativity, which presents their ideas (Celce-Murcia, 2001).

To discover effective ways to enhance learning, educators are increasingly focusing on the fundamental aspects of the learning experience (the knowledge, skills, processes, and environments that students already possess) before presenting new content (Coppola & Krajcik, 2014). While the awareness of the importance of prior knowledge is not a new topic (Ausubel, 1968), there has been a significant increase in concern regarding what students know before they enter the classroom and how this impacts their subsequent learning. In the last decade, flipped classroom instruction (FCI) has emerged as a method that allows students to engage with course content prior to participating in face-to-face class sessions (Herreid & Schiller, 2013). Flipped instruction, as an alternative instructional method, emphasizes student-centered instruction while it keeps the conventional classroom environment as a reserve (Pan et al., 2022). It has captured much attention and interest and has been very popular at higher educational levels (Khayat et al., 2021).

The FCI deals with the best features of both the active learning and the lecture models (Toto & Nguyen, 2009). Jonathan Bergmann and Aaron Sams developed the FCI in 2006 (Bergmann & Sams, 2012). Andujar et al. (2020) consider flipped instruction as a kind of blended learning, which has gained popularity over recent years. This type of classroom represents a modern teaching approach where lectures and videos are provided to students

beforehand, allowing them to engage with these materials prior to attending class. Research on the impact of flipped instruction on learning English as a foreign language (EFL) became increasingly popular after 2014, with a noticeable rise in studies within this area from 2016 to 2017 (Turan & Akdag-Cimen, 2020). Several research investigations have examined the influence of flipped learning on EFL students, showing positive outcomes in language acquisition due to the implementation of flipped instruction (Ahmed, 2016; Hsieh et al., 2016; Sung, 2015). In fact, the flipped classroom embodies the reversal of Bloom's revised taxonomy (Anderson & Krathwohl, 2001). In flipped learning, the lower levels of cognitive work in Bloom's taxonomy, i.e., remembering and understanding, take place outside the classroom, and higher levels of cognitive work, i.e., application, analysis, evaluating, and creating, are performed in the classroom.

Certain learner-centered educational theories in the realm of educational psychology have validated the instructional benefits of the FCI (Bishop & Verleger, 2013). These theories encompass cooperative learning (Slavin, 1991), collaborative learning (Goodsell et al., 1992), peer tutoring (Tabacek et al., 1994), peer-assisted learning (Topping & Ehly, 1998), problem-based learning (Barrows, 1996), and active learning (Michael, 2006).

Flipped instruction is claimed to give learners an opportunity to engage in the process of learning. Compared to traditional teaching methods, flipped instruction can involve learners more in the learning process. Thus, the purpose of this research was to explore the assertions regarding flipped instruction within educational contexts. More precisely, this study focused on examining the impact of flipped instruction on enhancing the writing skills of Iranian EFL learners.

The primary objective of this study was to investigate how grammar instruction impacts the expository writing skills of EFL learners using a flipped classroom approach. This research aimed to offer insights into the efficacy and practicality of flipped instruction for teachers interested in implementing it in grammar education. Consequently, this study employed various resources to address the subsequent research question:

RQ: Does teaching grammar through flipped instruction have any statistically significant effect on improving Iranian EFL learners' expository writing?

In light of the research question presented above, the subsequent research hypothesis was formulated.

H: Teaching grammar through flipped instruction does not have any statistically significant effect on improving Iranian EFL learners' expository writing.

2. Review of Literature

2.1. Flipped Instruction

The conventional teaching methods that focus primarily on the teacher have become outdated, requiring students to memorize information that they are likely to forget later (Datig & Ruswick, 2013; Giannakos & Chrisochoides, 2014). Boyer (2013) points out the irony in spending considerable time lecturing in class, only for students to return home and face challenges in applying what they learned without support. According to Taylor and Parsons (2011), the needs, aspirations, and learning styles of students have evolved over the past twenty years. As Vaughan (2014) notes, today's learners typically access necessary information quickly and easily, preferring interactive and cooperative learning environments. As a consequence, advancements in technology, enhancements of existing online content, and progress in cognitive science are questioning established ideas and concepts surrounding teaching and learning (Pierce, 2013). The flipped classroom presents a novel and inventive model that has transformed the conventional approach (Giannakos & Chrisochoides, 2014) by utilizing internet technology and online educational materials (Strayer, 2012) to benefit learners and enrich education (Horn, 2013). Known by various names, including reverse (Halili & Zainuddin, 2015), inverted (Bates & Galloway, 2012), backwards (McLaughlin et al., 2014), and upside down (Zhang et al., 2014), the flipped classroom is an instructional model that alters the traditional structure of lectures followed by homework tasks (Arnold-Garza, 2014).

According to the definition given by The Flipped Learning Network (2014), the flipped classroom as an educational method shifts direct instruction from a collective learning setting to an individual learning setting. This transformation allows the group setting to become an engaging and interactive learning environment where the teacher supports students as they apply concepts and explore the subject matter creatively. As noted by Webb and Doman (2016), this model utilizes videos and audio resources to deliver instruction to students outside of the classroom, thus allowing class time to be dedicated to group collaboration, practical

activities, personalized instruction, and creative projects aimed at achieving learning goals. In this manner, students receive both extensive and intensive exposure to language, enabling them to progress at their own pace.

In a flipped classroom, educational resources like PowerPoint slides, pre-recorded lectures, videos, and podcasts are provided outside the conventional classroom setting (Butt, 2014); therefore, collaborative and interactive tasks and activities are completed during the regular and formal class time. Also, the flipped classroom is explained by Bishop and Verleger (2013) as an educational technique by which interactive and cooperative group learning tasks and activities take place inside the classroom while individual instruction occurs outside the classroom. In the same way, Poon (2013) characterizes the flipped classroom model as a blend of teaching methods that merges the effectiveness and social interaction benefits of classroom learning with the technological advancements of online education.

2.2. WhatsApp Messenger

Language learning practices have changed in recent years as a result of advances in the field of technology. One of the instances of these changes is using mobile-assisted language learning (MALL) (Syairofi et al., 2023). Numerous studies have been carried out in the past twenty years on MALL (e.g., Liu & Chen, 2015; Shadiev et al., 2022), including several review articles (e.g., Gutiérrez-Colón et al., 2020; Wang et al., 2017; Yang, 2013). These review articles indicate that MALL has become a crucial aspect of language education. Furthermore, MALL has been identified as an effective resource for language learning (Yu et al., 2022).

WhatsApp is a significant technological tool that has greatly impacted both teachers and students (Mwakapina et al., 2016). The introduction of WhatsApp as an instant messaging platform dates back to 2009, when it amassed approximately two billion monthly active users (Statista, 2022). In recent years, numerous studies have explored the application of WhatsApp across various educational fields, including computer science, language acquisition, midwifery, and psychology (Syairofi et al., 2023). In the realm of language learning, Manca (2020) examined research on the utilization of various social media platforms, such as Instagram, Pinterest, Snapchat, and WhatsApp. The results of the review showed that WhatsApp was the most explored platform in the context of language learning.

WhatsApp allows for immediate access to information, and exchanging information via WhatsApp is both quick and easy (Gon & Rawekar, 2017). The benefits of using WhatsApp compared to other technological tools in educational environments include its affordability, ease of use, accessibility, effectiveness, and use of natural language (Gon & Rawekar, 2017). Nuraeni and Nurmalia (2020) state that the advantage of using WhatsApp in educational fields is that it provides beneficial features such as texting, calling, and sending videos, links, locations, pictures and documents.

2.3. Empirical Studies

In examining the effectiveness of flipped instruction, Marlowe (2012) explored how the flipped classroom model influences learner achievement and stress levels. The results indicated that students in the flipped classroom experienced lower stress levels compared to those in traditional classes. Although semester grades showed improvement, exam scores did not reflect any significant enhancement.

Another research conducted by Johnson (2013) at the University of British Columbia focused on students' perceptions of the flipped classroom across three high school math classes. The students in this study overwhelmingly responded positively to the flipped classroom, expressing that it was more enjoyable, that their time was utilized more efficiently, and that the video lectures were helpful.

In a mixed-methods research project, Choe and Seong (2016) sought to investigate students' views on flipped classrooms in a general English course at a Korean university. The results were highly favorable. Over half of the students felt that flipped instruction benefited their English learning and provided more opportunities for English communication, as well as enhanced participation, preparedness, and feedback. Students also mentioned that the flipped classroom facilitated a deeper understanding of the subject matter. However, there was some dissatisfaction among participants regarding this instructional approach. When asked about the downsides of flipped classrooms, many cited the time commitment required for online homework and quizzes, alongside a desire for improved video quality and a wider variety of activities.

Pudin (2017) conducted research to examine how the flipped learning method influences grammar instruction, focusing on students' views regarding its efficacy and

practicality. The analysis of the gathered data indicated that the majority of learners preferred acquiring grammar skills through flipped classrooms rather than conventional grammar lessons.

Hashemifardnia et al. (2018) explored the effects of implementing flipped classrooms on the reading comprehension of junior high school students in Iran. The results demonstrated that students who participated in flipped instruction surpassed those who experienced traditional teaching methods on their reading comprehension assessments.

In another study, Alnuhayt (2018) looked at how effective the flipped classroom approach was in EFL vocabulary classes. The findings revealed that participants in the flipped instruction group performed better than those in the traditional instruction group. Additionally, it was found that students in the experimental group held favorable views toward flipped classroom teaching in the EFL vocabulary setting.

Saidah and Kediri (2019) conducted an investigation to assess the impact of a video-based flipped classroom strategy on students' mastery of grammar. The outcomes indicated a significant difference between the control group and the experimental group, demonstrating that the flipped classroom approach enhanced students' grammar skills.

Abedi et al. (2019) endeavored to compare the impacts of FCI and traditional teaching methods on the English composition writing abilities of intermediate EFL learners. In their research, the experimental group received targeted instruction through a flipped classroom equipped with internet access, computers, and projectors. Participants in the experimental group were allowed to bring their smartphones to class and use them for learning purposes. Meanwhile, the control group experienced traditional instruction within the classroom. The results from the independent-samples t-test and one-way ANCOVA revealed that the experimental group performed better than the control group on the posttest.

In Iran, Afzali and Izadpanah (2021) investigated how the flipped learning model influenced the engagement and motivation of intermediate and upper-intermediate learners in studying English grammar. They administered validated questionnaires as pretests and posttests to assess the participants' motivation and engagement levels before and after the intervention. After analyzing the pretest and posttest results using ANCOVA, the authors found that the experimental group significantly outperformed the control group.

Andujar and Çakmak (2023) explored the use of flipped instruction through the Instagram application in an EFL class. Through a mixed-methods approach, they analyzed students' perceptions of the flipped learning model in general and the Instagram application in particular. The results showed that the flipped learning method and the application were considered motivational and useful elements to develop language learning processes. However, the participants did not consider flipped instruction superior to traditional lecture-based instruction.

Vitta and Al-Hoorie (2023) conducted a meta-analysis of 56 reports and articles on the effect of flipped instruction on different aspects of language learning. The findings indicated that flipped instruction was superior to traditional instruction in enhancing language acquisition. Furthermore, the results revealed no substantial differences in the impact of flipped instruction across various age groups. However, it had a significantly different effect on different proficiency levels, i.e., the more advanced students gained greater benefits from flipped instruction. Moreover, flipped learning was effective in most areas of language learning. However, the use of video intervention and interactive platforms did not prove to be more effective than other methods of flipped learning.

Recently, Qi et al. (2024) performed a meta-analysis involving 57 studies on the impact of flipped instruction in language learning. They selected these papers from 565 documents through a rigorous and systematic approach to literature selection. Their results showed that flipped instruction is still a leading area of research. However, the authors believe that although the use of flipped instruction in language learning has gained some achievements, there are some limitations in this area. The most important issues are the sample size, the difficulty of technology integration, and the lack of teacher training. The research gaps in this regard make flipped instruction an open area of research. This provided the motive for conducting the present study.

3. Method

3.1. Design

This research aimed to explore the impact of instructing grammatical structures to improve EFL learners' writing skills in a flipped classroom. The research design was a quasi-experimental design with a pretest/posttest, treatment, and random assignment of the

participants into two groups after homogenization. In addition, to ensure that both groups were comparable in their writing skills, a pretest was given to each group prior to the experiment, and to investigate the effect of flipped instruction on their expository writing, a posttest was administered after the treatment. In this study, teaching grammatical structures through flipped instruction was the independent variable, and the learners' expository writing ability was the dependent variable.

3.2. Participants

The participants in this study were 75 male EFL learners enrolled at Jahed English Language Institute, which is a branch of Shokouh Language Institute in Tehran, Iran. All of these individuals had Persian as their first language. The ages of the participants ranged from 16 to 20 years. Convenience sampling was employed to choose the participants. To ensure that the participants were homogeneous in terms of their English proficiency levels, the initial group took an Oxford Placement Test (OPT) (2001). Among the 75 EFL students who completed the OPT, 64 participants whose scores were within one standard deviation above and below the mean (intermediate level) were selected for the study sample. These selected participants were then randomly assigned to two groups: an experimental group and a control group.

3.3. Instruments

The initial instrument utilized in this research was the Oxford Quick Placement Test (OQPT) (2001). This test was selected because it serves as a proficiency assessment for Iranian EFL learners. It is an objective test that can be easily scored and effectively places participants in the appropriate language proficiency level. The test comprises two sections consisting of 60 multiple-choice and cloze-test questions, where test-takers must select the correct answer from the provided options. Participants are allotted 60 minutes to complete the test.

The following instruments employed in this study were the writing pretest and posttest. Before the treatment phase commenced, a writing assessment was conducted as the pretest to evaluate the participants' initial writing skills. In this assessment, participants were required to compose a 250-word expository text discussing the advantages of learning a foreign language. This topic was chosen by the researchers due to its relevance to their area of study. At the conclusion of the treatment process, the participants were again asked to write a 250-word text as the posttest to examine the effectiveness of the treatment and the participants' progress.

The instructional material in this study was the book titled *Grammar in Use Intermediate* (Murphy & Smalzer, 2009), which is a popular grammar text that has concise and clear explanations and an innovative format.

The video and audio files used in this study were downloaded from *Crown Academy of English*, a website that covers areas such as English vocabulary, grammar, reading skills, listening skills, punctuation and writing, and speaking and pronunciation.

To carry out flipped instruction, WhatsApp Messenger was used. This messenger, which is owned by Facebook and is free of charge, offers a cross-platform service for messaging and voice over IP. WhatsApp users can send and receive text messages, images, documents, share their location, and send a variety of media, alongside making voice and video calls. Primarily designed for mobile devices, this application can also be accessed on desktop computers as long as the user's mobile device stays connected to the Internet while using the desktop version.

To assess students' written texts, the researchers used the writing criterion developed by Jacobs et al. (1981). This scale comprises five distinct dimensions that evaluate writing quality, each assigned a specific weight: content (30 points), language use (25 points), vocabulary (20 points), organization (20 points), and mechanics (5 points). The total possible score is 100 points.

3.4. Procedure

The experiment took place over the course of 14 sessions within a span of seven consecutive weeks. The initial and concluding sessions were reserved for the pretest and posttest, while the other 12 sessions were dedicated to the treatment procedure. The research procedure began with the administration of the OPT to form a homogenized sample. For this purpose, 75 EFL learners studying general English at Jahed English Language Institute, selected through convenience sampling, formed the population of the study. After administration of the OPT, 64 (N = 64) learners with scores that were within one standard deviation above and below the average were chosen as the sample for the study. The participants selected in this manner were randomly divided into two groups: an experimental group (flipped instruction) and a control group (traditional instruction), each consisting of 32 participants. The flipped group was

instructed to install WhatsApp Messenger. It is important to note that both groups received instruction from the same teacher.

Prior to the treatment process, a pretest in writing was administered to the participants to assess their prior knowledge of writing. The two groups were given a topic to write about. Each individual participant was actually required to write an approximately 250-word paragraph. After administration of the pretest, the treatment procedure began for the experimental group.

In the experimental group, instruction was delivered using a flipped model. As previously described, the key feature of flipped instruction is that learning occurs outside of the classroom, while preparation happens within it. Thus, in this study, each lesson included brief lectures, approximately two minutes long, along with video files pertinent to grammatical concepts. Prior to class, video lessons were shared with the flipped group via WhatsApp Messenger. The participants were tasked with reviewing and studying the audio and video materials related to that session's instruction before attending class. Also, the students had the opportunity to ask questions, answer their peers' questions, and provide them with feedback, or send related audios, videos, and other files to the group.

At the start of each class, the teacher engaged the students in a conversation about the videos and audios to ensure that everyone had listened to and viewed the instructional materials. During this discussion, the teacher clarified any concepts that students found confusing and addressed their questions. Then the teacher asked the students to do the course book exercises in groups and give their books to their peers to receive corrective feedback. The group members were supposed to correct mistakes whenever they found one and explain the points related to their corrections. In fact, during class time, learners in this group took part in class activities to discuss, consider, and practice what they had learned.

The students in the control group received grammatical instruction from the same textbook. Afterwards, they viewed video clips or listened to audio recordings related to the topics being investigated, using conventional teaching methods (the same materials that the flipped instruction group had engaged with prior to and outside the classroom). Before each lesson, the teacher prompted the students to recall their background knowledge. At the end of each lesson, the students were asked questions pertaining to the lesson content.

Finally, a writing posttest was given to the participants. Similar to the pretest, this assessment required participants to compose a 250-word expository essay. Both groups were instructed to write on a topic chosen by the teacher so that their progress in grammatical instruction could be evaluated. The scores from the pretest and posttest for the participants were analyzed to determine the level of improvement observed in each group.

Since the scoring of writing tests was mainly subjective and there was more than one correct way of writing each paragraph, the inter-rater scoring procedure was used. Two language supervisors, as the raters, scored the participant's writings. In order to decrease the mentioned subjectivity, the raters were asked to base their judgments on Jacob's Profile for Writing Scores (1981) to score the writings. The writing tests' reliability was assessed using the inter-rater reliability index. The obtained results were statistically analyzed in order to identify the changes that occurred as an outcome of treatment given to the experimental group, as well as differences in both groups' achievement.

4. Results

4.1.the Homogenizing Test

To ensure that the participants were homogeneous in terms of their overall English language proficiency, the OPT was given. The descriptive statistics for the OPT can be found in Table 1.

Table 1

The Descriptive Statistics of the OPT

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Oxford_Test	75	32.00	50.00	41.7467	4.09381	16.759
Valid N (listwise)	75					

The descriptive statistics for the OPT test are presented in Table 1. According to this table, the mean score and the standard deviation for the participants were 41.74 and 4.09, respectively. Figure 1 displays the histogram of the OPT proficiency test, which illustrates a normal distribution curve.

Having administered the language proficiency test, the researchers selected 64 homogeneous participants, out of 75 participants, based on their OPT scores, which varied

between 37 and 47 (intermediate level). Descriptive statistics for the selected participants are presented in Table 2.

Figure 1

Histogram of the OPT Scores

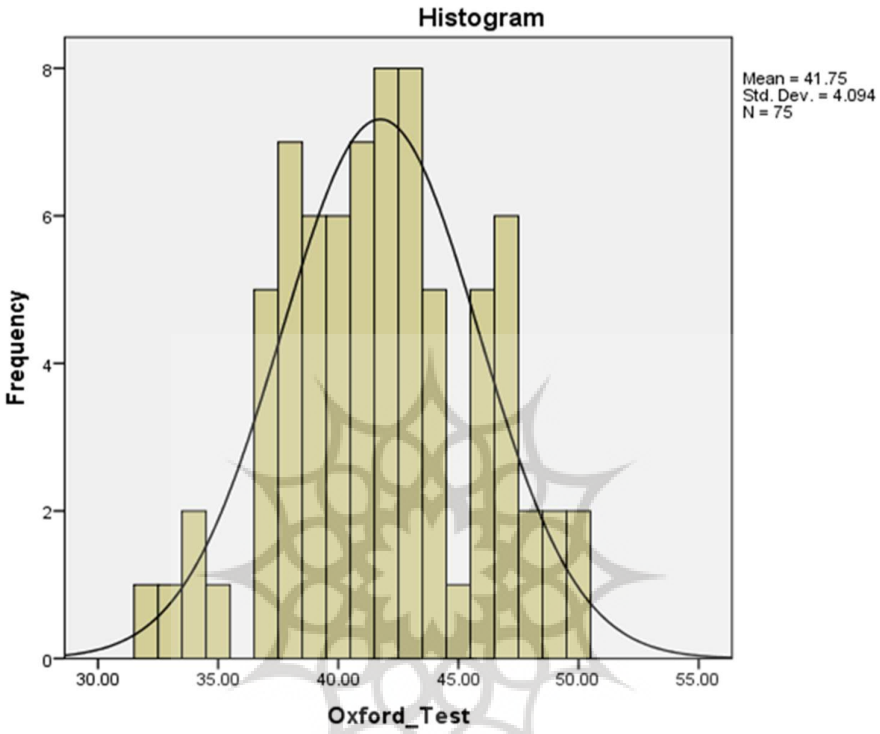


Table 2

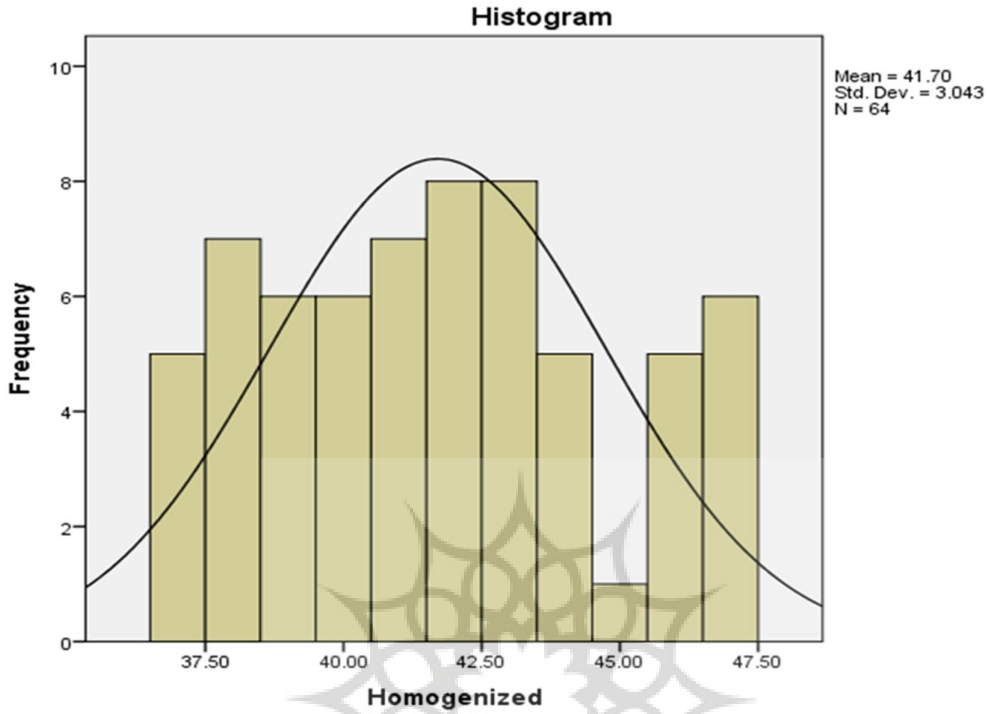
The Descriptive Statistics of the Homogenized Participants

	N	Min	Max	Mean	SD	V
Homogenized	64	37.00	47.00	41.703	3.042	9.260
Valid N (listwise)	64					

As shown in Table 2, the mean and the standard deviation of the scores of the homogenized participants in OPT were 41.7 and 3.04, respectively. The histogram of the OPT scores of the homogenized participants is shown in Figure 2, which shows a normal curve.

Figure 2

Histogram of the OPT Scores of the Homogenized Participants



4.2. the Inter-Rater Reliability

The inter-rater reliability of the scoring by the two raters for the participants' writing is presented in Table 3.

Table 3

The Inter-Rater Reliability for the Two Raters of the Writing

Item	N of Raters	N of Participants	R	Sig
Writing	2	32	.83	.000

Table 3 presents the findings on inter-rater reliability between the two raters with thirty-two participants in each group of the study. It is evident that there was a perfect level of agreement, according to the classification by Landis and Koch (1977), between the two evaluators in this research, with R = .83 and P < .05 for the writing scores.

4.3. the Research Question

Before evaluating the null hypothesis, the writing pretest scores of both groups were analyzed to determine any existing differences. To select the appropriate analysis method for this comparison, the normality of the data was assessed initially. The outcomes of the normality assessment can be found in Table 4.

Table 4

The Result of the Normality Test for the Writing Pretest Scores of the Two Groups

	Kolmogorov-Smirnov[a]		
	Statistic	df	Sig.
Con_Pre	.240	32	.000
Exp_Pre	.249	32	.000

As the table above shows, the data related to the pretest of writing were not normally distributed for both groups (Sig. < .05). Therefore, the appropriate statistical test for comparing the means of the two groups was the Mann-Whitney U test. Descriptive statistics for the pretest scores of both groups are presented in Table 5.

Table 5

The Descriptive Statistics for the Writing Pretest Scores of the Two Groups

	N	Min	Max	Mean	SD	V
Con_Pre	32	35.00	55.00	45.187	3.578	12.802
Exp_Pre	32	38.00	58.00	45.6875	4.46085	19.899
Valid N (listwise)	32					

The mean score and standard deviation of the control and the experimental groups were 45.18, 3.57, 45.68, and 4.46, respectively. The outcomes of the inferential statistics are presented in Table 6.

Table 6

The Result of the Mann-Whitney U Test for the Comparison of the Writing Pretest Scores

	Pre_scores
Mann-Whitney U	503.000
Wilcoxon W	1031.000
Z	-.125
Asymp. Sig. (2-tailed)	.900

Based on the findings presented in Table 6, it can be inferred that the two groups displayed homogeneity in their writing skills prior to the initiation of the treatment (U = 503, p > .05). The subsequent step involved comparing the writing scores of both the control and experimental groups in the posttest. Once again, the normality of the data was examined to determine the appropriate method for this comparison. The outcomes of the normality test are illustrated in Table 7.

Table 7

The Test of Normality for the Posttest of Writing

	Kolmogorov-Smirnov		
	Statistic	df	Sig.
Con_Post	.884	32	.003
Exp_Post	.960	32	.273

As the table above shows, the data related to the posttest of writing were not normally distributed for both groups (Sig. < .05 for the control group). As a result, the appropriate test for assessing the means of the two groups was the Mann-Whitney U test. Table 8 presents the descriptive statistics of the posttest scores for both groups.

Table 8

The Descriptive Statistics for the Writing Posttest Scores of the Two Groups

	N	Min	Max	Mean	SD	V
Con_Post	32	43.00	55.00	47.968	3.930	15.451
Exp_Post	32	45.00	80.00	61.656	7.468	55.781
Valid N (listwise)	32					

The mean score and standard deviation of the control and the experimental groups were 47.96, 3.93, and 61.65, 7.46, respectively. The outcomes of the inferential statistics are presented in Table 9.

According to Table 9, a statistically significant difference was observed in the posttest writing scores between the control and experimental groups, U = 51, p < .05. Consequently, the null hypothesis was rejected, indicating that the approach of teaching grammar through flipped instruction significantly enhanced the expository writing skills of Iranian EFL learners.

Table 9

The Result of the Mann-Whitney U Test for the Comparison of the Writing Posttest Scores

	Post_scores
Mann-Whitney U	51.000
Wilcoxon W	579.000
Z	-6.243
Asymp. Sig. (2-tailed)	.000

5. Discussion

The aim of this research was to investigate the impact of teaching grammar via flipped instruction on expository writing among Iranian EFL learners. To achieve this, 64 homogenized EFL learners were randomly assigned to two groups, one being an experimental group and the other a control group, with each group comprising 32 students, following the administration of the OPT. In the experimental group, the grammar instruction was delivered through flipped instruction using WhatsApp, while the control group received traditional classroom instruction.

The findings of this research indicated that implementing FCI brought significant benefits, aligning with various studies that have compared grammar teaching via flipped instruction to other instructional methods. These results were consistent with those of research conducted by Marlowe (2012) and Johnson (2013). The results showed the effectiveness of flipped classrooms on learner achievement and stress. The findings were consistent with the findings reported by Rameshianfar et al. (2015) and Zohrabi and Sabouri (2015). The examination of the data revealed that pre-listening activities positively influenced EFL students' understanding of authentic English films.

The outcomes of the current research align with those found by Abaeian and Samadi (2016), who examined the impact of flipped instruction on reading comprehension in L2 among Iranian EFL learners with varying proficiency levels. Additionally, the results are consistent with the findings from Hsieh et al. (2016), who explored the influence of flipped instruction in an online learning environment, especially through mobile devices, on the oral proficiency and perceptions of EFL students.

The results were similar to those reported by Choe and Seong (2016) and Pudin (2017), who investigated learners' attitudes toward the flipped classroom. Analysis of the data revealed that a majority of the learners preferred the flipped classroom approach over traditional teaching methods. These findings align with those shared by Hashemifardnia et al. (2018). Additionally, the outcomes of this study correspond with those of Alnuhayt (2018), who found that the flipped instruction method positively influenced vocabulary acquisition in EFL classes. The findings of the present research are also consistent with the results from studies conducted by Abedi et al. (2019) and Saidah and Kediri (2019), where students in the flipped classroom performed better than those in traditional classrooms.

In relation to the impact of grammar instruction on EFL learners' writing skills, the outcomes of this research align with the results reported by Akakura (2012), Shen (2012), and Khoshsima and Tanhaei (2014). The results suggested that the instruction of grammatical structures had a positive influence on EFL learners' writing abilities, and there was a significant improvement in the participants' writing from the start to the conclusion of the study.

The results of this research are backed by the results of a study carried out by Robinson and Feng (2016), who examined whether the students' writing skills were affected by direct grammar instruction. The analysis of the collected data demonstrated that when grammar instruction, as a research-based strategy, was used during teaching writing, learners could make sufficient improvement in their writing.

However, the results of the current study do not align with those described by van Alten et al. (2019). They examined the effects of flipped instruction on the satisfaction of students as well as on learning outcomes. The results showed that flipped instruction affected learning outcomes positively, but slightly. However, learner satisfaction with regard to the learning environment was not affected by flipped instruction. The findings were not consistent with a meta-analysis of blended learning conducted by Spanjers et al. (2015), who found that the effect of blended learning on learner satisfaction was non-significant and trivial.

The present study, like many other studies, demonstrated the effectiveness of flipped instruction in the field of language learning. This success can be due to different reasons. One possible explanation is that flipped classrooms enable students to make better use of classroom time and foster greater enthusiasm for engagement, learning, evaluation, and sharing (Boucher

et al., 2013; Fulton, 2012). Another reason is that in flipped classrooms, the students' potential fear of the classroom decreases (Marlowe, 2012). In addition, the use of innovation in flipped instruction leads to the improvement of learning (Bergmann & Sams, 2012; Thoms, 2013). Prensky (2001) also believes that innovation greatly contributes to the improvement of learning outcomes.

This study was delimited to WhatsApp as a tool for conducting flipped instruction in language teaching contexts. This may reduce the generalizability of findings to other applications that can be used in flipped classrooms. However, as Manca (2020) showed, WhatsApp is the most popular application as a tool for conducting flipped instruction in the context of language learning.

In spite of the advantages of flipped instruction shown in the findings of the present study and the previous ones, implementing flipped instruction may face some obstacles, such as a lack of access to technology, a lack of engagement of the students outside the classroom, and a lack of teacher facilitation. With regard to access to technology, teachers should pay attention to the context in which they are going to implement the flipped instruction. If they are teaching in a region in which most people are of lower socioeconomic status and they do not have access to technology, the teacher and the school or institute manager should look for some methods to compensate for the students' lack of access to technology, such as providing the students with libraries equipped with computers and burning the instructional materials on DVDs (November & Mull, 2012).

Considering the engagement of the students outside the classroom, the teacher should use some strategies to motivate the students to use the instructional materials outside the classroom. November and Mull (2012) recommend some strategies to increase students' engagement outside the classroom, such as not limiting the instructional materials to videos only, avoiding preparing long videos or audios, providing students with videos or audios prepared by different teachers, asking students to interact with each other in social networks, and checking the resources which are already available through the Internet.

Regarding the teacher facilitation, November and Mull (2012) have some recommendations. They believe that teachers should provide learners with different rich resources and create opportunities for them to think deeply and question what they have learned

at home before coming to the classroom. Teachers should also prepare suitable questions to ask students in the classroom. Teachers themselves can also benefit from the advancements of technology to learn more about their classes.

Moreover, flipped instruction may not be suitable for all ages, proficiency levels, and cultural contexts. Considering the age of the learners, Vitta and Al-Hoorie (2023) showed no significant difference regarding the impact of flipped classrooms on language learning across different age groups. However, young learners may not benefit from flipped instruction because they usually do not have access to smartphones or other technological devices. With regard to proficiency levels, learners of lower proficiency levels cannot benefit from the flipped instruction as much as learners of higher levels (Vitta & Al-Hoorie, 2023). The reason may be that students of lower levels cannot fully understand the audio and video materials sent to them. In addition, the effect of flipped instruction on language learning may vary in different sociocultural contexts. However, as far as the researchers of the present study know, no previous study has dealt with this issue.

6. Conclusion

The primary conclusion of this study is that implementing flipped instruction can significantly assist teachers and educators in enhancing their learning outcomes through a more efficient use of technology in their classrooms. This advantage was evidenced by statistically significant variations in learning results, indicating that students taught through flipped strategies obtained higher scores compared to those in traditional lecture-based approaches. The results showed that flipped learning positively affected learners' writing ability. As a result, this type of instruction can provide learners with an opportunity to learn in an environment in which teaching is not linear and didactic (Butt, 2014; Willey & Gardner, 2013).

Teachers may find the results of this study to be very useful, as it will help them increase their understanding of using the flipped instruction in the learning process. By the same token, it may help them create their knowledge for the effective use of flipped instruction. Rather than being instructors who control the class, EFL teachers can change their roles and become educators who help, organize, coordinate, guide, and support the students so that the students can communicate and acquire language more efficiently. One way to achieve this is to use FCI

because, in this teaching method, the roles of teachers and learners are different from conventional classes.

EFL instructors can clearly explain the guidelines for effectively implementing flipped learning to students right from the start, and these guidelines should be followed as closely as possible. Educators can prevent dedicating the majority, if not all, of class time to lecturing. The teacher can monitor students, move around among them, engage in their group conversations, participate in discussions, pose questions, provide feedback, and address any misunderstandings students may have.

Students and educators can collaborate to establish the guidelines that govern their classroom for a specific academic term. Students can have the chance to exchange their knowledge with one another and apply the concepts they have recently acquired. Since in EFL classes, there is not enough opportunity for the learners to practice the language, and this opportunity is also lacking outside the classroom, more opportunities are provided for the learners in flipped classes to communicate in English. In fact, learners have access to the in-class activities and instructional files out of the classroom, which can lead to an improvement in their learning. Learners can be motivated to do activities outside the class, which is one of the significant requirements for the success of flipped instruction.

EFL material developers and textbook designers adapt the curriculum to promote self-learning and to include more cooperative and interactional tasks and activities to enhance learners' opportunities to communicate in the target language. Therefore, material developers are recommended to prepare some audio and video files in the form of CDs or DVDs so that EFL teachers can use them as materials for flipped instruction.

Similar to other research, this study faced certain limitations. The most significant limitation of the study was the limited sample size, which makes it difficult to generalize the results to the considered specific population. The second limitation was the short period of time in which the study was conducted. Due to the institute's policies, it was not possible to carry out the research for more than 14 sessions. Another limitation was that it was impossible to have complete control over the other variables, such as personal variables. The last limitation of this study was that there were some problems working on the Internet; for example, when lines were busy due to many users, it took time to access information or download the files. Internet

problems and disruptions are common in Iran. Due to the mentioned limitations of the present study, further research is needed to compensate for these limitations.

Given the limitations of this research, it is essential to pursue additional studies in this field. Future research should replicate the current study over an extended timeframe with a larger group of students instead of a limited sample. Conducting this investigation for a more prolonged duration with a different cohort of learners at a larger scale could prove beneficial to educators when selecting effective strategies for teaching writing.

The current study focused on EFL learners; future research should assess both quantitatively and qualitatively the impact of flipped instruction on teachers' perceptions within the EFL context, as teachers play a vital role in the effectiveness of flipped classrooms.

As this study was carried out with a small sample of intermediate EFL learners at a private institute, it is suggested that similar experiments with a larger number of participants can be replicated. This study was not sensitive to the age and gender of the participants; further research can be carried out considering these variables. The intermediate Iranian EFL learner participated in this study; further research can be carried out at different language proficiency levels.

Conflict of Interest

The author(s) certify/certifies that they have no affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in the present research paper.

References

Abaeian, H., & Samadi, L. (2016). The effect of flipped classroom on Iranian EFL learners' L2 reading comprehension: Focusing on different proficiency levels. *Journal of Applied Linguistics and Language Research, 3*(6), 295-304.

Abedi, P., Keshmirshekan, M. H., & Namaziandost, E. (2019). The comparative effect of flipped classroom instruction versus traditional instruction on Iranian intermediate EFL learners' English composition writing. *Journal of Applied Linguistics and Language Research, 6*(4), 43-56.

Afzali, Z., & Izadpanah, S. (2021). The effect of the flipped classroom model on Iranian English foreign language learners: Engagement and motivation in English language grammar. *Cogent Education*, *8*(1), 1-37. https://doi.org/10.1080/2331186X.2020.1870801

Ahmed, M. A. E. A. S. (2016). The effect of a flipping classroom on writing skill in English as a foreign language and students' attitude toward flipping. *US-China Foreign Language, 14*(2), 98-114. https://doi.org/10.17265/1539-8080/2016.02.003

Akakura, M. (2012). Evaluating the effectiveness of explicit instruction on implicit and explicit L2 knowledge. *Language Teaching Research, 16*(1), 9-37. https://doi.org/10.1177/1362168811423339

Alnuhayt, S. S. (2018). Investigating the use of the flipped classroom method in an EFL vocabulary course. *Journal of Language Teaching and Research, 9*(2), 236-242. http://doi.org/10.17507/jltr.0902.03

Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives* (Complete ed.). Longman.

Andujar, A., & Çakmak, F. (2023). Foreign language learning through Instagram: A flipped learning approach. In Information Resources Management Association (Ed.), *Research anthology on applying social networking strategies to classrooms and libraries* (pp. 278-299). IGI Global. https://doi.org/10.4018/978-1-6684-7123-4.ch016

Andujar, A., Salaberri-Ramiro, M. S., & Martínez, M. S. C. (2020). Integrating flipped foreign language learning through mobile devices: Technology acceptance and flipped learning experience. *Sustainability*, *12*(3), 1110. https://doi.org/10.3390/su12031110

Arnold-Garza, S. (2014). The flipped classroom: Assessing an innovative teaching model for effective & engaging library instruction. *College & Research Libraries News, 75*(1), 10-13. http://doi.org/10.5860/crln.75.1.9051

Ausubel, D. P. (1968). *Educational psychology: A cognitive view*. Holt, Rinehart & Winston.

Barrows, H. S. (1996). Problem-based learning in medicine and beyond: A brief overview. *New Directions for Teaching and Learning, 68*(5), 3-12. https://doi.org/10.1002/tl.37219966804

Bates, S., & Galloway, R. (2012, April 12-13). *The inverted classroom in a large enrolment introductory physics course: A case study* [Paper presentation]. Higher Education Academy STEM Conference, London, England.

Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.

Bishop, J. L., & Verleger, M. A. (2013, June). *The flipped classroom: A survey of the research* [Paper presentation]. 120th ASEE Annual Conference & Exposition, Atlanta, GA, United States.

Boucher, B., Robertson, E., Wainner, R., & Sanders, B. (2013). Flipping Texas State University's physical therapist musculoskeletal curriculum: Implementation of a hybrid learning model. *Journal of Physical Therapy Education, 27*(3), 72-77. https://doi.org/10.1097/00001416-201307000-00010

Boyer, A. (2013). The flipped classroom: Catering for difference. *Teacher Learning Network, 20*(1), 28-29. https://doi.org/10.4018/jcit.2014040103

Butt, A. (2014). Student views on the use of a flipped classroom approach: Evidence from Australia. *Business Education & Accreditation, 6*(1), 33-44.

Celce-Murcia, M. (2001). *Teaching English as a second or foreign language* (3rd ed.). Heinle & Heinle.

Choe, E., & Seong, M.-H. (2016). A case study of the flipped classroom in a Korean university general English course. *Journal of Pan-Pacific Association of Applied Linguistics, 20*(2), 71-93.

Coppola, B. P., & Krajcik, J. S. (2014). Discipline-centered post-secondary science education research: Distinctive targets, challenges and opportunities. *Journal of Research in Science Teaching, 51*(6), 679-93. https://doi.org/10.1002/tea.21165

Datig, I., & Ruswick, C. (2013). Four quick flips: Activities for the information literacy classroom. *College & Research Libraries News, 7*(5), 249-257. https://doi.org/10.5860/crln.74.5.8946

Flipped Learning Network. (2014). *What is flipped learning?* https://fln.schoolwires.net/cms/lib07/VA01923112/Centricity/Domain/46/FLIP_handoutFLN_Web.pdf

Fulton, K. (2012). Upside down and inside out: Flip your classroom to improve student learning. *Learning and Leading with Technology, 38*(9), 12-17.

Giannakos, M. N., & Chrisochoides, N. (2014). Challenges and perspectives in an undergraduate flipped classroom experience: Looking through the lens of learning analytics. In *2014 IEEE Frontiers in Education Conference (FIE) Proceedings* (pp. 1–5). IEEE. https://doi.org/10.1109/FIE.2014.7044413

Gon, S., & Rawekar, A. (2017). Effectivity of e-learning through WhatsApp as a teaching learning tool. *MVP Journal of Medical Sciences, 4*(1), 19. https://doi.org/10.18311/mvpjms/0/v0/i0/8454

Goodsell, A. S., Maher, M. R., Tinto, V., Smith, B. L., & MacGregor, J. (1992). *Collaborative learning: A sourcebook for higher education.* Pennsylvania State University.

Gutiérrez-Colón, M., Frumuselu, A. D., & Curell, H. (2020). Mobile-assisted language learning to enhance L2 reading comprehension: A selection of implementation studies between 2012–2017. *Interactive Learning Environments*, *31*(2), 854–862. https://doi.org/10.1080/10494820.2020.1813179

Halili, S., & Zainuddin, Z. (2015). Flipping the classroom: What we know & what we don't. *The Online Journal of Distance Education & e-Learning, 3*(1), 15-22.

Hashemifardnia, A., Namaziandost, E., & Shafiee, S. (2018). The effect of implementing flipped classrooms on Iranian junior high school students' reading comprehension. *Theory and Practice in Language Studies, 8*(6), 665-673. http://doi.org/10.17507/tpls.0806.17

Herreid, C. F., & Schiller, N. A. (2013). Case studies and the flipped classroom. *Journal of College Science Teaching, 42*(5), 62-67.

Hsieh, J. S. C., Wu, W. C. V., & Marek, M. W. (2016). Using the flipped classroom to enhance EFL learning. *Computer Assisted Language Learning*, *30*(1), 1-21. http://doi.org/10.1080/09588221.2015.1111910

Horn, M. (2013). The transformational potential of flipped classrooms: Different strokes for different folks. *Education Next, 13*(3), 78-79.

Jacobs, H. L., Zinkgraf, S. A., Wormuth, D. R., Hartfiel, V. F., & Hughey, J. B. (1981). *Testing ESL composition: A practical approach*. Newbury House.

Johnson, G. B. (2013). *Student perceptions of the flipped classroom* [Unpublished master's thesis]. The University of British Columbia.

Khayat, M., Hafezi, F., Asgari, P., & Talebzadeh Shoushtari, M. (2021). Comparison of the effectiveness of flipped classroom and traditional teaching method on the components of self-determination and class perception among university students. *Journal of Advancements in Medical Education Professionalism, 9*, 230-237. http://doi.org/10.30476/JAMP.2021.89793.1385

Khoshsima, H., & Tanhaei, R. (2014). The impact of teaching grammatical structures on writing ability of Iranian students. *International Journal of Applied Linguistics & English Literature, 3*(6), 134-138. http://doi.org/10.7575/aiac.ijalel.v.3n.6p.134

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*(1), 159–174. https://doi.org/10.2307/2529310

Liu, P. L., & Chen, C. J. (2015). Learning English through actions: A study of mobile-assisted language learning. *Interactive Learning Environments, 23*(2), 158–171. https://doi.org/10.1080/10494820.2014.959976

Manca, S. (2020). Snapping, pinning, liking or texting: Investigating social media in higher education beyond Facebook. *The Internet and Higher Education, 44*, 100707. https://doi.org/10.1016/j.iheduc.2019.100707

Marlowe, C. (2012). *The effect of the flipped classroom on student achievement and stress* [Unpublished master's thesis]. Montana State University.

McLaughlin, J., Roth, M., Glatt, D., Gharkholonarehe, N., Davidson, C., Griffin, L., & Mumper, R. (2014). The flipped classroom: A course redesign to foster learning & engagement in a health professions school. *Academic Medicine, 89*(2), 236-243. https://doi.org/10.1097/ACM.0000000000000086

Michael, J. (2006). Where's the evidence that active learning works? *Advances in Physiology Education, 30*(6), 159-67. https://doi.org/10.1152/advan.00053.2006

Murphy, R., Smalzer, W. R. (2009). *Grammar in use intermediate* (3rd ed.). Cambridge University Press.

Mwakapina, J., Mhandeni, A., & Nyinondi, O. (2016). WhatsApp mobile tool in second language learning: Opportunities, potentials and challenges in higher education settings in Tanzania. *International Journal of English Language Education, 4*(2), 70. https://doi.org/10.5296/ijele.v4i2.9711

November, A., & Mull, B. (2012, March 26). Flipped learning: A response to five common criticisms. *eSchool News*. https://www.eschoolnews.com/2012/03/26/flipped-learning-a-response-to-five-common-criticisms/

Nuraeni, C., & Nurmalia, L. (2020). Utilizing WhatsApp application in English language learning classroom. *Metathesis: Journal of English Language, Literature, and Teaching*, *4*(1), 89-94. https://doi.org/10.31002/metathesis.v4i1.2289

Pan, H., Xia, F., Kumar, T., Li, X., & Shamsy, A. (2022). Massive open online course versus flipped instruction: Impacts on foreign language speaking anxiety, foreign language

learning motivation, and learning attitude. *Frontiers in Psychology*, *13*, 833616. https://doi.org/10.3389/fpsyg.2022.833616

Pierce, R. (2013). Student performance in a flipped class module. In R. McBride & M. Searson (Eds.), *Proceedings of society for information technology & teacher education international conference 2013* (pp. 942-954). Chesapeake, VA: AACE.

Poon, J. (2013). Blended learning: An institutional approach for enhancing student's learning experiences. *MERLOT Journal of Online Learning & Teaching, 9*(2), 271-289.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5), 1-6. https://doi.org/10.1108/10748120110424816

Pudin, C. S. J. (2017). Exploring a flipped learning approach in teaching grammar for ESL students. *Indonesian Journal of English Language Teaching and Applied Linguistics*, *2*(1), 51- 64. https://doi.org/10.21093/IJELTAL.V2I1.47

Qi, P., Jumaat, N. F. B., Abuhassna, H., & Ting, L. (2024). A systematic review of flipped classroom approaches in language learning. *Contemporary Educational Technology*, *16*(4), 529-547. https://doi.org/10.30935/cedtech/15146

Rameshianfar, A., Shahnazari, M. T., & Tavakoli, M. (2015). The effects of two pre-listening vocabulary and enhanced content-related supports on Iranian intermediate EFL learners' listening comprehension sub-skills. *Journal of Applied Linguistics and Language Research, 2*(8), 284-302.

Robinson, L., & Feng, J. (2016, February). *Effect of direct grammar instruction on student writing skills*. [Paper presentation]. Eastern Educational Research Association (EERA) Annual Conference, Hilton Head Island, SC, United States.

Saidah, S., & Kediri, I. (2019). The effectiveness of flipped classroom in teaching grammar of EFL students. *Journal of English Teaching and Research, 4*(2), 193-206.

Shadiev, R., Wang, X., Liu, T., & Yang, M. (2022). Improving students' creativity in familiar versus unfamiliar mobile-assisted language learning environments. *Interactive Learning Environments*, *31*(9), 5899–5921. https://doi.org/10.1080/10494820.2021.2023891

Shen, Y. (2012). Reconsidering English grammar teaching for improving non-English Majors' English writing ability. *English Language Teaching*, *5*(11), 74-78. http://dx.doi.org/10.5539/elt.v5n11p74

Slavin, R. E. (1991). Synthesis of research of cooperative learning. *Educational Leadership, 48*(5), 71-82.

Spanjers, I. A., Könings, K. D., Leppink, J., Verstegen, D. M., de Jong, N., Czabanowska, K., & van Merrienboer, J. J. (2015). The promised land of blended learning: Quizzes as a moderator. *Educational Research Review*, *15*, 59-74. https://doi.org/10.1016/j.edurev.2015.05.001

Statista. (2022, January). *Most popular social networks worldwide as of January 2022, ranked by number of monthly active users* [Graph]. Retrieved June 20, 2024, from https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

Strayer, J. (2012). How learning in an inverted classroom influences cooperation, innovation, & task orientation. *Learning Environments Research, 15*(2), 171-193. https://doi.org/10.1007/s10984-012-9108-4

Sung, K. (2015). A case study on a flipped classroom in an EFL content course. *Multimedia-Assisted Language Learning, 18*(2), 159-187. https://doi.org/10.15702/mall.2015.18.2.159

Syairofi, A., Suherdi, D., & Purnawarman, P. (2023). Using WhatsApp to support English language learning: A systematic review. *Computer Assisted Language Learning*, *24*(1), 305-337.

Tabacek, D. A., McLaughlin, T. F., & Oward, V. F. (1994). Teaching preschool children with disabilities tutoring skills: Effects on pre-academic behaviors. *Child and Family Behavior Therapy, 16*(8), 43-63. https://doi.org/10.1300/J019v16n02_03

Taylor, L., & Parsons, J. (2011). Improving student engagement. *Current Issues in Education, 14*(1), 1-33. https://doi.org/10.1088/1742-6596/1554/1/012003

Thoms, C. L. (2013, June). *Maximizing the blended learning curriculum by using the flipped classroom approach in the workplace*. [Paper presentation]. The International Conference on E-Learning in the Workplace (ICELW), New York, NY, United States.

Topping, K., & Ehly, S. (1998). *Peer assisted learning*. Routledge.

Toto, R., & Nguyen, H. (2009, October 18-21). *Flipping the work design in an industrial engineering course* [Paper presentation]. 39th ASEE/IEEE Frontiers in Education Conference, San Antonio, TX, United States.

Turan, Z., & Akdag-Cimen, B. (2020). Flipped classroom in English language teaching: A systematic review. *Computer Assisted Language Learning*, *33*(5-6), 590-606. https://doi.org/10.1080/09588221.2019.1584117

van Alten, D. C., Phielix, C., Janssen, J., & Kester, L. (2019). Effects of flipping the classroom on learning outcomes and satisfaction: A meta-analysis. *Educational Research Review, 28*, 1-18. https://doi.org/10.1016/j.edurev.2019.05.003

Vaughan, M. (2014). Flipping the learning: An investigation into the use of the flipped classroom model in an introductory teaching course. *Education Research & Perspectives, 41*(1), 25-41.

Vitta, J. P., & Al-Hoorie, A. H. (2023). The flipped classroom in second language learning: A meta-analysis. *Language Teaching Research*, *27*(5), 1268-1292. https://doi.org/10.1177/1362168820981403

Wang, H. Y., Liu, G. Z., & Hwang, G. J. (2017). Integrating socio-cultural contexts and location-based systems for ubiquitous language learning in museums: A state of the art review of 2009–2014. *British Journal of Educational Technology, 48*(2), 653–671. https://doi.org/10.1111/bjet.12424

Webb, M., & Doman, E. (2016). Does the flipped classroom lead to increased gains on learning outcomes in ESL/EFL contexts? *The CATESOL Journal, 28*(1), 39-67. https://doi.org/10.5070/B5.36040

Weigle, S. C. (2002). *Assessing writing*. Cambridge University Press.

White, R., & Arndt, V. (1991). *Process writing*. Longman.

Willey, K., & Gardner, A. (2013, September). *Flipping your classroom without flipping out*. [Paper presentation]. 41st Annual SEFI Conference, Leuven, Belgium.

Yang, J. (2013). Mobile assisted language learning: Review of the recent applications of emerging mobile technologies. *English Language Teaching, 6*(7), 19–25. https://doi.org/10.5539/elt.v6n7p19

Yu, J., Zhou, X., Yang, X., & Hu, J. (2022). Mobile-assisted or paper-based? The influence of the reading medium on the reading comprehension of English as a foreign language. *Computer Assisted Language Learning, 35*(1-2), 217–245. https://doi.org/10.1080/09588221.2021.2012200

Zhang, P., Ma, J., & Liu, Y. (2014). Flipped classroom: An effective model of improving student teachers′ educational technology. *Journal of Information Technology & Application in Education, 3*(3), 144-149. https://doi.org/10.14355/jitae.2014.0303.02

Zohrabi, M., & Sabouri, H. (2015). The impact of pre-listening activities on Iranian EFL learner's listening comprehension of authentic English movies. *International Journal on Studies in English Language and Literature, 3*(2), 42-56.