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The Investigation on College Students' English Writing Achievements and Perceptions towards a Flipped Instructional Model

Pei-Wen Huang[1], Yan-Ling Hwang[2] & Kuo-Shu Huang[2]

[1] National Formosa University, Department of Applied Foreign Languages, Assistant Professor, Taiwan

[2] Chang Shan Medical University, Department of Applied Foreign Languages, Associate Professor, China

Correspondence: Yan-Ling Hwang, Chang Shan Medical University, Department of Applied Foreign Languages, Associate Professor, Taiwan, R.O.C. E-mail: yanling_h@yahoo.com

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Abstract

Many educators are seeking new methods to motivate and encourage student learning, and the flipped classroom model is increasingly being used by language teachers to engage students. This approach involves students watching instructional videos prior to class, then participating in practical activities during class time. This study aimed to evaluate the effectiveness of the flipped instructional model on the writing achievements, attitudes, and stress levels of first-year college students. The study was conducted in an intact writing classroom from 2020 to 2021 at a central university in Taiwan, with the researcher serving as the instructor. Students were given the option of an 8-week traditional classroom or an 8-week flipped classroom. The study used quantitative research methods to assess students' writing skills and attitudes towards the flipped classroom model, including an EFL writing test and a questionnaire. The study found that the flipped classroom methodology improved students' writing motivation and quality, with students being more comfortable in this type of environment and engaging in more group discussions about video content. Additionally, the flipped model led to significant improvements in students' writing abilities on pretest and posttest assessments. Both quantitative and qualitative data support the positive impact of the flipped classroom model on students' writing performance and attitudes. This research study offers significant insights into the utilization of the flipped instruction model, which can assist educators in enhancing the efficiency of their teaching approaches, particularly in improving students' writing abilities and fostering self-directed learning.

Keywords: flipped instructional model, EFL learners, English writing, perceptions

1. Introduction

According to Jehma and Phoocharoensil (2014), English has become a dominant global language and a primary means of communication. However, second language (L2) learners who lack confidence and face weak learning motivation may struggle to perform well in English, especially in teacher-dominated classrooms. In contrast, the use of technology-assisted teaching methods has transformed the traditional teacher-centered classroom into a more interactive learning environment that promotes active learning. In traditional classrooms, students tend to be passive learners, with limited interactions and discussions between them and their teachers due to the content delivery-focused teaching approach. As noted by Huang and Hwang (2013), this teacher-centered approach negatively impacts students' attitudes towards learning, leading to anxiety, disappointment, frustration, low motivation, and skepticism. Language teachers must work towards building high levels of learning motivation and active participation to foster strong English proficiency among second language learners.

Additionally, Huang and Hwang (2013) suggested that L2 learners can benefit from a positive emotional state and active participation. One model that has gained the attention of educators worldwide, particularly in higher education, is the blended learning model. This model combines face-to-face learning and student-teacher interaction with online assignments and activities, allowing for innovative student-driven instruction that replaces unnecessary teacher instruction. To improve the blended learning environment, the flipped classroom model has been introduced. The flipped classroom, first proposed by Bergmann and Sams (2012), is a widely adopted approach that transforms classroom-based instruction into a learner-centered learning experience. In this model, teachers act as facilitators rather than instructors, and students are expected to review instructional materials, presented through video lectures or posted materials, before class. This allows for collaborative, active,

and cooperative problem-solving pedagogy in class and online, while traditional classrooms are often inefficient and fail to engage students. The flipped classroom represents a transformative role for teachers who prioritize the needs of their students over their own teaching methods.

According to Souza and Rodrigues (2015), traditional English writing classes are characterized by passive learning, where students focus on their teacher's lectures and writing assignments. This approach results in a constrained time period for writing and a silent, passive attitude towards the task. This method of teaching writing is considered ineffective, inefficient, and irrelevant by 21st century students in the traditional classroom. Nunan (1999) emphasizes that writing is a challenging skill to teach and learn, even for native speakers. However, writing well can make students feel at ease and encourage them to participate in imaginative activities. Additionally, writing allows students to access contemporary information technology and expand their knowledge. Developing writing skills involves meaning-focused learning, language-focused learning, and fluency development, making it an excellent opportunity for EFL learners to improve their academic performance and future career prospects. Unfortunately, many EFL students face challenges when learning to write, including struggling with grammar structures, limited vocabulary, and difficulty organizing their ideas. Furthermore, topics may not be appealing to them due to the limited time available in the classroom. This lack of opportunity for correction and consultation with the teacher can lead to decreased interest and motivation in writing.

Numerous studies have investigated the effectiveness of the flipped classroom model in various secondary school subjects, such as math, science, English, and social studies (Lee, 2013; Clark, 2015; Bae & Kwon, 2013). However, little research has been conducted on the impact of this model on the academic performance and stress levels of EFL students, particularly in writing classes during their first semester of college. Despite the proven success of the flipped classroom method in teaching and learning, few studies have explored its application in the Taiwanese college context. Therefore, this study aims to investigate the effects of the flipped instructional model on the writing skills, English writing achievement, and stress levels of EFL college freshmen in Taiwan.

1.1 Purpose of Study

The aim of this research was to investigate the impact of the flipped classroom model on the writing achievements and perceptions, including stress levels, of EFL first-year college students. The study separately examined the writing skills of the students and their opinions of the flipped classroom instruction in English writing class at different times. The researcher intended to combine the students' perceptions and stress levels to evaluate the effectiveness of the flipped teaching method and provide insights and analysis on how it could enhance the writing performance of English language learners. To accomplish these goals, the study focused on the following research questions:

(1) How do college freshmen students perceive the effectiveness of English wring skills through the flipped instructional model?

(2) To what extent does the flipped instructional model affect college freshmen students' English writing performance?

(3) How do college freshmen students demonstrate the stress levels in the flipped classroom?

2. Literature Reviews

2.1 The Concepts of Blending Learning

E-learning and face-to-face classroom instruction are combined in a process known as "blended learning" (Astalin, 2012; Williams, 2002). According to Bliuc, Goodyear, and Ellis (2007), blending learning involves engaging students and teachers in both face-to-face interactions and technologically-assisted learning activities. By utilizing technology to improve cooperation and communication between students and teachers, blending learning replaces conventional educational and teaching methods, according to Sharpe, Benfield, Roberts, and Francis (2006). In tertiary education, hybrid courses are a common name for blended learning. Garnham and Kaleta (2002) noted that hybrid or blended courses give learners with some flexibility the best features of online learning, including face-to-face interaction and web-based learning activities to enhance active, self-directed learning opportunities. There is less "seat time" in the classroom, but it is still present. For the development of skills and overall learning, blended learning offers a flexible teaching methodology.

Technology is not the only thing that blended learning includes in a conventional course. Contrary to "distance education" courses, blended courses do not offer all classes online and do not merely transfer information to websites, according to Dziuban, Hartman, Moskal, and Sorg (2005). Instead, Bleed (2001) suggested that it should be an opportunity to redesign courses in higher education by fusing in-person and online learning.

2.2 Web-based Learning and Adult Learners

Adult learners, who require unrestricted learning in physical locations to accommodate their work and multiple responsibilities, can benefit from asynchronous learning. Asynchronous communication, in accordance with Palloff and Pratt (1999), addresses the characteristics of adult learners and promotes the growth of a learning community where students can look for and provide support. According to Shotsberger (1997), self-directed learning is necessary for online instruction. Eastmond (1995) also believed that in distance education, self-direction is a function of the individual learner. French et al. (1999) assert that in order to effectively use the internet as a teaching tool and give students more authority over their learning process, it is necessary to comprehend the notion of self-directed learning. Adults are frequently classified as self-directed learners with specific educational goals and objectives because of their intense motivation. For adult learners to acquire new knowledge and skills, their prior learning experiences are essential. Furthermore, French, Hale, Johnson, and Farr (1999) claim that traditional lectures and didactic teaching approaches often fail to make use of the important resource that adult learners' prior knowledge represents. Internet-based learning is an approach to gain from the prior experiences and skills of adult learners in ways that conventional methods have frequently failed to do if it is premised on interactive learning methods where students are regarded as knowledge discoverers and asked to work in teams. The most prevalent idea in adult learning theory today is that for instruction to be active and effective, it must be student-centered and self-directed. According to Berge (1996), a learning environment that is significantly more likely to be student-centered than teacher-centered is created by online teachers in higher and continuing education after exploring the perspectives of 42 teachers about their teaching in post-secondary, formal educational environments. French et al. (1999) also contended that teachers who construct and facilitate adult Web-based learning experiences must take into account the entire scope of learner-centered instruction. Jaeger (1995) also pointed out that in online courses, students are required to be independent, pay close attention to instructions, and try different approaches when the first ones don't work. Students develop self-direction and take ownership of the course's goals as a result. They start to rely on one another as well.

2.3 The Definition of a Flipped Classroom Model

According to Berrett (2012), there are various methods by which people learn, including face-to-face interaction, online remote teaching, and peer review. The flipped classroom model differs from traditional classroom models in several ways. In a flipped classroom, instructors use a reversed teaching approach where students use technology such as videos to access lessons outside of class hours (Findlay-Thompson & Mombourquette, 2014). Gerstein (2011) sees the flipped classroom as a platform for cooperative learning, problem-solving, and studying complex concepts. The flipped approach goes beyond video lectures, as students can engage in online quizzes or readings before class to learn most of the material. During class, students participate in student-centered activities such as group discussions, case studies, task projects, or experiments led by the teacher (Herreid & Schiller, 2013). In essence, the flipped classroom concept suggests that students complete lectures at their own pace outside of class, while homework is done in class with the teacher's assistance. Snowden (2012) adds that the flipped classroom model focuses on completing homework at school, while teacher lectures are reviewed and learned at home. Tucker (2012) also notes that the flipped classroom involves interactive or video lessons recorded by the teacher and accessible from home.

To put it simply, flipped classrooms involve teachers providing interactive and relevant learning activities and materials based on what students have learned prior to class. Bretzmann (2013) argues that this model can help students develop higher order thinking skills and create a more student-centered learning environment by effectively integrating student-to-teacher interaction in class. In support of this idea, Strayer (2007) proposed a conceptual framework for a flipped classroom using the behind-the-scenes diagram (Figure 1), which emphasizes active learning during class time and extensive use of educational technology outside of class to enhance the learning environment in the flipped model.

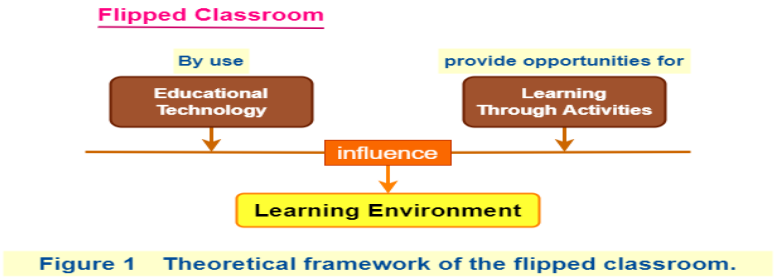

Figure 1. Theoretical framework of the flipped classroom

Furthermore, a graphic representation of the flipped classroom model was provided by Bishop and Verleger (2013) as shown in Figure 2. This illustration provides a comprehensive definition of the flipped classroom and implies that it involves assigning reading materials outside of class and holding discussions during class time. Sung (2015) also emphasizes that the flipped classroom provides students with unrestricted access to an online learning platform where they can work individually or collaboratively to watch instructional videos, test their comprehension by answering questions, and learn additional materials before class. During class time, students then apply their knowledge by engaging in interactive activities, group projects, or discussions related to the assigned readings.

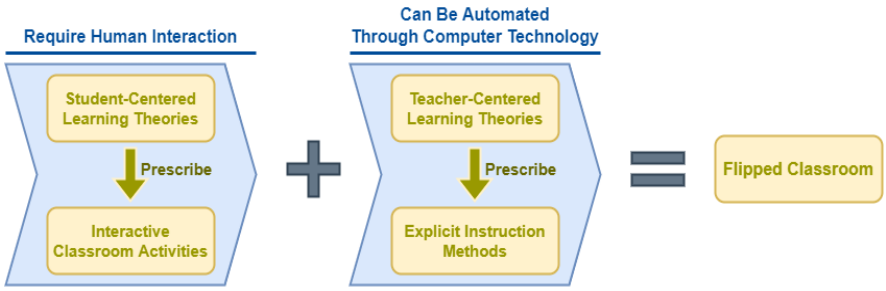

Figure 2. The Flipped Classroom Model

2.4 Related Studies of the Flipped Instructional Model

Bergmann and Sams (2012) proposed a shift from the conventional education model to a student-centered approach after observing the success of posting chemistry course material online for students. According to Hamdan, McKnight, McKnight, and Arfstrom's (2013) study, 450 teachers who participated in the survey agreed that utilizing videos and establishing ongoing interaction with students was effective.

Consequently, the flipped classroom is considered an effective educational model that combines interactive learning in the classroom and video lecture instruction outside of it (Bishop & Verleger, 2013). In other words, the primary teaching approach involves interactive activities and direct interaction with students in the classroom, while recorded video lectures are assigned as homework. In addition, Jeong (2017) explores university students' experiences of using Moodle as an online learning management system to facilitate flipped learning procedures within the context of English as a foreign language (EFL). This paper discusses the adoption of Moodle as an online learning management system and the implementation of flipped learning in EFL education, exploring various issues related to this integration. Additionally, the study examines how integrating Moodle into flipped classrooms has improved students' English language learning and classroom interaction.

Moreover, the study of Abu Safiyeh and Farrah (2020) intended to investigate the effectiveness of implementing flipped classrooms on the English language skills (including reading comprehension, writing, listening, and speaking) and areas (such as grammar and vocabulary) of seventh-grade students at Farahat Secondary Girls' School. Two 7th-grade classes were selected for the study, with the experimental group receiving flipped learning and the control group receiving traditional learning. The study's major findings showed significant differences in English language skills and areas between the experimental and control groups. The experimental group achieved higher scores, with the most significant improvements observed in listening, speaking, and communication skills.

Chou, Chen, and Hung (2021) conducted the experimental study in Chungli, Taiwan, involving 386 high school students. The research findings revealed that students who participated in the flipped teaching models

demonstrated better comprehension of the teaching content due to the change in learning style and attitude, leading to enhanced learning effectiveness. Based on these results, it is recommended that efforts be made to improve students' active learning ability, boost their learning interests, enhance learning effectiveness, and encourage a shift from passive to active learning, ultimately leading to greater creativity in the classroom.

Recently, to understand the impact of flipped learning on vocational learners, Zhou (2023) analyzed previous studies on the effect of flipped learning on cognitive skills and emotional states. The results of these investigations indicated that flipped learning had a significant positive impact on learners' engagement, motivation, self-efficacy, critical thinking, problem-solving, learning skills, learning strategies, and communicative competence. This review suggests that flipped learning, as a form of blended learning, could benefit not only learners but also instructors and parents, and should be considered a valuable approach for vocational education. It is also thought that flipped teaching can encourage underachieving learners to become more actively engaged in the learning process, thereby enhancing overall learning effectiveness.

3. Research Design

3.1 Participants

This quantitative study conducted at a university in central Taiwan during the first semester of the 2020-2021 academic year aimed to examine the effectiveness of the flipped instructional model in a college writing class and to assess the perceptions and stress levels of first-year English major students. The study involved 47 participants from a single intact class, comprising of 30% male students and 70% female students, who regularly attended a 60-minute English grammar and writing course. The participants, aged 18 to 19 years, had an average of ten years of English language study and had no prior experience with flipped classrooms.

3.2 Instruments

The current study is conducted by first-year university students majoring in the English language. The researcher is the teacher of “Grammar and Writing I” course in the first semester using and research instructional framework is demonstrated as Table 1 below.

Table 1 Summary of Writing Instructional Framework

Style	Inside Class	Outside Class
Traditional classroom	Lectures	Practice Exercises & Writing assignments
Flipped classroom	Practice Exercises; Writing analyses; Questions & Answers;Group-Based/Open-Ended Problem Solving	Video Lectures; Closed-Ended Quizzes & Practice Exercises

The aim of this writing course was to teach six distinct writing styles, including narration, description, comparison and contrast, cause and effect, procedure, and classification. To achieve this, the writing objective is communicated to the students, and several related YouTube lecture videos for each writing style are provided. Furthermore, academic writing assignments are uploaded on Blackboard, the online learning platform for students. All lecture-related materials are provided and uploaded by the researcher before the actual class, allowing students access to lecture videos and specific educational YouTube links outside of the classroom. To facilitate self-directed learning, students are expected to watch the lecture prior to the regular class. During the regular writing class period, the teacher leads interactive group activities, provides discussion worksheets, and offers in-class writing practice opportunities. This use of the flipped classroom model allows students to engage with the material both in and out of the classroom.

The traditional teaching methods have been updated through the flipped classroom model, which allows students to access lecture materials through PowerPoint slides, recorded audio lectures, or recorded video lectures. To prepare for class, students are required to watch video lectures at home, and then engage in more hands-on, active learning activities during class time, which are designed by the teacher. In a flipped classroom, the teacher's role is to facilitate student discussion and critical thinking while encouraging collaboration. The educational goal of the writing course is aligned with the introduction of a hybrid approach to learning, combining flipped and traditional teaching methods with interchangeable instruction. This approach challenges students in the flipped writing class to use their problem-solving skills and demonstrate their learning through

class discussions. Additionally, the lesson objectives are more focused on guiding students' apprenticeship and self-directed learning.

3.3 Treatments

Ahmed (2016) used an adaptation of the survey of students' opinions regarding the flipped classroom model as the questionnaire for this study (see appendix 1). This self-created survey examines students' participation in writing in a flipped classroom and is based on a meta-construct development. To determine whether the flipping instructional model can enhance writing skills, the students' attitudes toward it are examined and measured. It has two parts and was created specifically for the current study. Basic demographic information is gathered in the questionnaire's first section, including gender and year of schooling. The second section of this questionnaire explores how college students view the flipped classroom model. Thirty items consist the questionnaire, and each item has a five-point—Likert format: (5) Strongly Agree (SA), (4) Agree (A), (3) Neutral (N), (2) Disagree (D), and (1) Strongly Disagree (SD). Thirty questions were developed to examine students' perspective about the flipped instructional model and their stress levels. (Q 27,28,29,30). The purpose of the questionnaire is to gather data and enhance the study with students' perspectives on the flipped teaching model. To maintain face validity, two seasoned researchers assist in ensuring that the survey's items are clear and unambiguous. The questions are revised due to the content validity to remove false statements and to ensure that they are cognitively structured to satisfy the needs of the study. Additionally, the questionnaire was given to a group of five students before the study itself. The outcomes of the question items were revised, and their content validity was validated, to prevent false assertions and guarantee compliance with the requirements.

3.4 Procedure

This study took place in the researcher's writing classroom, which was used for both the traditional and flipped classroom sections of the intact writing course during the spring semester of the 2020-2021 academic year. The traditional classroom involved lectures during scheduled class meetings and writing assignments outside of class, while the flipped classroom required students to watch narrated PowerPoint or YouTube videos and complete worksheets prior to class. In-class activities consisted of alternating ten-minute mini-lectures and five to seven-minute active learning exercises, with the first ten minutes focused on introducing the course's video and audio and developing students' English language skills. Students were encouraged to read and imitate to enhance their listening and speaking abilities, and the teacher facilitated discussions and class interactions. Writing tests and a questionnaire were administered in the ninth and eighteenth weeks, respectively, and the students' writing proficiency and responses were analyzed at the end of the semester. Bergmann & Sams (2012) were used as a source for adapting the flipped classroom model (see Table 2).

Table 2. The summary of syllabus of the one writing class

Traditional Classroom		Flipped Classroom	
Activity	Time	Activity	Time
Warm-up activity	10 min	Warm-up activity	10 min
Go over previous writing homework	20 mins	10-minute mini lecture	10 mins
		Q & A (pop quiz) from Youtube video	
Lecture new content	30 mins	Guided and independent practice and or /lab activity; group activities	40 mins

3.5 Data Analysis

To ensure the questionnaire's clarity and content validity, two experienced researchers reviewed and revised the questions. To evaluate the questionnaire's internal consistency and reliability, the Cronbach Scale and SPSS 20.0 were utilized. Chi-square and T-test analyses were then used to determine the effects of the flipped classroom model on freshmen students' perceptions, stress levels, and English writing performance. The Chi-square test was used to examine the association between two categorical variables, such as students' perceptions of flipped learning and their stress levels, while the T-test was used to compare the means of two groups, such as the writing performance of students in the flipped classroom group versus those in the traditional classroom group. By utilizing these statistical tests, it was expected to find that the flipped classroom model had a significant impact on the freshmen students' perceptions, stress levels, and English writing performance.

4. Results and Discussion

Question 1. How do college freshmen students perceive the effectiveness of English writing skills through the flipped instructional model?

Table 3. The overall descriptive statistics of the students ' perception of flipped instructional model in the writing class

Items related	Minimum	Maximum	Mean	Standard Deviation
1	2.00	5.00	3.8305	.81267
2	3.00	5.00	3.9000	.87721
3	2.00	5.00	3.5667	.85105
4	1.00	5.00	3.6949	.91452
5	1.00	5.00	3.7167	.88474
6	2.00	5.00	3.8475	.88695
14	2.00	5.00	3.7500	.96770
19	2.00	5.00	3.8571	.94250
23	2.00	5.00	3.8571	.92301
22	1.00	5.00	3.3571	.99870
24	1.00	5.00	3.8182	.98302

According to Table 3, the overall results for items related to the flipped instructional model in the writing class had an average mean value of 3.74. This indicates that students who participated in the flipped instruction perceived positive effects on their writing skills. The item with the highest mean value was item 2, "Through the video lecture, I have enough time to acquire the sentence structure," with a mean of 3.90, followed by item 24, "I think the online video/materials used in my English class so far are effective in helping me learn," with a mean of 3.85. However, the lowest mean value of 3.35 was found in item 22, "I prefer watching video lessons at home (such as the annotation video) rather than live teaching instruction in class." While the mean value of 3.35 is higher than the median of 3.00, the results indicate that some students still prefer attending physical classes rather than watching videos at home.

Question 2. To what extent does the flipped instructional model affect college freshmen students' English writing performance?

Table 4. the descriptive statistics of students' writing performance before and after the flipped instruction

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pre1	86.9362	47	13.30806	1.94118
	post1	90.3617	47	14.01153	2.04379
Pair 2	pre2	76.4468	47	32.45251	4.73369
	post2	77.8723	47	33.05570	4.82167

Table 4 reports that 47 students from the writing class underwent two sets of writing tests. The pre1 and pre2 sets were administered as pretests for the writing essay prior to the flipped instruction. The post1 and post2 sets, on the other hand, were conducted as posttests for the same writing essay after the students had watched the video materials. The mean values of the posttests were greater than those of the pretests, suggesting that the flipped instructional model had a beneficial effect on enhancing students' writing skills.

Additionally, the study examined the cognitive strategies used by students in the writing class. The results showed that students' most used strategy was "reading the teacher's comments and feedback" with a mean value of 4.19, indicating that students found feedback from the teacher to be helpful in improving their writing skills. On the other hand, the least used strategy was "brainstorming ideas before writing" with a mean value of 2.77, suggesting that students may need more support in generating ideas and organizing their thoughts before writing.

Table 5. Pre-Post scores on students' writing performances

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	pre1 - post1	-3.42553	2.90235	.42335	-4.27770	-2.57337	-8.091	46	.000
Pair 2	pre2 - post2	-1.42553	2.54365	.38562	-2.20174	-.64933	-3.697	46	.001

Table 5 provides an analysis of the pre-post scores on students' writing performance before and after the flipped instruction. The results show a significant difference between pre1 and post1 scores ($t = -8.09$, $p < .01$), indicating that the flipped instruction had a positive impact on students' writing skills. Additionally, there was a significant difference between pre2 and post2 scores ($t = -3.69$, $p < .01$), suggesting that the flipped instructional model improved students' writing performance. Overall, the findings suggest that the flipped writing instruction led to better student achievement, with post-test scores surpassing those of the pretest.

Question 3. How do college freshmen students demonstrate the stress levels in the flipped classroom?

Table 6. The descriptive statistics of students' stress level

Table 6. The descriptive statistics of students' stress level

Items related	Mean	Standard Deviation
Item 27	2.67	1.19
Item 28	3.80	1.01
Item 29	2.96	1.02
Item 30	2.73	1.10

Based on the results shown in Table 6, it was found that three items, namely item 27 (mean 2.67), item 28 (mean 2.96), and item 30 (mean lower than 3.00), were reversed items. These mean values suggest that students did not experience much stress when taking the flipped instruction. The findings also indicated that students were comfortable with the flipped instructional model, as reflected in the mean value of item 28, "I feel relaxed by watching movies and videos," which was 3.80. Therefore, it can be inferred that the flipped instructional model was well-received by the students and did not cause significant stress or discomfort.

5. Discussion

The finding of the question one suggests that students who participated in the flipped instructional model perceived positive effects on their writing skills. Specifically, students found that the use of video lectures gave them enough time to acquire sentence structure, and they believed that the online materials and videos used in their English class were effective in helping them learn. The findings of this study are consistent with Zhou's (2023) suggestion that flipped learning, as a form of blended learning, can provide benefits not just to learners but also to instructors and parents. As a result, it should be considered a valuable approach for vocational education. Interestingly, the finding that students preferred attending physical classes rather than watching videos at home is worth noting. This may indicate that students still value face-to-face interaction and the traditional classroom experience, even with the benefits offered by online learning.

However, the study's findings appear to differ from Garnham and Kaleta's (2002) research, which highlights the benefits of hybrid or blended courses. Garnham and Kaleta argue that such courses enable learners to enjoy the advantages of both online learning, like web-based activities, and face-to-face interaction, which provides greater flexibility and enhances opportunities for active, self-directed learning. However, the current study's results suggest that students still hold face-to-face interaction and the traditional classroom experience in high regard, despite the advantages that online learning can offer. As such, it may be necessary to find ways to integrate the flipped instructional model with in-person teaching to better accommodate students' preferences

and needs.

Regarding the findings of the question two, Table 4 suggests that the flipped instructional model had a positive impact on students' writing skills, as evidenced by the higher mean values in the posttests compared to the pretests. This finding supports the idea that the flipped classroom model can be an effective way to improve student learning outcomes.

Moreover, the question three with the findings from Table 6, suggesting that students did not feel significantly more stressed by the flipped instructional model. However, it is important to note that some students did report feeling stressed, as indicated by the lower mean values for reversed items 27 and 30. It is important for educators to be aware of the potential stress that can be associated with online learning, even with the benefits it offers. One suggestion for addressing this is to provide clear and consistent communication and support to students throughout the course. This can include providing a detailed syllabus, clear instructions for assignments and assessments, and timely feedback on student work. Additionally, educators can provide resources for stress management and time management, such as mindfulness exercises or tips for effective study habits.

6. Conclusion

The purpose of this study was to investigate the effectiveness of the flipped classroom approach in improving students' writing skills in an English writing course, as well as to explore students' perceptions of this approach. The results showed that students in the flipped classroom environment were more at ease and demonstrated improved writing motivation and quality, as well as better-structured and organized post-writing performances. The use of the flipped model had a significant positive impact on students' writing abilities on both the pretest and posttest. However, it is important to note that students still showed a preference for physical classes, indicating the continued value of face-to-face interaction and the traditional classroom experience. It is suggested that educators should consider ways to integrate the flipped instructional model with in-person teaching to better accommodate students' preferences and needs.

Regarding students' cognitive strategies, the study found that reading the teacher's comments and feedback was the most commonly used strategy, indicating the importance of teacher feedback in enhancing student writing skills. However, the finding that brainstorming ideas before writing was the least used strategy suggests that students may need more support in generating ideas and organizing their thoughts before writing. Teachers could provide more support to students in this area, such as through brainstorming activities or providing prompts to help students develop their ideas.

The findings of the study have significant implications for teaching English writing courses. Firstly, it suggests that incorporating a flipped classroom approach can effectively enhance students' writing skills by allowing them to engage with course materials at their own pace and providing more time for learning. Secondly, it highlights the importance of constructive feedback and guidance throughout the writing process, which can be provided by teachers. Thirdly, it underscores the need for teachers to support students in generating ideas and organizing their thoughts before writing. Finally, the study emphasizes the importance of recognizing and addressing students' preferences for traditional classroom experiences while integrating online learning.

Overall, the study provides valuable insights on the use of the flipped instruction model that can help teachers improve the effectiveness of their teaching methodologies, particularly in enhancing students' writing skills and promoting self-directed learning.

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Appendix

Questionnaire of the Flipped Instructional Model on College Students' English Learning

This survey is entirely confidential and anonymous. We are not asking for your identity and the information gathered will not be used for any purposes other than compiling data to instruct medical students better. Please read the instruction of every section with care and complete the following questionnaire to the best of your ability. Thank you very much for the cooperation and essential contribution to the evaluation!

Part I. Demographics

Gender: ____ Male ____Female

Students: ____ freshman ____ sophomore ____junior ____senior

Students major: _____

Do you take any English proficiency tests? Toeic: scores _____; GEPT: level _____: other:_____

Part II. Perception on Flipped Classroom's in English Learning

Indicate your attitude to rate the importance of each of the following items. (Use the following scale: 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree)					
1. The flipped instruction allows me to prepare for my writing class in advance	1	2	3	4	5
2. Through the video lectures or link, I have enough time to acquire the sentence structures	1	2	3	4	5
3. I feel more confident to ask for clarifications in class after watching the online lecture videos.	1	2	3	4	5
4. I feel more confident about my writing learning due to the flipped instructional model.	1	2	3	4	5
5. The flipped instruction made it easier for me to write assignments.	1	2	3	4	5
6. My writing strategies are better as I have more time to apply the learning in class.	1	2	3	4	5
7. I feel I am more in charge of my learning through the flipped instruction.	1	2	3	4	5
8. I feel that the flipped instructional model has not helped me at all.	1	2	3	4	5
9. I understand more when the teacher explains in class.	1	2	3	4	5
10. I like to write in class to get instant feedback from my teacher.	1	2	3	4	5
11. The quality of my communication skills in English has improved.	1	2	3	4	5
12. I felt more engaged in this writing class than in other classes I have taken.	1	2	3	4	5
13. Classroom time was used effectively.	1	2	3	4	5
14. If given the choice, I would continue learning English with the flipped instructional model.	1	2	3	4	5
15. The flipped instructional model helped me feel more comfortable speaking English during class.	1	2	3	4	5
16. The flipped instructional model increases my English listening comprehension.	1	2	3	4	5
17. Online resources are helpful in learning English.	1	2	3	4	5
18. Online grammar quizzes that allow me to receive immediate feedback are helpful in learning English.	1	2	3	4	5
19. Knowledge of English grammar is important to my overall learning of English.	1	2	3	4	5
20. Knowledge of vocabulary is important to my overall learning of English.	1	2	3	4	5
21. The best way to learn grammar is to have my teacher lecture on it in class.	1	2	3	4	5
22. I prefer watching video lessons at home (such as the annotation video) rather than live teacher instruction in class.	1	2	3	4	5
23. I feel that the use of technology is helping me learn in this class.	1	2	3	4	5
24. I think the online videos/materials used in my English class so far are effective in helping me learn.	1	2	3	4	5
25. My English classroom provides me more opportunity than my other classes to communicate with other students.	1	2	3	4	5
26. I like submitting assignments and receiving teacher's feedbacks online through online platform.	1	2	3	4	5
Stress Levels					
27. I feel stressed when I watch online lectures videos outside the classroom.	1	2	3	4	5
28. I feel relaxed to learn English by watching movies and videos.	1	2	3	4	5
29. I feel worried if my computers or smartphones work properly when I want online lecture videos assigned.	1	2	3	4	5
30. I feel tired and annoyed when previewing lessons by watching videos at home.	1	2	3	4	5