The Use of Flipped Classroom Technology Approach with E-Writing Program to Develop Writing and Promote Active Learning Environment of Thai EFL Learners

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Abstract

The utilization of technology and digitalization has ushered in substantial changes within the education system, exerting a profound influence on the processes of teaching and learning. This study introduces an innovative approach, the flipped classroom learning method, with the objective of enhancing the writing skills of learners. The research encompasses the following objectives:

(1) To evaluate the impact of the flipped classroom learning approach, combined with the e-Writing instructional design program, on the writing skills of EFL (English as a Foreign Language) learners.

(2) To investigate the creation of an active learning environment for learners who have experienced the flipped classroom learning approach with the e-Writing instructional design program.

(3) To explore the attitudes of EFL learners regarding the implementation of the flipped learning approach with the e-Writing instructional design program within a writing classroom.

This study involved 30 participants enrolled in an Essay Writing course, selected through a purposive sampling method. Six research instruments were employed:

(1) Flipped classroom lesson plans
(2) Achievement tests
(3) Questionnaires
(4) Flipped classroom learning technology with a model for an e-Writing instructional design program
(5) Interview questions
(6) Focus group discussions

Data collection took place during the second semester of the Academic Year 2022, with data analysis conducted using SPSS for quantitative data and coding and content analysis for qualitative data. The primary findings demonstrated that the flipped classroom learning approach effectively enhanced learners' writing tasks, bolstering motivation and cultivating a more favorable learning environment that positively impacted the quality of writing. Learners responded positively to the flipped classroom approach, reporting increased engagement in active learning. Consequently, it is recommended that the flipped classroom learning approach be considered as a viable instructional alternative to cultivate a more meaningful learning environment and elevate learners' academic performance.

Keywords: flipped classroom learning technology, e-Writing program, English writing ability, active learning, Thai EFL learners

1. Introduction

The rapid advancements in science and technology, coupled with the emergence and evolution of multimedia technology in education, featuring audio, visual, and animation effects, have significantly shaped the landscape of English instruction. In the 21st century, the educational system has become a subject of profound interest.
among scholars. Each year witnesses a multitude of studies dedicated to enhancing education and pedagogy (Glewwe & Muralidharan, 2016; Qader & Arslan, 2019). Presently, instructional trends revolve around restructuring teaching and activities in a manner that transfers responsibility and ownership of instruction from instructors to learners, fostering a learner-centric environment. Consequently, instructors are encouraged to adapt to these evolving dynamics. Hence, it is imperative for educators to find effective ways to incorporate technology into their classrooms, creating a more conducive and engaging learning environment for their students. To improve instructional management, innovative teaching methods such as the flipped classroom model have been introduced as a pilot project for an English course in Thailand. In the Thai educational system, there is a strong emphasis on developing the “four skills” of English: listening, reading, speaking, and writing.

Among these skills, writing holds particular significance, as it plays a vital role in various aspects of daily life, including academic writing, composing paragraphs, crafting essays, completing forms, sending emails, engaging in business correspondence, and participating in various forms of academic writing (Ahmed, 2016; Boonyarattanasoontorn, 2017; Sarani, Zarei & Naidinia, 2020). The teaching of writing begins in the early stages of education, when students learn how to form letters correctly (Moses & Mohamad, 2019). However, as with any learning challenge, difficulties in writing can have a substantial impact on a student's educational journey. Weak writing skills can lead to setbacks in academic performance (Hyland, 2019). Writing, especially in the context of English as a foreign language (EFL), is recognized as a complex skill to acquire, involving various elements such as identifying the thesis statement, constructing supporting details, reviewing, and editing. Additionally, EFL learners encounter challenges in three main categories. First, linguistic challenges encompass limitations in vocabulary and grammar proficiency (Aunurrahman, 2019). The second challenge relates to students' readiness and their limited exposure to books and reading materials. Finally, instructors face the challenge of motivating and fostering active learning among students, as writing is a multifaceted activity (Gbollie & Keamu, 2017).

As a university-level English instructor experienced in teaching writing courses, I have observed that learners, particularly those studying Essay Writing in English, face various difficulties in composing English essays. Issues such as limited vocabulary and inadequate understanding of sentence structures often hinder their writing progress. Vocabulary knowledge is essential for precise word usage and comprehension of multiple word meanings, while understanding sentence structures involves determining word order and language patterns. Moreover, the choice of topics and exercises may not align with students' interests in their respective fields. Additionally, the use of teaching materials may lead students to practice paragraph writing as technology rapidly advances. These challenges significantly affect the writing abilities of learners. Given these challenges, supporting students in improving their writing skills remains a substantial challenge for instructors. The use of technology can provide valuable assistance in successfully developing students’ English essay writing skills. Many educators have turned to the flipped classroom approach, a hybrid teaching method, to enhance language skills (Kvashnina & Martyanko, 2016; Amiryousefi, 2017; Alexander, 2018; Arslan, 2020).

The flipped classroom model offers several benefits for both instructors and students in English language teaching, including streamlined teaching methods, improved overall performance, enhanced motivation, and the promotion of active learning. In the field of language education, there is still a need for further research to understand how the flipped classroom model can enhance students' learning outcomes. Therefore, to address this gap, the current study aims to investigate the effectiveness of different learning styles within a flipped classroom model in the context of EFL classes. The primary goal of this study is to evaluate the efficacy of implementing the flipped learning approach in conjunction with the e-Writing instructional design program. It seeks to determine whether this approach can enhance students' writing skills while creating an interactive and immersive learning experience. Additionally, the study endeavors to make a meaningful contribution to the field of education by addressing writing-related challenges, fostering learning outcomes with real-world applications, and substantiating improvements in English writing skills.

### 1.1 Purposes of the Study

This study is guided by three main objectives:

1. To assess the effectiveness of the flipped classroom learning approach, combined with e-Writing instructions, in improving the writing skills of EFL learners.

2. To explore the impact of the flipped classroom approach on the creation of an active learning environment for students.

3. To investigate the attitudes of EFL learners towards the implementation of the flipped learning approach with e-Writing instructions.
1.2 Research Questions

The study aims to address the following research questions:

1. Could the adoption of the flipped classroom learning approach contribute to the development of writing abilities among EFL learners in the classroom setting?

2. Does the flipped classroom learning approach facilitate the establishment of an active learning environment in the context of writing instruction?

3. What are the attitudes of learners towards the implementation of the flipped classroom learning approach?

1.3 Conceptual Framework

![Conceptual Framework of This Study](image)

2. Literature Review

2.1 Technology-Enhanced Language Learning

Technology-Enhanced Language Learning is the integration of digital technology and computer-based tools to enhance language teaching and learning. This approach has gained significant importance in the field of language education due to the widespread availability of technology. It has the potential to make language learning more engaging, effective, and accessible. It primarily focuses on how technology impacts the teaching and learning of second languages, often referred to as L2 (Kranti, 2017). Technology empowers learners to access information and resources, taking control of their own learning process. It allows access to a wealth of information beyond the control of instructors. The rapid development of technology used in language learning necessitates staying updated on its applications and changes (Lopez, 2017; Shadi, Hwang, and Liu, 2018; Zhonggen, 2018). Technology applications are instrumental in enhancing learning by aligning with learners’ interests and fostering engagement. It also significantly influences teaching methods employed by instructors. In the realm of education and pedagogy, technology has become an integral part of educational settings. Instructors continually explore opportunities to leverage technology to enhance the learning experience for students, offering numerous opportunities to improve language learning with technological devices.

However, Eady & Lockyer (2013) and Pourhosein Gilakjani (2017) reached important conclusions regarding technology. They found that, with proper execution, language lessons can be more interactive and engaging for both students and teachers. While the use of technology in the classroom has many benefits, it is crucial to find a balance by incorporating digital tools with conventional approaches and in-person lessons. Pourhosein Gilakjani’s study (2017) reported a similar transformation, indicating that the way teachers create and administer lesson plans has radically changed due to technology. Technology is ideal for creating learning environments tailored to students’ interests. The integration of new technology in the classroom has made it easier for teachers to promote language learning and use. It is a necessary tool for teachers in the language classroom, requiring proper skills for effective use (Ahmadi, 2018). By blending old and new methodologies, educators can deliver a
comprehensive and balanced language lesson, involving sustaining enthusiasm, nurturing appreciation for diverse cultures, and establishing achievable objectives in their learning environments.

2.2 Writing in Language Learning

Writing plays a vital role in language learning, helping learners develop language skills, including vocabulary, grammar, and communication abilities. Writing exercises are valuable components of language learning, allowing learners to practice and reinforce their linguistic knowledge. When integrating writing into language learning, it is crucial to set clear objectives and engage in regular practice. It is also beneficial to strike a balance between writing and other language skills, such as listening, speaking, and reading, to develop well-rounded language proficiency (Schmidgall & Powers, 2020b). Different writing styles are employed for various purposes, with the genre approach being an effective means to help learners grasp language effectively (Dirgeyas, 2016).

Writing can typically be categorized into four primary types: expository writing, descriptive writing, persuasive writing, and narrative writing (Bhasin, 2020). Understanding different writing genres is important for writers as it helps them tailor their communication style to suit the purpose and audience of their writing. The writing process approach aims to guide learners in producing well-structured written content by considering the writing process as a whole, with a significant emphasis on meaning creation. Proficient academic writing requires effective planning, drafting, and revision. While the writing process varies among individuals, there are five fundamental steps that can help structure the writing process for various types of texts (Caulfield, 2020).

![Writing process diagram](image)

Figure 2. Writing process 1 (Caulfield, 2020)

It is essential to recognize that the stages of the writing process are not always linear; they can overlap or be revisited multiple times as you work on a piece of writing. Writing is an iterative process, and experienced writers often move back and forth between these stages as they refine their work. Furthermore, feedback from peers, teachers, or editors can be valuable at various points in the writing process, helping writers make necessary improvements. Teaching writing effectively requires a variety of activities to engage students, develop their writing skills, and nurture creativity. Writing exercises are valuable because they encourage learners to think critically about their own writing and help them organize and integrate prior knowledge with new concepts.

Writing in a second language or foreign language can be more challenging and less efficient than writing in one’s first language. Effective activities to improve writing skills may include journaling, creative writing prompts, collaborative storytelling, essay writing, research reports, blogging or online journals, writing across different genres, and engaging in simulated situations. Offering learners a combination of freewriting and more focused task writing that emphasizes specific writing techniques can be beneficial. Writing exercises, as suggested by The Masterclass staff (2021), assist learners in discovering their own writing style, generating ideas, practicing writing in different tones, and improving their overall writing skills.

2.3 Flipped Classroom Learning Technology Approach as a Global Language Learning

The flipped classroom learning technology approach has gained popularity in education and can be effectively employed as a global language learning method. This approach involves reversing the traditional classroom model by delivering instructional content outside of class, often utilizing technology, and using in-class time for activities, discussions, and the application of knowledge. However, successful implementation requires a well-structured curriculum, clear communication, and active engagement from both teachers and students.
Furthermore, the use of technology should be complemented with real-world language practice and cultural experiences to ensure a well-rounded language learning experience (Carhill-Poza, 2019). In a flipped classroom, students access course materials, like lectures and readings, online or through videos outside of the classroom. Classroom time is then dedicated to active learning activities, discussions, and applying the concepts they have learned independently. This approach empowers students to take control of their learning, deciding when and where to study and choosing the strategies that work best for them (Uzunboylu & Karagozlu, 2015).

Carhill-Poza (2019) divides the flipped classroom into two learning environments: outside the classroom and inside the classroom. In the outside classroom environment, students may seek additional information on the internet, watch videos, or listen to audio materials provided by instructors. Inside the classroom, they participate in question-and-answer (Q&A) sessions, group discussions, projects, problem-based learning, interactive exchanges, and other activities that place the learners at the center of the educational experience. This approach allows instructors to conduct in-depth discussions on the topics during class, eliminating the need for traditional lectures (Adnan, 2017; Soltanpour & Valizadeh, 2018; Su Ping, Verezub, Adi Badiozaman, F & Chen, 2020; Shafiee Rad, Roohani & Rahimi Domakani, 2021). Implementing a flipped classroom approach involves several key steps and considerations, including establishing clear learning objectives, creating pre-class assignments, using technology, designing classroom activities, defining the instructor’s role, engaging students, and assessing and grading their progress. To provide a comparison between the flipped classroom technology approach and traditional teaching methods in the context of EFL writing instruction, the researcher highlights key points from the literature in Table 1.

Table 1. The Flipped Classroom Learning for EFL writing instructions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Traditional classroom</th>
<th>The Flipped classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside the class</td>
<td>Instructor: 1. Instructor prepares lecture.</td>
<td>Instructor: 1. Instructor provides condensed video clips, e-Writing Instructional Design Program, e-Learning, or Supplementary reading materials and worksheets to the learners.</td>
</tr>
<tr>
<td></td>
<td>2. Most of the learning activities and contents are held in the class by the instructors.</td>
<td>2. Instructor prepares learning activities and assignments.</td>
</tr>
<tr>
<td></td>
<td>Learners: 1. Learners sit and study within the classroom.</td>
<td>Learners: 1. Learners study by themselves and summarize what they have learned in each chapter</td>
</tr>
<tr>
<td></td>
<td>2. Learners are assigned to do activities and assignments.</td>
<td>Instructor: 1. Instructor performs as a facilitator to guide the learning process, give feedback, and deliver mini lectures.</td>
</tr>
<tr>
<td>Inside the class and during the class</td>
<td>Instructor: 1. Instructor lectures throughout the session.</td>
<td>2. The instructor responds to queries from students and provides additional clarification for those who may find the topic less comprehensible.</td>
</tr>
<tr>
<td></td>
<td>2. Instructor assigns the assignments or projects.</td>
<td>3. Instructor assigns new topics for learners to study for the next session.</td>
</tr>
<tr>
<td></td>
<td>Learners: 1. Learners follow the instructor’s lecturing along the content in each chapter.</td>
<td>Learners: 1. Learners discuss questions about the contents of their study (outside classroom) with their peer and instructor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Learners provide specific questions to guide their learning contents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Learners do activities and exercises using technological instruments.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Learners practice their writing skills themselves via writing assignments, individual work, group work, in-class discussion, group project, peer review, self-learning activities, and so on.</td>
</tr>
</tbody>
</table>
Employing a technology-driven flipped classroom approach to enhance writing skills can lead to improved academic achievements. In a writing-focused flipped classroom, students can benefit from a combination of self-directed learning, active participation, collaboration with peers, and the use of technology-based resources (Renard, 2019; Loizou, 2022). This method enables them to more effectively nurture and refine their writing abilities, resulting in enhanced academic success and readiness for real-world writing tasks. However, when executed effectively, it has the potential to significantly enhance student engagement, understanding, and critical thinking skills. Customize this approach to meet the specific needs and goals of your course or program.

2.4 Motivation in Flipped Classroom Learning Technologies

Motivation plays a pivotal role in the success of a flipped classroom learning environment. When students are motivated, they are more inclined to engage with the preparatory materials and actively participate in in-class activities. Motivation in learning activities helps students focus on their tasks and derive satisfaction from their efforts. Sustained motivation is essential to keep learners concentrated on the lessons to be absorbed. Both motivation and technology can significantly impact writing proficiency. When utilized effectively, technology can enhance the writing process, offer valuable feedback, and inspire writers to enhance their skills (Arslan, 2020). Numerous studies have shown that the application of technology has assisted learners in improving their writing abilities, enabling them to produce higher-quality written work and contributing to the development of their literacy skills (Eubanks, Yeh, and Tseng, 2017; Toney, 2017; Green, 2019; Alharthi & Zhang, 2021).

The incorporation of technology in classrooms introduces engaging and meaningful processes in language learning, which can boost learners’ motivation. Integrating technology into the language classroom is imperative. Research has established that technology is just as effective, if not more so, than traditional teaching methods (Shadiev & Yang, 2020). With technology, learners have the flexibility to progress at their own pace, allowing them to advance if the material is too easy or revisit previous lessons if it is challenging. Furthermore, technology enhances instructional delivery. With a wide array of apps and software available, technology can complement traditional teaching approaches and foster higher academic achievements. Instructors can integrate existing technology into their lessons, enabling both instructors and students to assume new roles within the learning environment. Implementing technology in language classrooms enhances the learning process, creates a motivating atmosphere, fosters autonomous learning, and facilitates educational development.

2.5 Active Learning in Flipped Classroom Language Learning Development

Active learning is an educational approach that prioritizes student engagement, participation, and interaction in the learning process, moving away from passive reception of information. It encourages students to take an active role in their own learning through activities such as problem-solving, discussions, critical thinking, and hands-on experiences with the subject matter. Active learning can take various forms and occur in different settings, including traditional classrooms, laboratories, online environments, and more (Deng, 2020). In a flipped classroom language learning environment, where students have already engaged with language materials outside of class and come prepared to apply what they have learned, active learning proves to be particularly effective (Song, Jong, Chang, and Chen, 2017; Steen-Utheim & Foldnes, 2018; Yang & Chen, 2020).

Furthermore, active learning in language education has the potential to enhance learners' critical thinking skills, which can develop alongside language proficiency. This method allows students to learn by doing, fostering an enjoyable classroom atmosphere that motivates learners to feel confident and enthusiastic about completing their tasks. Instructors in this context act as facilitators rather than mere controllers. A range of activities can be incorporated to promote active learning in the language learning classroom (Active learning, n.d.). To successfully implement active learning, instructors play a crucial role and should be knowledgeable about various teaching approaches and learning activities (Deslauriers, McCarty, L. Miller, Callaghan, and Kestin, 2019).

Here are some examples of active learning activities that can be applied to educate learners:

1. Think-Pair-Share: This involves having learners work individually on a problem or reflect on a passage before discussing their thoughts with a partner.

2. Brainstorming: Instructors can introduce a topic or problem and then ask learners to contribute their ideas and input.

3. Role Playing: Engaging learners in role-playing activities allows them to interact with their peers while working together to accomplish specific tasks related to their assigned roles.
(4) Interactive Lecture: Instructors can break up their lectures at least once per class to engage all learners directly with the material through interactive activities.

(5) Discussion: Effective discussions depend on the framing of questions, which encourage learners to participate actively.

(6) Peer Review: Learners can review and comment on materials written by their classmates, fostering peer-based feedback and improvement.

(7) Peer Correction and Feedback: Instructors can encourage students to provide constructive feedback to their peers, with a focus on aspects like pronunciation, grammar, and vocabulary. This peer review process promotes active learning and skill enhancement.

Incorporating these active learning activities into the classroom is essential to meet learners’ expectations for interactive and engaging experiences, which can enhance motivation and learning outcomes. Working on these activities creates personal connections with the material, increasing learners’ motivation to learn and succeed.

3. Research Methodology

3.1 Research Design

The researcher has implemented flipped classroom learning technology, primarily utilizing the e-Writing instructional design program as the key instructional resource for participants, promoting engagement outside the traditional classroom environment. Furthermore, this study is classified as developmental research, involving the administration of learners’ perception questionnaires to gather participant perspectives. The research also includes interviews and focus group discussions with participants to elicit additional insights and information related to various ideas and responses. To enhance the findings derived from questionnaires, transcript analysis, and document-based data sources, the researcher incorporates interview questions and focus group discussions. This research employs a mixed-methods approach, encompassing both quantitative and qualitative data collection methods. Within this study, learners actively participate in activities aimed at improving their writing skills within the context of a flipped classroom. It is important to emphasize that this research does not impact students’ grades within the online grading system. The scores collected from the two groups do not contribute to the overall grading of the students.

3.2 Population and Participants

The study’s population included sophomore students who were registered for the “Essay Writing in English” course during the second semester of the academic year 2022 at HCU. The research participants were exclusively the students who had enrolled in this specific course. A group of 30 learners was selected from among these participants using a quota sampling method. This approach was employed because of constraints related to the number of students who had initially enrolled in the course, as detailed in the study’s limitations.

3.3 Research Instruments

This study utilized a range of instruments for data collection and assessment, including:

(1) Lesson Plans: These were employed to evaluate the appropriateness and comprehensiveness of English essay writing instruction in a blended learning lesson plan. A panel of three experts validated these lesson plans, and their assessment used Item Objective Congruence (IOC) criteria. The results, as evaluated by these three experts, yielded an average score of 0.25.

(2) Flipped Classroom Learning Technology with Model for an e-Writing Instructional Design Program: After the completion of flipped e-Writing lessons, the quality of these lessons was evaluated by five experts. This evaluation encompassed elements such as content accuracy, lesson design, and suggestions for improvement. The results from this evaluation by five experts indicated a level of “Good,” with an average score of 4.35.

(3) Learners’ Perception Questionnaire: Administered prior to the experiment, this questionnaire underwent reliability testing with 20 participants. The Item Objective Congruence Index, as evaluated by three experts, showed an average score of 0.93.

(4) Interview Questions: These questions were assessed by experts to ensure alignment with the study's objectives. The Item Objective Congruence Index, as assessed by three experts, showed an average score of 0.89.

(5) Focus Group Discussion: This method was employed to gather additional qualitative data and insights from the participants.

(6) Achievement Tests (Pretest and Posttest): Pretest and posttest assessments were employed to measure the learning outcomes of the participants both before and after the intervention.
These instruments were crucial for collecting a combination of quantitative and qualitative data to effectively support the research's objectives and outcomes.

3.4 Data Collection

The research spanned a period of five months, commencing in January 2023 and concluding in May 2023. This duration encompassed several significant activities, including:

1. Pre-Test: Over the course of eighteen weeks, participants completed a pre-test, specifically the writing section of the TOEIC test.

2. Online Self-Study: Subsequent to the pre-test, students embarked on their learning journey through online self-study modules, which focused on writing strategies and various types of essay writing. These modules adhered to the structure provided by the e-Writing instructional design program, with the selection of writing topics customized to align with the students' interests.

3. Data Recording: Thorough record-keeping of each student’s scores was diligently maintained throughout the study.

4. Post-Test: After the completion of their lessons, all students undertook a post-test, which mirrored the pre-test in its content. Importantly, these test scores did not factor into the students’ overall grades.

5. Questionnaire Administration: Following the post-test, questionnaires were distributed to collect feedback from participants regarding the perceived advantages and disadvantages associated with learning English using the teaching methods employed in this study.

6. Interviews: In the study’s final session, students were randomly selected for interviews, providing them with the opportunity to share their experiences, express their viewpoints, and offer suggestions related to the utilization of the e-writing program and paper-based activities in the context of English writing education.

7. Focus Group Discussion: At the conclusion of each session, a focus group discussion was conducted within the classroom setting.

The data collection process adhered to a well-defined procedure. The researcher sought and obtained permission from HCU (presumably the academic institution where the research was conducted) to carry out the study. Crucially, it should be noted that the scores derived from this study did not impact the students’ academic grades. Subsequent to the receipt of permission, participants engaged in a comprehensive flipped classroom learning course that integrated the e-Writing instructional design program and spanned a total of 45 hours, distributed across three hours per week. This comprehensive approach facilitated the collection of substantial data and insights to support the research's objectives.

3.5 Data Analysis

3.5.1 Quantitative Data Analysis

This research incorporated a range of statistical techniques for the assessment of quantitative data. These approaches encompassed:

1. Frequency and Percentage Analysis: The responses from Part 1 of the perception questionnaires were subjected to scrutiny, utilizing calculations of frequency and percentage. This analysis enabled an examination of the distribution of responses.

2. Mean and Standard Deviation Analysis: The data obtained from the questionnaires were evaluated through the calculation of mean values (\( \bar{X} \)) and standard deviations (SD). These metrics were employed to gain insights into the central tendencies and variations in the responses.

3. Mean Score Calculation and Dependent t-test: Pretest and posttest scores were computed and then transformed into mean scores. Subsequently, a dependent t-test was executed to ascertain the statistical significance of any variations between the two sets of scores.

4. Fisher’s Exact Test for Relationship Analysis: Fisher’s Exact Test was used to analyze the potential relationships or disparities between the pretest and posttest scores.

3.5.2 Qualitative Data Analysis

The qualitative data were assessed through a series of methods aimed at making sense of the open-ended information derived from interviews and focus group discussions. These strategies included:

1. Data Coding and Categorization: Information gathered from interviews was meticulously reviewed, coded, and categorized. This coding process permitted the researcher to systematically structure and organize the data.
into more precise and contextually relevant categories. A final set of codes was created and employed for coding all the qualitative data.

(2) Content Analysis: Focus group discussions, conducted in a relaxed classroom setting, were recorded and transcribed. These transcripts were subsequently subjected to content analysis, involving the interpretation and classification of responses based on coded language. This approach facilitated the extraction of valuable insights and the identification of recurring themes within the qualitative data.

The combined use of these quantitative and qualitative data analysis techniques offered a comprehensive and robust evaluation of the research findings, ensuring a multifaceted exploration of the study's objectives.

4. Results

4.1 The Provided Explanation Outlines the Assessment of Students’ Writing Proficiency both Prior to and Following their Engagement with the Flipped Classroom Learning Method, Coupled with an E-Writing Instructional Design Program

Table 2. Descriptive statistics of learners’ perceptions of the flipped classroom learning approach

<table>
<thead>
<tr>
<th>Achievement Test</th>
<th>N</th>
<th>( \bar{x} )</th>
<th>SD.</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>30</td>
<td>16.78</td>
<td>3.389</td>
<td></td>
<td>-.13166</td>
</tr>
<tr>
<td>Post-Test</td>
<td>30</td>
<td>25.16</td>
<td>1.178</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Statistical significance at 0.001

Referring to Table 2, it is evident that the post-test scores (25.16) displayed a substantial and statistically significant increase when compared to the pre-test scores (16.78) at an exceptionally high level of statistical significance (0.001). The marked enhancement in the post-test scores indicates that the implementation of the flipped classroom learning approach along with the e-Writing instructional design program had a beneficial influence on students’ proficiency in composing English essays. The observed disparity in mean scores was determined to be statistically significant, affirming the effectiveness of this instructional method in improving learners’ English essay writing performance.

Table 3. The level scores of pretest and posttest of learners

<table>
<thead>
<tr>
<th>Evaluation Lists</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Very Poor</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Poor</td>
<td>4 13.3</td>
<td>-</td>
</tr>
<tr>
<td>Fair</td>
<td>15 50.0</td>
<td>-</td>
</tr>
<tr>
<td>Good</td>
<td>11 36.7</td>
<td>6</td>
</tr>
<tr>
<td>Excellent</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>30 100</td>
<td>30 100</td>
</tr>
</tbody>
</table>

Based on the data presented in Table 3, the pretest and posttest scores of students in the English Essay Writing course, graded on a maximum scale of 30, can be categorized into two distinct groups:

(1) In the pretest scores, 15 learners achieved “Fair” scores, while 11 learners attained “Good” scores, followed by those with “Poor” scores, respectively.

(2) In the posttest scores, 24 learners achieved “Excellent” scores, with 6 learners securing “Good” scores.

It is noteworthy that every learner demonstrated improved scores in their post-test results. Upon closer examination of the table, a significant enhancement in the average test scores of the learners becomes evident.
Table 4. The comparison scores of learners’ assignments in each essay type

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Very Poor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Poor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fair</td>
<td>6</td>
<td>20.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Good</td>
<td>24</td>
<td>80.0</td>
<td>18</td>
<td>60.0</td>
</tr>
<tr>
<td>Excellent</td>
<td>-</td>
<td>-</td>
<td>12</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

In this study, the various sub-skills associated with essay writing included the introduction, the body of the essay, the conclusion, sentence structure, and transitions. Consequently, the utilization of the flipped learning method in writing classes emerges as an effective instructional approach for enhancing the writing skills of English as a Foreign Language (EFL) students. Referencing Table 4, the scores for the Essay Writing assignments of learners were categorized into four distinct types:

1. **Explanatory Essay (30 Points):** Among the learners, 24 achieved “Good” scores, while 6 received “Fair” scores.
2. **Problem-Solution Essay (30 Points):** The results indicated that 18 learners attained “Good” scores, with 12 achieving “Excellent” scores.
3. **Comparison-Contrast Essay (30 Points):** In this category, 15 learners secured “Good” and “Excellent” scores.
4. **Persuasive Essay (30 Points):** The data reveals that 18 learners received “Excellent” scores, with 12 earning “Good” scores.

Furthermore, when a one-way analysis of variance was conducted on the scores for the four essay writing assignments, the analytical results yielded the following outcomes.

In summary, the findings from this study provide substantial evidence that the implementation of the flipped classroom technology approach effectively enhances the quality of learners’ writing. Notably, when examining the impact of the flipping method, post-test scores outperformed pre-test scores, showcasing significant improvements in various aspects of writing, including introductions, body content, conclusions, sentence structure, grammar, spelling, and the use of transitions. Consequently, the utilization of the flipped classroom learning approach in writing classes can be regarded as an effective instructional method for enhancing the writing skills of EFL learners.
4.2 Learners’ Active Learning Environment after Receiving the Flipped Classroom Learning Approach with E-Writing Instructional Design Program

Table 5. Learners’ opinions on active learning through the flipped classroom approach

<table>
<thead>
<tr>
<th>Learners’ Satisfaction</th>
<th>ì</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Flipped Learning had effectiveness for EFL classrooms.</td>
<td>3.97</td>
<td>.615</td>
</tr>
<tr>
<td>2. Flipped instruction enables learners to get ready for the class ahead of time, and the classroom activities have improved my writing skills.</td>
<td>4.07</td>
<td>.691</td>
</tr>
<tr>
<td>3. Engaging in the Flipped Classroom approach while learning English provides learners with chances to interact with fellow learners.</td>
<td>3.77</td>
<td>.817</td>
</tr>
<tr>
<td>4. The Flipped Classroom Technology Approach was successfully applied in the writing class, and the in-class activities enabled the instructor to provide feedback on your writing.</td>
<td>3.93</td>
<td>.583</td>
</tr>
<tr>
<td>5. The flipped classroom simplifies and offers greater convenience for my English studies outside of the class.</td>
<td>4.00</td>
<td>.643</td>
</tr>
<tr>
<td>6. Learner is satisfied and engaged in learning with Flipped Classroom Technology Approach.</td>
<td>3.87</td>
<td>.629</td>
</tr>
<tr>
<td>7. Learners have the freedom to study from Flipped Classroom Technology Approach.</td>
<td>4.03</td>
<td>.809</td>
</tr>
<tr>
<td>8. The Flipped Classroom Technology Approach fosters an environment of active learning.</td>
<td>4.00</td>
<td>.743</td>
</tr>
<tr>
<td>9. Learners gain academic knowledge with Flipped Classroom Technology Approach.</td>
<td>4.07</td>
<td>.691</td>
</tr>
<tr>
<td>10. Engaging in English learning through the Flipped Classroom Technology Approach offers learners opportunities to communicate with one another.</td>
<td>3.73</td>
<td>.868</td>
</tr>
<tr>
<td>11. The Flipped Classroom Technology Approach incorporates valuable tools to support my learning.</td>
<td>4.07</td>
<td>.640</td>
</tr>
<tr>
<td>12. Utilizing the Flipped Classroom Technology Approach helps alleviate feelings of fear and tension, thanks to the preparatory work done beforehand.</td>
<td>3.87</td>
<td>.860</td>
</tr>
<tr>
<td>13. Learners feel motivated towards the Flipped Classroom Technology Approach.</td>
<td>3.90</td>
<td>.759</td>
</tr>
<tr>
<td>14. The flipped classroom provided me with the chance to study independently before our class sessions.</td>
<td>4.07</td>
<td>.828</td>
</tr>
<tr>
<td>15. Learner is motivated to practice writing by instruction with Flipped Classroom Technology Approach.</td>
<td>4.20</td>
<td>.714</td>
</tr>
<tr>
<td>Average</td>
<td>3.97</td>
<td>.726</td>
</tr>
</tbody>
</table>

The perception questionnaires administered to learners regarding their views on the flipped classroom learning approach, which aims to create an active learning environment in writing instruction, have been presented. Based on the results from these questionnaires, learners were asked to rate the extent to which they benefited from the flipped classroom technology approach using a five-point rating scale for 15 different items. The frequency and percentage of scores for each item were calculated and displayed. The overall level of satisfaction among learners concerning the flipped classroom learning approach yielded an average score of 3.97, with a standard deviation of 0.726, indicating an “Agree” level of consensus. This suggests that learners are in favor of implementing the flipped classroom technology approach.

The findings indicate that, in a study focused on the flipped classroom learning approach, learners exhibited a positive attitude toward this method and recognized several advantages associated with its implementation. Learners agreed on the pedagogical benefits of active learning, increased motivation, pre-class preparation, acquisition of academic knowledge, and the provision of opportunities for learning. They also found it to be a valuable tool in supporting their learning. Furthermore, the flipped classroom approach was considered convenient for learners in terms of accessing study materials and promoting an active learning atmosphere.
In conclusion, these findings highlight the adaptability and advantages of using flipped classroom technology in the context of English as a Foreign Language (EFL), particularly in writing classes and related activities. The technology not only enhanced motivation but also fostered a more relaxed and communicative learning environment, effectively addressing common challenges associated with language learning.

4.3 The Learners’ Attitudes Regarding the Application of the Flipped Learning Approach Combined with the E-Writing Instructional Design Program within the Writing Classroom

The outcomes derived from interviews and focus group discussions shed light on the learners’ favorable disposition towards the incorporation of a flipped learning approach in conjunction with an e-Writing instructional design program within the writing classroom. Key points of significance from these findings include:

Positive Attitude: The learners demonstrated a positive and optimistic perspective regarding the integration of the flipped learning approach with the e-Writing instructional design program, reflecting their favorable perception of this instructional method.

Flipped Learning Approach: The flipped learning approach, which involves students accessing educational materials and content before class to facilitate more interactive and engaging in-class activities, was effectively implemented within the context of a writing classroom.

e-Writing Instructional Design Program: An e-Writing instructional design program typically refers to a digital or electronic platform designed to enhance the teaching of writing skills, often providing a range of tools and resources to support writing instruction.

Implementation in a Writing Classroom: The flipped learning approach was specifically tailored for use in a writing classroom, indicating that it was customized to meet the specific requirements and objectives of teaching writing.

In conclusion, the findings suggest that the combination of the flipped learning approach with the e-Writing instructional design program was well-received by learners in the writing classroom. Their positive attitude implies that they perceived this instructional approach as effective, engaging, and beneficial for the development of their writing skills.

5. Discussion

The discussion of the findings and their implications regarding the implementation of the flipped learning approach with an e-Writing instructional design program in a writing classroom reveals several key observations:

Positive Impact on Writing Skills: The study highlights a positive impact on learners’ writing skills, emphasizing the effectiveness of the flipped classroom approach. Previous research studies have also shown a consistent positive impact on the writing proficiency and skills of English as a Foreign Language (EFL) learners (Ekmekci, 2017; Johnston, 2017; Cheng, Ritzhaupt & Antonenko, 2019). The flipped classroom approach allows learners to engage in collaborative writing, facilitating idea exchange and feedback, ultimately improving their ability to write various types of essays.

Enhanced Motivation and Interaction: In addition to improved writing skills, the flipped classroom approach enhances learners’ motivation and interaction. This aligns with the findings of Yu and Wang (2016) and underscores that it not only improves academic achievement but also creates a more engaging and motivating learning environment. This approach caters to individual learning preferences and needs, allowing learners to progress at their own pace (Qadar & Arslan, 2019; Alghasab, 2020).

Improved Composition and Writing Skills: Learners in the flipped classroom environment exhibited improved structural and organizational understanding, higher test scores, and enhanced writing skills. This method is seen as valuable for language accuracy and efficient skill development (Ekmekci, 2017; Haghighi, et al., 2018).

Active Learning Environment: Learners recognized the presence of active learning opportunities in the flipped classroom, which promotes active participation. This aligns with the research by Turan and Akdag-Cimen (2019) and emphasizes the benefits of improved classroom interaction and increased motivation. The approach encourages hands-on practices through group work, ensuring that class time is used for active learning and collaboration (Alexander, 2018; Karabulut et al., 2018; Chen et al., 2019).

Positive Learner Attitudes: Learners expressed positive attitudes toward the flipped classroom approach, appreciating the shift in the learning environment and the flexibility it offers. Their positivity is consistent with previous research findings (Ekmekci, 2017; Fauzan & Ngabut, 2018; Alghasab, 2020; Alharthi & Zhang, 2021).
The approach enhances learners’ responsibility for their own learning, self-learning skills, and active role in their education. Preparing for lessons before class enhances meaningful and deeper group discussions, a key feature of the flipped classroom model (Yang & Chen, 2020).

In conclusion, the learners in the study displayed a positive attitude toward the flipped classroom approach with an e-Writing instructional design in the writing classroom. The flexibility, motivation, interaction, and alignment with previous research contribute to the favorable reception of this instructional method.

6. Conclusion

The adoption of the flipped classroom learning method in a writing course offers numerous favorable outcomes. This approach not only results in enhanced educational achievements but also introduces an innovative and promising technology that benefits both students and educators. It has the potential to cater to diverse learning preferences and its positive influence on multiple aspects of the learning process establishes it as a valuable teaching technique for improving writing skills and promoting student success.

7. Recommendations for further Research

The suggested avenues for future research outlined in this study encompass a wide range of topics concerning the flipped classroom approach in English language education. These topics include its efficacy, the viewpoints of instructors, and its influence on students’ English proficiency levels. Exploring these areas through research can provide valuable insights for educators and researchers, further expanding the practicality of the flipped classroom approach in language learning.

8. Limitations of the Study

The primary limitation of this study was concerning the learners. Firstly, the limited number of students made it challenging to use a random sampling method. Additionally, learners had the freedom to review lesson materials outside the classroom. Moreover, the flipped classroom method resulted in varying amounts of material covered in lessons among students and their learner groups, potentially leaving some learners unfamiliar with certain test points. Lastly, learners’ attitudes and motivation significantly influenced their overall learning experience. Students who chose not to engage in the lessons might not have fully benefited from the course material.

References


Appendix A
Pretest and Posttest

Directions: In this part of the test, you will write an essay in response to a question that asks you to state, explain, and support your opinion on an issue. Typically, an effective essay will contain a minimum of 500 words. (50 Points)

“Some people think that robots are important for human’s future development. Others think that robots have negative effects on society. Discuss both sides and give your reasons or examples to support your opinion”.

Resources: Adapted from https://www.ieltspodcast.com/writing-task-2/topics-answers/

Your essay will be graded based on this rubric. Consequently, use this rubric as a guide when writing your essay and check it again before you submit your essay. (30 POINTS)

<table>
<thead>
<tr>
<th>Essay Rubric</th>
<th>Range from 0 to 10 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criteria</td>
<td>9-10</td>
</tr>
<tr>
<td>1. Introduction (10 POINTS)</td>
<td>The introduction has an attention-grabbing &quot;hook&quot;, previews the structure of the paper, and states a clear thesis.</td>
</tr>
<tr>
<td>2. Body Paragraphs (10 POINTS)</td>
<td>Body paragraph supports the thesis statement with a clear idea (topic sentence) and supporting details.</td>
</tr>
<tr>
<td>3. Conclusion (10 POINTS)</td>
<td>The conclusion restates the thesis, summarizes the ideas and details from the body paragraphs, and leaves the reader with a sense of finality.</td>
</tr>
<tr>
<td>4. Sentence structure, Grammar and Spelling (10 POINTS)</td>
<td>All sentences are well-constructed and have varied structure and length. The author makes no errors in grammar, mechanics, and/or spelling.</td>
</tr>
</tbody>
</table>
mechanics, and/or spelling, but they do not interfere with understanding.

Transitions clearly show how ideas are connected, but there is little variety.

Some transitions work well but others are awkward or unclear.

The transitions between ideas are unclear or nonexistent.

5. Transitions (10 POINTS)

A variety of thoughtful transitions are used. They clearly show how ideas are connected.

Appendix B
Questionnaire: Perception of Learners

Part 1: Demographics

Instruction: Check (✓) the appropriate box

1. Gender

☐ Male  ☐ Female

2. Age

☐ 19 years  ☐ More than 20 years

3. What is your grade point average?

☐ 2.00-2.50  ☐ 2.50-3.00

☐ 3.00-3.50  ☐ 3.50-4.00

4. How much time do you spend practicing writing online each week?

☐ Less than one hour  ☐ Between 2-4 hours

☐ More than 5 hours  ☐ No never

5. How often do you use technology to write per week?

☐ 1-2  ☐ 3-5

☐ 6-9  ☐ more than 10

Part 2: Perception Questionnaires

Directions: Please read the below statements carefully and answer them as truthfully as possible by ticking (√) in the right box. Rate your opinions to English teaching and learning with the flipped classroom instruction from 1-5

1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree,
<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flipped Learning is effective for EFL classrooms.</td>
<td>1 Disagree</td>
</tr>
<tr>
<td></td>
<td>The flipped instruction allows learners to prepare for the class in advance, and classroom activity.</td>
<td>2 Disagree</td>
</tr>
<tr>
<td>2</td>
<td>allowed me to write good.</td>
<td>3 Neutral</td>
</tr>
<tr>
<td>3</td>
<td>Learning English with the Flipped Classroom gives learner opportunities to communicate with other learners.</td>
<td>4 Agree</td>
</tr>
<tr>
<td>4</td>
<td>Flipped Classroom Technology Approach was effectively implemented in writing class, and classroom activity allowed the lecturer to give feedback to your writing.</td>
<td>5 Strongly Agree</td>
</tr>
<tr>
<td>5</td>
<td>The flipped classroom makes it easier and convenient for me to study English outside class.</td>
<td>1 Disagree</td>
</tr>
<tr>
<td>6</td>
<td>Learner is satisfied and engaged me in learning with Flipped Classroom Technology Approach.</td>
<td>2 Disagree</td>
</tr>
<tr>
<td>7</td>
<td>Learners have the freedom to study from Flipped Classroom Technology Approach.</td>
<td>3 Neutral</td>
</tr>
<tr>
<td>8</td>
<td>Flipped Classroom Technology Approach creates an active learning atmosphere.</td>
<td>4 Agree</td>
</tr>
<tr>
<td>9</td>
<td>Learners gain academic knowledge with Flipped Classroom Technology Approach.</td>
<td>5 Strongly Agree</td>
</tr>
<tr>
<td>10</td>
<td>Learning English with the Flipped Classroom Technology Approach provides learners opportunities to communicate with other.</td>
<td>1 Disagree</td>
</tr>
<tr>
<td>11</td>
<td>The Flipped Classroom Technology Approach has useful tools for supporting my learning.</td>
<td>2 Disagree</td>
</tr>
<tr>
<td>12</td>
<td>The use of the Flipped Classroom Technology Approach reduces a feeling of fear and tension, because of the prior preparation.</td>
<td>3 Neutral</td>
</tr>
<tr>
<td>13</td>
<td>Learners feel motivated towards the Flipped Classroom Technology Approach.</td>
<td>4 Agree</td>
</tr>
<tr>
<td>14</td>
<td>The flipped classroom gave me opportunities to study by yourself before the class meet.</td>
<td>5 Strongly Agree</td>
</tr>
<tr>
<td>15</td>
<td>Learner is motivated to practice writing by instruction with Flipped Classroom Technology Approach.</td>
<td>1 Disagree</td>
</tr>
</tbody>
</table>
Appendix C

Interview Guide and Focus Group Discussion

1. Do you think the flipped classroom technology approach enhances your writing skill? and how?
2. Do you feel comfortable when you can display the provided material at any time you want?
3. Do you think that a flipped classroom technology approach can enrich your writing ability? How?
4. What are the main advantages that you gain by using the flipped classroom technology approach?
5. Do you think the flipped classroom approach provides you with a chance to become active in learning? Please provide your reasons.
6. Do you think the flipped classroom technology approach could help your motivation to practice your writing skill?
7. Do you think the flipped classroom technology approach assists you concentrate more when compared to the traditional lectures? Please provide your reasons.
8. What was your favorite part of flipped classroom technology approach? Please provide your reasons.
9. Do you think the flipped classroom technology approach instruction allows you to prepare your lesson before the class meet?
10. How did you feel about interacting with your classmates in writing classroom when flipped classroom technology approach was implemented?

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