

## IMPLEMENTATION OF FLIPPED LEARNING IN A TERTIARY-LEVEL COURSE: A QUALITATIVE CASE STUDY

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### ARTICLE INFO ABSTRACT

<b>Received:</b>	<b>29/4/2023</b>	Flipped learning is a pedagogical approach that has gained increasing attention in recent years, particularly in the context of tertiary education. This study aimed to investigate the implementation of the flipped classroom model in a tertiary-level course with 27 students, and to examine their attitudes and perceptions towards this approach. The research utilized qualitative methods, including interviews with the teacher and students, and document analysis, to gather data about the implementation of flipped learning. The findings suggest that flipped learning is a valuable approach in tertiary education, with students responding positively to its engaging, active and beneficial learning environment. The students perceived a range of benefits, including improved language and subject knowledge, enhanced self-directed learning, and the development of critical thinking and presentation skills. The study recommends enhancing the flipped learning experience by providing ample references in advance, mandating pre- and post-class tasks, creating engaging and interactive tasks during class, and using positive reinforcement such as checking and bonus scores. Addressing potential issues, such as student motivation and language proficiency limitations, can be achieved through interventions such as providing information technology tools for language support. The findings of this study highlight the potential of the flipped classroom model to enhance learning outcomes, promote learner autonomy, and foster soft skill development in tertiary education.
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## HỌC TẬP ĐẢO NGƯỢC TRONG MỘT KHÓA HỌC CHUYÊN NGÀNH TẠI ĐẠI HỌC: MỘT NGHIÊN CỨU ĐỊNH TÍNH

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### THÔNG TIN BÀI BÁO TÓM TẮT

<b>Ngày nhận bài:</b>	<b>29/4/2023</b>	Nghiên cứu này điều tra việc triển khai học tập đảo ngược trong một khóa học đại học với 27 sinh viên, nghiên cứu thái độ, quan điểm của người học và người dạy đối với phương pháp này. Nghiên cứu sử dụng phương pháp định tính, bao gồm phỏng vấn và phân tích tài liệu. Các phát hiện cho thấy phương pháp này có hiệu quả khi sinh viên phản ứng tích cực với môi trường học tập chủ động, và nhận thấy nhiều lợi ích, bao gồm cải thiện ngôn ngữ và kiến thức môn học, nâng cao khả năng tự học, phát triển tư duy phản biện và kỹ năng trình bày. Nghiên cứu khuyến nghị phát triển mô hình bằng cách cung cấp trước nhiều tài liệu tham khảo, thực hiện các nhiệm vụ bắt buộc trước và sau giờ học, tạo các nhiệm vụ tương tác và hấp dẫn trong lớp và sử dụng biện pháp củng cố tích cực như kiểm tra và điểm thưởng. Có thể giải quyết các vấn đề về động lực của người học và hạn chế về trình độ ngôn ngữ qua cung cấp công cụ công nghệ hỗ trợ ngôn ngữ. Những phát hiện của nghiên cứu này nhấn mạnh tiềm năng của mô hình học tập đảo ngược trong nâng cao kết quả học tập, thúc đẩy sự tự chủ của người học và thúc đẩy phát triển kỹ năng mềm trong giáo dục đại học.
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## 1. Introduction

Flipped teaching and learning has become a popular approach in the field of English language teaching (ELT) over the past decade, with many educators recognizing its potential to enhance student engagement and learning outcomes. The approach involves a reversal of the traditional teaching and learning model, whereby students are exposed to new content and concepts outside of the classroom through pre-recorded videos, readings, and other multimedia resources, and then engage in collaborative and interactive activities in the classroom to deepen their understanding of the material [1]. And the in-class time is devoted to interactive and collaborative activities that enable students to apply and consolidate their learning [2].

The increasing availability of digital resources and technologies has made it easier to deliver and access content outside of the classroom. And flipped teaching and learning has been found to be particularly effective in ELT as it provides students with the opportunity to engage with language input on their own terms and at their own pace, allowing them to better absorb and comprehend the material [3]. In addition to its potential to improve learning outcomes, flipped teaching and learning has also been found to have other benefits, such as increased engagement and motivation, as well as the development of critical thinking and collaborative skills [4]. Moreover, the approach can be adapted to a range of learning contexts and levels, making it a versatile and flexible teaching method.

The adoption of flipped teaching and learning in ELT has been documented in a number of popular publications, including the book "Flip Your Classroom: Reach Every Student in Every Class Every Day" by Bergmann and Sams [1], which provides practical guidance and insights into how teachers can effectively implement the flipped classroom model in their teaching practice. Basal [5], in his article, reported on the implementation of a flipped classroom approach in a foreign language teaching context, finding that students' attitudes towards learning and achievement improved as a result of the flipped model. Similarly, Chilingaryan and Zvereva [6] researched and found that the flipped classroom approach enhanced students' engagement and motivation, as well as their language proficiency. Turan and Akdag-Cimen [7] conducted a systematic review of studies that investigated the impact of flipped learning on English language learning outcomes, finding that the majority of studies reported positive effects on language proficiency, motivation, and engagement. Ngo and Yunus [8] conducted a similar review, which revealed that the flipped classroom model was effective in improving language learning outcomes across various language skills, including reading, writing, listening, and speaking. The use of flipped classroom technology in language learning has also been investigated. Evseeva and Solozhenko [9] reported on the use of flipped classroom technology in an English for Specific Purposes course, finding that students' language proficiency improved as a result of the flipped classroom model.

In Vietnam, a recent study on the flipped classroom approach in speaking skills of high school students carried out by Huong & Hung [10] showed a significant improvement in students' speaking skills, including fluency, pronunciation, comprehension, grammar, and vocabulary. They utilized both quantitative and qualitative methods and involved 35 students and one English language teacher. The study highlights the effectiveness of flipped education as a form of blended learning, particularly in boosting English speaking skills.

The researcher was inspired by the positive outcomes of applying the flipped classroom model in the above discussion and research. Motivated by this, the researcher, in this research, investigate the effectiveness of flipped learning in a major course at the tertiary level, specifically among students from the northern mountainous area of Vietnam, which is known to face certain challenges and difficulties . The aim is to determine if this approach that emphasizes self-study and autonomy is suitable for this group of students, and to identify ways to optimize their learning experience. This study is expected to contribute to the current understanding of the applicability of flipped learning, and provide insights on how to enhance the learning outcomes of students in a diverse educational context.

## 2. Methods

### 2.1. Participants

The participants in this study were 27 students and 1 teacher at the School of Foreign Languages - Thai Nguyen University. The students all are from the northern areas of Vietnam, including Ha Giang, Cao Bang, Bac Kan, Yen Bai, Lang Son, Tuyen Quang, and Thai Nguyen. They were in their first semester of the third year at university and were expected to have a B1+ level of English proficiency. The course in which the flipped classroom model was implemented was "English Teaching Methods at Secondary Schools," a major course that lasted for 15 weeks in the 2022-2023 school year. Convenient sampling was used to select the participants for this study. The teacher who was known to implement the flipped teaching was approached to participate in the study, and all students enrolled in the course were invited to take part in the research. All participants provided informed consent before participating in the study.

### 2.2. Data collection

Qualitative research methods were employed in this study as they are well-suited to explore the implementation of the flipped classroom model in tertiary-level education. Qualitative method allows for a deep understanding of participants' experiences, attitudes, and perceptions towards a particular approach, and can reveal rich and nuanced data. To collect data for this study, in-depth interviews were conducted with both the teacher and the 27 students. The interviews were semi-structured, meaning that the interviewer had a set of predetermined questions (11 questions in this study), but they also allowed for follow-up questions and exploration of specific topics. These interviews provided an opportunity to explore the participants' experiences with flipped learning, their attitudes towards the approach, and their suggestions for improvements.

The semi-structured interview protocol used in the study included three main groups of questions. The first group consisted of four questions that aimed to gain insight into how the students actually studied in the course, what they did before, during, and after class. The second group were five questions that focused on the students' reflections on their feelings and attitudes towards the flipped learning approach. These questions were designed to explore the students' experiences with flipped learning, how they felt about this approach, and any challenges they faced. The final group consisted of two questions that aimed to gather the students' suggestions or recommendations for improving experiences with the flipped classroom model.

The teacher's perspective was captured through one-on-one interviews, which allowed for a deep exploration of the teacher's reflections on the experience and suggestions for other further application of the learning approach. The teacher's insights were particularly important as they provided an understanding of how the flipped classroom model was implemented in the course and how it was perceived by the instructor. Besides the individual interview with the teacher, group interviews were held with small groups of 5-6 students participating in each session. There were five focus group interviews in total. The focus group interviews with small size allowed for a more interactive and friendly approach to data collection, where students could have more opportunities to share their views and opinions with each other in a group setting.

To further triangulate the data obtained from the interviews, weekly reflection journals from the 27 students were examined. These journals were analyzed to cross-check whether the students were actually implementing the flipped classroom model as they described in their interviews. The journals also provided an additional source of data to supplement the interview data, as they gave the students an opportunity to reflect on their learning experiences on a regular basis.

### 2.3. Data analysis

The data collected from the interviews and reflection journals were analyzed using thematic analysis. This involved coding the interview transcriptions and reflection journal data to identify

common themes and patterns. The coding process involved breaking the data down into meaningful units, or codes, and organizing these codes into sub-themes and themes for analysis and discussion.

In summary, this study utilized qualitative data collection tools, including in-depth interviews with focus groups, and document analysis, to gather rich data for a comprehensive understanding of the participants' experiences and perspectives towards flipped learning, and to ensure the validity and reliability of the findings.

### 3. Results and Discussion

#### 3.1. How the flipped learning was conducted

##### 3.1.1. Interviews with the teacher

In the interviews with the teacher, it was revealed that flipped learning was conducted with the use of Google Classroom and Google Drive, as well as weekly journals for students' self-studying. To facilitate communication outside of class and to allow students to ask questions and discuss topics, the teacher set up a Google Classroom where the students could freely upload or make a post. Additionally, two big folders were created on Google Drive: one for references and another for students' weekly journals, the links for them were also public on a very first post on the Google Classroom. She clarified their uses as:

*Teacher: The folder for references contained books chapters, articles, and videos for students to read and prepare at home... I often uploaded from two to three pieces for each content or topic weekly... and provided guided questions to help students focus their reading.... The uploading was done at least one week before the class meeting. I think that would give students enough time to prepare before the lesson.*

The teacher also explained that in the folder for weekly journals, students were asked to summarize the main points of what they read and watched, as well as to answer guided questions provided by the teacher. The teacher encouraged students to use other outside references in addition to the ones provided, but they were required to cite their sources properly. Students were responsible for uploading their journals themselves, two days before the class meeting each week.

*Teacher: Students could write their journals in any style, ... academic paragraphs or bullet points, as long as they demonstrated their understanding of the significant contents related to the weekly topic... And I also suggested that they limit their journal entries to no more than 1200 words or 3 pages... in order to encourage clear and concise writing rather than excessive length in an attempt to appear thoughtful.*

During class meetings, the teacher organized a range of activities for students to showcase and share their understanding of the topics they had prepared at home. These activities included whole-class discussion, pair work or group discussion, and debates where students were asked to share their perspectives and to engage in critical thinking with reasoned arguments. By engaging in these activities, students were able to apply their knowledge and skills, to share their perspectives, and to receive feedback and guidance from their peers and the teacher. The teacher provided guidance and feedback to ensure that students were on track and that they were addressing the relevant issues.

In addition, live and online quizzes were also used often to test students' understanding from their preparation at home, and to reinforce their learning. Platforms such as Quizzes and Kahoot were utilized, which allowed students to compete against each other and to learn from their mistakes. Poster presentations were another activity used in her flipped learning class. Students were required to create posters based on the topics covered, which they then presented to the class. This allowed students to demonstrate their understanding in a creative and visual way and to receive feedback from their peers and the teacher. These activities were designed to be interactive and engaging, allowing students to actively participate in the learning process and to apply their knowledge and skills.

According to the teacher, she guided the discussions and class activities with guided questions to ensure that students understood the main and significant points of each topic. The teacher also made sure that all essential elements and questions were addressed before the end of class. This was done to ensure that students had a comprehensive understanding of the topics covered and to clarify any misunderstandings that might have arisen during their individual preparation at home. By summarizing the key points and ensuring that questions were answered before leaving the class, the teacher aimed to reinforce students' learning and to promote retention of the material covered.

To ensure that the flipped learning approach was implemented effectively, the teacher employed various strategies.

*Teacher: During class meetings, I observed students' reactions and participation in the activities. Bonus scores were also given to students who answered the questions or participated in the activities and showed that they had made much effort on reading and preparing for the lesson before class.*

Besides, the teacher checked and marked the weekly journal submissions, counting on whether students submitted on time and had provided thoughtful reflections. To limit the burden for students, the teacher provided them with guided questions for their reading and limited the length and style of their submissions. The focus was on the main important points, rather than on grammatically perfect or well-written reflections. Students were encouraged to use tools such as Grammarly to check their submissions for errors. By providing guidance and feedback on the weekly journals, the teacher aimed to ensure that students were engaged in the flipped learning approach and were able to reflect on their learning effectively.

### 3.1.2. Interviews with the students

The interviews with the students were conducted in a triangular, cross-check format to verify and compare the teacher's perspective with the students' experiences of the flipped classroom model. This approach ensured a comprehensive and well-rounded understanding of how the flipped teaching was actually implemented and received by the students

According to the interviews with 27 students divided into 5 groups, all of the students reported that they spent time preparing for class by reading and watching the materials provided by the teacher, but to different extents. Out of the 27 students, 20 (74%) reported finding additional materials to read on the Internet; 7 (26%) said they focused only on the provided materials.

*Interviewee 1.5: I often search with key words of the issues with Google, and read from reliable sources first, for example... from website of university or educational organizations such as British Council or American English for Educator... because sometimes there are not enough information on about points I need in the materials given.*

*Interviewee 3.4: For me, I find reading 2-3 chapters and articles per week is a lot of work already. And so, I tried to finish with the compulsory readings first. I believe that they have core contents there... That's the reason why the teacher sends us those but not others.*

Additionally, all students reported writing summaries, although 2 of them admitted to copying sometimes more than reading. The time spent on self-study preparation varied among the students, with 3 (11%) students reporting less than 2 hours of self-study per week, 18 (67%) students reporting 3-4 hours per week, and 6 (22%) students reporting 6-7 hours per week. Overall, the data suggests that the majority of students engaged with the materials provided and spent a considerable amount of time preparing for class.

During the in-class sessions, the majority of the students said they were engaged with the guided questions and participated actively in the discussions. According to the results of the interviews, 78% of the students felt more confident and comfortable sharing their thoughts and asking questions on topics they found unclear in class thanks to their preparation with the input in advance. This level of engagement and participation indicates that students felt more empowered to take control of their learning and were able to communicate their thoughts and questions

effectively. However, 11% of the students admitted to being shy and not well-prepared at times, leading them to simply listen and take notes without actively participating in some lessons.

*Interviewee 2.3: On class, there are many activities and tasks that require us to demonstrate what we read and understand about the topics... The teacher does not simply lecture. She keeps asking, ... and it looks like we rely on each other's answers to reach the final conclusions about the topics.*

*Interviewee 5.2: Often we have some time to talk to our peers, discuss in groups before sharing with the class about the issues... This actually gives me more confidence as knowing that my views after reading are similar to others makes me believe more in my self... Once I was the presenter for my group and we received compliments and approvals from the teacher and other groups... That's such a great feeling.*

After the class, the students continued their self-study by summarizing the main points discussed during the class and writing reflections. The majority of the students, about 60% (16), compared their reflections after the class with what they had written before in their journals before the class. Also, they prepared for the next lesson in the same way as before, reading the supplied materials (and finding additional resources online) and create summaries. This shows that the students were more actively engaged in the learning process, not just during class but also in their self-study time, which is a positive outcome of the flipped learning approach.

*Interviewee 4.6: After about 3 weeks, the routine becomes something automatic to me when thinking about this course. We open the Drive for materials on Tuesday, read, write summary, submit on the link before Saturday, come to class on Monday, write reflection on Monday night, and start reading again on Tuesday.*

By examining the reflection journals submitted by students on the class's shared Google Drive link, it was found that student each wrote a total of 10 journals, submitting them weekly. Each journal consisted of two parts, a summary of the reading materials before class and the student's reflections on the topic after class. It was observed that the access to the link changed from "anyone can edit" to "view only" after the weekly deadline. This management practice was found to be in line with what the teacher and students had described about the pre and post-class activities. This regulation of submitting reflection journals is considered an essential step in implementing the flipped learning in this course.

### **3.2. Participants' attitudes towards this flipped learning experience and recommendations**

#### **3.2.1. From the teacher**

The teacher shared that the flipped learning approach had a positive impact on the course. She observed that students knew (even not all, and sometimes not correctly) about the topics and showed enthusiasm for sharing their ideas during class discussions. The teacher noted that the active learning made the learning process easier and more fun, than just her lecturing simply. The time on class allowed for more in-depth discussions and exploration of the topic.

However, the teacher also recognized the challenges associated with the flipped learning approach. One challenge was ensuring that students did not copy the content instead of engaging in serious reading and thinking.

*Teacher: Sometimes it's hard to find out whether they copy parts of the journals from the Internet instead of reading and writing up their own or not... If our school or faculty provided us with plagiarism detection tools, such as Turnitin, Grammarly or Plagiasism Checker, ... the job would be much easier and it would be fair for all students... They would definitely do the preparation more seriously... and thus would learn more effectively.*

Additionally, the teacher recognized the importance of giving more scores for class participation, which was a strategy that the teacher intended to employ in future courses. The teacher acknowledged the need to strike a balance between promoting independent learning and ensuring that students were prepared for class discussions.

Despite the challenges, the teacher expressed a sense of satisfaction with the effectiveness of the flipped learning approach. The teacher stated that the overall performance of the students on class was positive and that the approach encouraged independent learning and promoted a deeper understanding of the course material. The teacher felt that this was a significant accomplishment, as these goals were fundamental to the course's objectives. Therefore, the teacher felt that the flipped learning approach was worth pursuing further and planned to use it again in the future.

### 3.2.2. From the students

The flipped learning experience was viewed as very effective by the majority of the students. In fact, 25 out of the 27 students who participated in the interview agreed that they found the approach to be highly effective. Many added that the classes were fun, interactive, and not at all passive like traditional lectures. Two students found the approach to be quite effective, admitting to being lazy at home sometimes and the glad that the teacher didn't check on them those days. However, they still felt that the flipped learning model was effective in studying major courses with a lot of complex knowledge like this course.

When asked why they felt that way, 24 students (89%) mentioned that they had developed various skills throughout the course. For example, they had to read materials, listen to and watch videos, speak on class and write journals in English for 12 weeks before class. These activities helped them develop not only English language proficiency but also critical thinking skills. They had to read from multiple sources and choose the most prominent information. Also, they were able to compare and contrast different ideas and get to the most valid ones. Furthermore, they also developed presentation and communication skills by exchanging information with their peers and presenting their ideas in class. They recognized that self-studying was an essential skill for tertiary level education and that flipped learning helped them develop this skill. By providing materials in advance and requiring preparation, flipped learning encouraged students to become more self-reliant in their studies.

Moreover, the students enjoyed the interactive and collaborative nature of the on-class environment in flipped learning. They appreciated the opportunity to share their knowledge and ideas with their classmates, as well as the chance to learn from their peers. This collaborative approach helped create a sense of community within the class and fostered a supportive learning environment. The students also appreciated the guidance provided by their teacher during the on-class activities, which helped them better understand the materials and concepts covered in the course. As a result, they felt great about their learning experience and all (27 out of 27) agreed that they would like to apply flipped learning to other courses in the future.

During the interviews, some students reported facing challenges or problems while engaging in flipped learning. A significant proportion of students (19 out of 27, or 70%) reported feeling bored during the preparation stage when reading the materials. This was attributed to their low English language skills, which made it difficult for them to comprehend the materials easily. As a result, some students found it challenging to complete the required readings before class. This challenge could be addressed by providing materials in simpler language, or suggesting tools to simplify the language level in some references (Rewordify, Simplish websites, for example) or incorporating more visual aids, such as diagrams or videos, to enhance comprehension.

Another challenge mentioned by the students was laziness. Approximately 74% of students admitted to being lazy at times, which affected their engagement with flipped learning. They also reported that they needed more time to engage in the preparation and post-meeting activities required by the flipped learning approach. This challenge could be mitigated by providing students with clear guidelines on how to allocate their time effectively or by distributing reading materials in advance of the scheduled class sessions, with a lead time significantly exceeding one week.

Additionally, some students felt that more materials, such as additional websites and videos, should be provided to supplement the reading materials. This was mentioned by 8 out of 27 students

(30%) during the interviews. This challenge could be addressed by providing a wider range of resources for students to engage with, thus catering to different learning styles and preferences.

Although the benefits and positive experiences of flipped learning were confirmed, there were some challenges that showed room for improvement to make sure it works well for all students.

#### 4. Conclusion

In conclusion, this study has investigated the effectiveness of flipped learning at tertiary education, particularly in a major course. Through the use of qualitative methods, including in-depth interviews and document analysis, the study found that flipped learning can be a successful method if applied correctly. The findings of this study align with previous research, highlighting the benefits of flipped learning such as language and presentation skills development [7] – [10], critical thinking skills development [1] - [4], and the fostering of learner autonomy and self-confidence [5] - [7]. Based on the results, the study provides recommendations for the implementation of flipped learning in tertiary education. Providing students with many references in advance, making pre- and post-class tasks obligatory, creating interactive and interesting tasks during class, and providing positive reinforcement such as checking and bonus scores were found to be effective strategies. Additionally, the study highlights the importance of addressing potential problems such as student laziness and providing information technology tools for students with limitations in language proficiency. Overall, the findings of this study provide evidence for the effectiveness of flipped learning in tertiary education and suggest practical recommendations for educators to implement this method successfully. The potential benefits of flipped learning, such as time-saving and deeper class discussions, make it a valuable tool for educators seeking to enhance the learning experience for their students.

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