

# The flipped classroom approach to enhancing reading skills and engagement among first-year EFL students

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## ABSTRACT

*This study investigates the impact of the flipped classroom model on reading comprehension and classroom engagement among first-year non-English major university students. Grounded in learner-centered pedagogy and constructivist theory, the flipped approach provided students with access to instructional materials before class and opportunities for interactive, task-based activities during class. A mixed-methods design was adopted, combining reading comprehension tests with semi-structured interviews to capture both academic outcomes and learner experiences. Findings revealed that although post-test scores were lower due to the increased difficulty of academic texts, students demonstrated higher motivation, confidence, and engagement in classroom tasks. The flipped classroom was also perceived as enhancing collaboration and independent learning by allowing students to come to class better prepared and ready to participate actively. Challenges remained in terms of self-paced study, particularly time management and maintaining consistent preparation. Overall, the results suggest that flipped instruction can strengthen students' readiness for academic reading and foster higher levels of engagement and motivation, provided that adequate support for self-regulated learning is incorporated.*

**Keywords:** flipped classroom, reading comprehension, EFL students, learner engagement, higher education

## 1. INTRODUCTION

Reading comprehension is widely recognized as a core academic skill for university students, particularly for those enrolled in non-English-major programs where English functions as a tool for accessing academic resources and professional knowledge [1]. However, first-year EFL learners frequently encounter difficulties in reading due to limited vocabulary, insufficient background knowledge, and the absence of effective reading strategies. Moreover, conventional teacher-centered instruction, which often emphasizes grammar explanation and translation, tends to limit opportunities for active participation, resulting in lower motivation and passive learning behaviors.

The flipped classroom model has emerged as a promising pedagogical approach that shifts the focus from passive knowledge reception to active, learner-centered engagement. In this model, instructional input is delivered outside the classroom via online lectures, videos, or guided readings, while in-class time is reserved for interactive, task-based activities that promote deeper learning and collaboration [2, 3]. This approach not only supports learner autonomy and self-regulation but also maximizes opportunities for peer interaction, immediate feedback, and the application of knowledge in authentic contexts [4].

Previous studies have documented positive

outcomes of flipped instruction in EFL contexts, including increased learner motivation, improved academic achievement, and enhanced critical thinking skills [4, 5]. However, much of this research has focused on listening, speaking, or general language performance, while the impact on reading comprehension-particularly among first-year non-English-major students-remains underexplored. Additionally, few studies have systematically examined how flipped learning influences not only cognitive outcomes (reading skills) but also affective factors such as engagement and classroom participation.

Against this backdrop, the present study seeks to investigate the effectiveness of the flipped classroom model in improving both reading comprehension and classroom engagement among first-year EFL students in a non-English-major program. By integrating pre-class preparation with interactive in-class tasks, the study aims to examine how flipped instruction can enhance students' reading skills while fostering active participation and sustained motivation.

## 2. LITERATURE REVIEW

### 2.1. Reading in EFL and the Vietnamese context

Reading plays a pivotal role in English as a Foreign

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Language (EFL) education, serving as both a key skill for academic success and an essential medium for language development [1]. Strong reading comprehension facilitates vocabulary expansion, grammatical awareness, and engagement with authentic texts across disciplines. For university students, particularly those in non-English majors, reading plays an essential role in enabling access to textbooks, academic research, and professional documents [6]. Despite its importance, many EFL learners continue to face persistent challenges in reading. These include limited vocabulary, insufficient background knowledge, and inefficient strategy use, such as skimming and inference [7]. Non-English majors often approach texts with low confidence, relying heavily on translation and struggling with complex comprehension tasks, which can reduce motivation and lead to negative attitudes toward reading [8].

Motivation often declines when English is viewed as secondary to disciplinary study [9]. In Vietnam, where English instruction at the secondary level has been dominated by grammar-translation and exam-oriented practices, students arrive at university with limited experience in critical reading or learner autonomy [8]. As a result, many first-year Vietnamese students find it difficult to adapt to student-centered methods such as the flipped classroom. Combined with heavy course loads and part-time employment, these conditions further reduce students' investment and motivation in English reading. Such realities highlight the urgent need for innovative approaches that not only build reading competence but also enhance motivation, autonomy, and active engagement.

## **2.2. The flipped classroom model: Potentials and challenges**

One instructional model that has attracted considerable attention is the flipped classroom, which reorganizes the traditional sequence of instruction. The model was first popularized by Bergmann and Sams [2] in secondary education and later conceptualized within constructivist and active learning traditions by Bishop and Verleger [3]. Instead of relying on in-class lectures followed by homework, flipped learning provides input through pre-class materials such as videos or digital readings, while in-class time is dedicated to interactive activities including discussion, problem-solving, and collaboration.

In EFL contexts, the flipped classroom has been shown to deepen reading comprehension by requiring students to engage with texts before class

and then apply comprehension strategies through collaborative activities [10]. It also fosters greater autonomy and self-regulation, as learners must manage pre-class preparation independently, while encouraging higher levels of participation and motivation through peer interaction and feedback [5]. Moreover, flipped learning allows students to progress at their own pace, making more effective use of classroom time for higher-order thinking rather than passive listening [4].

Despite these advantages, several challenges have been identified. The model requires consistent self-discipline and reliable digital access, which can create barriers in contexts where technological resources or self-regulation skills are uneven. First-year EFL students, still in the process of adjusting to university-level autonomy, may struggle to meet these demands [4]. In addition, teachers also face a heavier workload in preparing pre-class materials and designing meaningful in-class activities, raising concerns about sustainability in resource-constrained settings.

## **2.3. Empirical evidence and research gap**

A growing body of empirical studies supports the effectiveness of flipped learning in EFL education. Studies highlight positive student perceptions, improved preparation, and more active classroom participation [4, 5]. With regard to reading specifically, Wang [10] demonstrated that flipped groups outperformed traditional groups in reading comprehension and self-regulated learning.

Meta-analyses and recent large-scale empirical reviews reaffirm these findings, confirming consistent improvements in learner outcomes and increasing scholarly interest in flipped classrooms [4, 5]. Despite this growing evidence, relatively few studies have addressed reading comprehension in depth, particularly in the Vietnamese context. This study addresses these gaps by examining how flipped classroom instruction influences reading skills and classroom engagement among first-year non-English-major students in Vietnam.

## **2.4. Theoretical Framework**

Building on identified research gaps, this study adopts a comprehensive theoretical foundation to explain how flipped classroom instruction can influence both cognitive and affective dimensions of EFL learning. The focus on first-year non-English-major students in Vietnam, who often struggle with exam-oriented habits, low motivation, and weak self-regulation, necessitates frameworks that emphasize experiential learning, social scaffolding, and motivational processes. Accordingly, the study

integrates three complementary perspectives: Kolb's Experiential Learning Theory, Vygotsky's Zone of Proximal Development, and Pintrich's Motivational Science Framework. Together, they provide a coherent lens for understanding how flipped learning enhances reading comprehension and engagement while clarifying the mediating role of motivation and self-regulated learning.

**2.4.1. Experiential learning theory**

Kolb's Experiential Learning Theory conceptualizes learning as a cyclical process involving four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation [11]. The flipped classroom aligns closely with this model. Pre-class activities such as videos or readings provide concrete experience, while in-class discussions and peer collaboration promote reflection and concept development. Strategy training and text analysis support abstract conceptualization, while comprehension tasks provide opportunities for experimentation. This cycle allows learners to actively construct meaning, deepen comprehension, and transfer reading strategies across contexts.

**2.4.2. Zone of proximal development**

Vygotsky's concept of the Zone of Proximal Development (ZPD) underscores the role of social interaction and scaffolding in promoting learning. The ZPD represents the gap between what learners can do alone and what they can achieve with support from teachers or peers [12]. In the flipped classroom, students first encounter content independently, then refine understanding through guided discussion and collaboration. This structure situates learning within each student's ZPD-helping them tackle reading tasks that might exceed their individual capacity.

**2.4.3. Motivational science framework**

Pintrich's Motivational Science Framework emphasizes that successful learning depends on both motivation and self-regulated behavior. Motivation determines learners' effort and persistence, while self-regulated learning involves planning, monitoring, and strategy adjustment [9]. These factors are especially crucial in flipped contexts, where learners must prepare before class and take responsibility for their learning. The flipped model thus becomes a platform for developing both intrinsic motivation and the self-management skills essential for sustained academic success.

**2.4.4. Integrated model and research questions**

Building on the theoretical perspectives discussed above, this study proposes an integrated model to

explain how flipped classroom instruction shapes student learning in the Vietnamese EFL context. In this model, flipped classroom instruction serves as the independent variable. The dependent variables are students' reading comprehension and classroom engagement, which together capture both cognitive and affective outcomes. Two mediating variables, motivation and self-regulated learning, are incorporated to account for the internal learner factors that influence the effectiveness of flipped learning.

This model assumes that flipped instruction can directly enhance reading comprehension and engagement while also exerting indirect effects through its impact on learners' motivation and self-regulated learning. This integrated view reflects the interaction of experiential learning processes, scaffolding in the Zone of Proximal Development, and motivational dynamics [9, 13].

**Research question 1:** To what extent does flipped classroom instruction improve the reading comprehension and classroom engagement of first-year non-English-major students?

**Research question 2:** How do motivation and self-regulated learning influence students' learning outcomes in the flipped classroom?

Drawing on these complementary frameworks, the present study assumes that flipped classroom instruction (independent variable) affects both reading comprehension and classroom engagement (dependent variables), directly and indirectly through motivation and self-regulated learning (mediating variables). This integration provides the theoretical basis for the research model and informs the use of pre-/post-tests and student interviews.

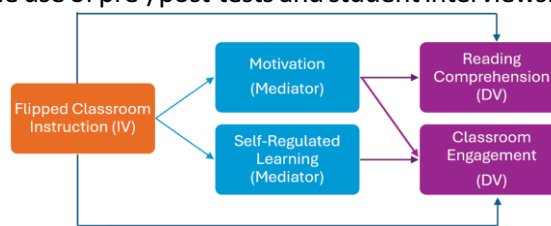


Figure 1. Integrated theoretical framework

**3. METHODOLOGY**

This study adopted a mixed-methods design based on a research model positing that flipped classroom instruction affects students' reading comprehension and engagement both directly and indirectly through motivation and self-regulated learning. Quantitative data were collected through pre- and post-tests, and qualitative insights through semi-structured interviews.

**3.1. Quantitative component**

Pre- and post-tests measured reading comprehension

gains. Each test included two passages (250 - 320 words) and 20 items covering lower- and higher-order skills such as skimming, inference, and summarizing, following EFL assessment frameworks [7, 13]. The pre-test used familiar topics, while the post-test featured more academic ones to scaffold learning.

Descriptive statistics and a paired-sample t-test assessed score differences, with item-level analysis examining progress across sub-skills. Based on Cohen's guidelines [14], a sample of 50 students was considered sufficient to detect a medium effect size and reflects typical class sizes in Vietnamese universities.

### 3.2. Qualitative component

To complement quantitative results, semi-structured interviews were conducted with 10 students purposefully selected to represent varied motivation and engagement levels. The sample size aligns with qualitative standards for thematic saturation. Interviews lasting approximately 25 - 35 minutes explored preparation habits, motivation, and perceived challenges in flipped learning.

Data were thematically analyzed following Braun and Clarke's six-step framework [15] and triangulated with test results to interpret how flipped instruction influenced both cognitive and affective outcomes.

## 4. RESULTS AND DISCUSSION

The results from both quantitative and qualitative analyses provide a comprehensive understanding of how flipped classroom instruction affected students' reading comprehension, engagement, and learning behaviors. While quantitative outcomes revealed limited measurable gains, the qualitative data illuminated substantial affective and behavioral growth among participants.

### 4.1. Quantitative Findings

The pre- and post-test results exhibited a nuanced pattern of performance. The mean score declined from 17.44 (SD = 4.28) on the pre-test to 13.40 (SD = 3.97) on the post-test.

**Table 1.** Descriptive statistics of pre-test and post-test Scores

Test	N	Mean	SD
Pre-test	50	17.44	4.28
Post-test	50	13.40	3.97

As shown in Table 1, the mean score declined from the pre-test to the post-test. A paired-sample t-test was conducted to examine the difference between the pre-test and post-test scores, providing further statistical insight into the observed changes. At first

glance, this decrease might suggest reduced comprehension; however, it should be interpreted in relation to the increased test complexity. The post-test passages were deliberately more academic and cognitively demanding, requiring higher-order comprehension such as inference-making, critical evaluation, and summarization.

Item-level analysis indicated that students maintained relatively strong performance on lower-order skills, such as skimming, scanning, and vocabulary recognition, but demonstrated difficulty with higher-order tasks. This outcome suggests that students were still in the process of developing analytical and critical reading strategies. Rather than signaling regression, the lower scores reflect a shift toward more demanding academic reading tasks that required deeper comprehension.

### 4.2. Qualitative findings

The semi-structured interviews provided rich insights into students' motivational and behavioral changes under the flipped learning environment. Four dominant themes emerged: Enhanced engagement, increased motivation and confidence, challenges in self-regulation, and emerging learner autonomy.

#### 4.2.1. Enhanced engagement

Nine out of ten participants reported greater classroom participation compared with traditional instruction. Students emphasized that prior exposure to materials made them feel more prepared and willing to contribute. Several described flipped sessions as "more interactive" and "less teacher-centered," noting that collaborative discussions allowed them to exchange ideas, clarify vocabulary, and co-construct meaning. This shift highlights how pre-class preparation supported more active and collaborative learning during class.

#### 4.2.2. Increased motivation and confidence

Eight students noted that pre-class preparation enhanced their confidence in class discussions and reduced performance anxiety. One participant explained, "When I already understand the topic, I feel more confident answering questions." Another observed, "I didn't want to disappoint my group, so I studied before class." These statements illustrate how flipped instruction stimulated both intrinsic and social motivation, strengthening students' sense of responsibility and engagement.

#### 4.2.3. Challenges in self-regulated learning

Despite these positive outcomes, six participants reported persistent difficulties in managing pre-class study time and sustaining focus. Some

admitted to procrastination or superficial engagement with preparatory materials, as reflected in comments such as “I watched the video but didn't take notes, so I forgot most of it”. These accounts underscore a common challenge in flipped contexts: learners' limited self-regulation and time-management abilities. The findings suggest that without explicit scaffolding—such as preparatory checklists, progress reminders, or short comprehension quizzes—students may struggle to sustain consistent preparation habits.

#### **4.2.4. Emerging learner autonomy**

Notably, most participants recognized the necessity of becoming more independent learners. Several acknowledged that the flipped model “helped me realize how to study effectively” and “made me responsible for my own learning”. Over time, students demonstrated growing metacognitive awareness, reflected in improved planning, note-taking, and peer collaboration. This shift indicates that the flipped classroom not only promoted engagement during class but also facilitated a gradual transformation in learners' self-perception and academic responsibility.

Taken together, the quantitative and qualitative findings present a coherent picture of the interplay between students' cognitive performance and affective development. Although the quantitative data showed a decline in post-test scores due to the higher difficulty of academic reading tasks, the qualitative evidence revealed clear growth in motivation, confidence, and metacognitive awareness. These complementary insights suggest that the flipped classroom not only influenced measurable comprehension outcomes but also reshaped learners' approaches to reading and learning itself. Students became more engaged and self-directed, gradually developing greater autonomy in reading and learning. This indicates that the strength of the flipped classroom lies less in short-term test improvement and more in cultivating process-oriented learning that nurtures independence, motivation, and sustained engagement. Ultimately, the model encouraged a shift from teacher-dependent instruction to learner-centered participation, consistent with constructivist and self-regulated learning perspectives that view cognitive, motivational, and behavioral dimensions as deeply interconnected in the development of effective readers.

The findings of this study demonstrate both the potential and the constraints of flipped classroom instruction in the Vietnamese EFL context. The

decline in post-test scores is best interpreted in light of the greater linguistic and conceptual complexity of the post-test texts, rather than as evidence of reduced reading ability. This outcome suggests that students were challenged to engage with authentic academic materials, a process that demands sustained exposure and cognitive effort. Qualitative results, however, indicate notable affective gains: most participants reported enhanced motivation, confidence, and engagement in collaborative learning. These findings reaffirm the theoretical claim that affective and self-regulatory factors mediate the success of flipped learning. Nonetheless, students' difficulties with time management and lesson preparation reveal that self-regulated learning skills remain underdeveloped among first-year learners.

Pedagogically, the flipped model should be regarded as a developmental approach rather than a mere instructional technique. Effective implementation requires structured scaffolding, such as guiding questions, vocabulary support, and explicit learning strategies to facilitate pre-class preparation. Furthermore, targeted training in self-regulated learning, particularly in goal-setting, time management, and reflective practices, can support students' transition from teacher-dependent to autonomous learning. Given its positive influence on motivation and participation, the flipped model is especially valuable in contexts where students exhibit low engagement with English learning. Institutional investment in teacher training and resource allocation will be essential to sustain and maximize the long-term benefits of this approach.

## **5. CONCLUSION**

This study provides empirical support for the pedagogical value of flipped classroom instruction in enhancing EFL reading among first-year non-English-major students in Vietnam. Although quantitative results revealed lower post-test scores due to increased task complexity, qualitative evidence demonstrated improved motivation, confidence, and active participation. These findings suggest that when combined with explicit support for self-regulated learning, flipped instruction can better prepare students for academic reading while shifting classroom dynamics from passive learning to active engagement. Overall, the study contributes to the growing body of research affirming the effectiveness of flipped learning in higher education and highlights the need for continued inquiry into how this model can be refined to balance cognitive demands with learners' affective and strategic development.

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## Ứng dụng mô hình lớp học đảo ngược nhằm nâng cao kỹ năng đọc hiểu và mức độ tham gia của sinh viên EFL năm nhất

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### TÓM TẮT

Nghiên cứu này khảo sát tác động của mô hình lớp học đảo ngược đối với khả năng đọc hiểu và mức độ tham gia lớp học của sinh viên năm nhất không chuyên tiếng Anh. Dựa trên phương pháp dạy học lấy người học làm trung tâm và lý thuyết kiến tạo, lớp học đảo ngược tạo điều kiện cho sinh viên tiếp cận tài liệu trước giờ học và tham gia vào các hoạt động tương tác theo nhiệm vụ trong lớp. Thiết kế nghiên cứu hỗn hợp được áp dụng, kết hợp giữa bài kiểm tra đọc hiểu và phỏng vấn bán cấu trúc nhằm đánh giá cả kết quả học tập và trải nghiệm của người học. Kết quả cho thấy rằng mặc dù điểm post-test thấp hơn do mức độ khó cao hơn của các văn bản học thuật, sinh viên vẫn thể hiện động lực, sự tự tin và mức độ tham gia cao hơn trong các hoạt động trên lớp. Mô hình lớp học đảo ngược cũng được đánh giá là giúp tăng cường sự hợp tác và khả năng tự học, nhờ việc sinh viên có sự chuẩn bị tốt hơn trước khi lên lớp và sẵn sàng tham gia tích cực. Tuy vậy, vẫn tồn tại thách thức trong việc tự học, đặc biệt là quản lý thời gian và duy trì sự chuẩn bị đều đặn. Nhìn chung, kết quả gợi ý rằng lớp học đảo ngược có thể nâng cao sự sẵn sàng của sinh viên đối với việc đọc học thuật và thúc đẩy mức độ tham gia cũng như động lực cao hơn, nếu được tích hợp thêm hỗ trợ về kỹ năng tự điều chỉnh trong quá trình học tập.

**Từ khóa:** lớp học đảo ngược, đọc hiểu, sinh viên EFL, sự tham gia của người học, giáo dục đại học

Received: 8/12/2025

Revised: 16/3/2026

Accepted for publication: 25/3/2026