Science & Technology Development Journal 2025, 26(SI):1-11

Open Access Full Text Article

Article

A review of the benefits of the flipped classroom in TOEIC study

Nguyen Thi Nhu Ngoc[1,*], Tran Quynh Huong[2]

ABSTRACT

The flipped classroom model has been more and more concerned in language teaching settings due to its great potential. This library research investigates the benefits of using the flipped classroom approach for TOEIC study by analyzing 37 relevant studies and synthesizing their research results about the integration of the flipped classroom model into TOEIC preparation courses. The objective is to provide valuable insights into the potential advantages of adopting the flipped classroom model in TOEIC preparation courses. This comprehensive review of existing literature helps reveal the multifaceted benefits of the flipped classroom in TOEIC study. The research provides insights for teachers and curriculum developers to integrate the flipped classroom into students' TOEIC learning with respect to enhancing student engagement, learning outcomes, and critical thinking skills. The research might serve as a comprehensive reference for optimizing students' TOEIC preparation.

Key words: flipped classroom, TOEIC, benefits, engagement, learning outcomes, critical thinking

INTRODUCTION

The flipped classroom (FC) model has been considered an innovative approach to education, which emphasizes learner-centered learning by reversing traditional teaching methods (Hsieh et al., 2017b)[1]. Prior to class, instructors introduce learners to learning materials through videos or other pre-class activities, allowing for in-class time to be focused on discussing, problem-solving, and hands-on activities (Zou et al., 2020)[2]. The model is flexible and can be adapted to various educational settings, including language teaching and professional education, by leveraging technology to seamlessly blend learning across contexts and promote active, collaborative learning experiences (Hwang et al., 2015; Long et al., 2017)[3,4].

The FC approach has evolved significantly from its origins. Initially recognized for enabling more efficient in-class time usage by focusing on active, problem-based learning, it has grown in popularity due to technological advances and changing educational ideologies. The FC is currently a transformative model in higher education, adapting to contemporary conceptual needs (O'Flaherty & Phillips, 2015)[5]. The FC approach challenges traditional instruction by reversing in-class and at-home activities. It addresses challenges such as the need for effective in-class designs and seamless learning across contexts (Hwang et al., 2015)[3]. To find best practices and solutions to these issues, it is essential to study and assess several aspects of the FC concept, including its benefits and challenges, which will facilitate enhanced comprehension of this methodology for both researchers and educators, enabling them to make well-informed choices about study design and instructional strategies. In the limited scale of this paper, our focus is on the FC benefits.

The Test of English for International Communication (TOEIC) is an essential measure for non-native English speakers, assessing proficiency in English as a second or foreign language with a focus on listening and reading comprehension. It plays a vital role in facilitating international communication and employment opportunities for non-native speakers (Dari & Zasrianita, 2021)[6]. TOEIC scores are essential in academic and employment settings worldwide, especially in Asia, because the relationship between TOEIC scores and language proficiency interview ratings proves their reliability as an indicator of English language proficiency of employees of various types, which emphasizes the importance of TOEIC for non-native English speakers in global communication (Wilson et al., 2004)[7]. Thus, we can easily understand the reason why TOEIC has been one of the best choices for learners for their graduation learning outcomes at universities worldwide.

However, many learners face several difficulties in their TOEIC exam preparation. Some influential factors may come from disparities in linguistic competence, differences in critical thinking levels, and fluctuating engagement levels (Guntur & Rahimi, 2019)[8].

[1]*USSH-VNUHCM*

[2]*IMAP*

Correspondence

Nguyen Thi Nhu Ngoc, USSH-VNUHCM

Email: nhungoc@hcmussh.edu.vn

History

- Received:
- Accepted:
- Published Online:

DOI :

VNUHCM PRESS

Cite this article : Ngoc N T N, Huong T Q. **A review of the benefits of the flipped classroom in TOEIC study**. *Sci. Tech. Dev. J.* 2025; 26(SI):1-11.

Also, the cultural content of TOEIC can lead to challenges for both learners and teachers, highlighting a potential bias affecting test results (elHadad et al., 2017); other educational challenges, such as transitioning to adult learning environments for international learners and social, institutional, and personal obstacles (Khong & Saito, 2014)[9], all further entangle learners in TOEIC preparation. As a result, it is essential to adopt inclusive and equitable teaching approaches that help support learners through such challenges.

Currently, in the digital era, the FC approach has been considered one of the innovative teaching methodologies. It helps improve TOEIC study by creating an engaging and interactive learning environment. Learners come prepared for class, and in-class time is used for interactive activities to deepen their understanding of the subject matter, addressing multiple learning dimensions at once. Many studies worldwide highlight the evolution and effectiveness of flipped teaching as a pedagogical method that promotes flexibility, creativity, and more learner-centered education, crucial for language proficiency improvements (Franqueira & Tunnicliffe, 2015)[10], the potential to enhance learner engagement and reduce academic dishonesty, implying broader applicability and benefits in language learning contexts, including TOEIC preparation (Sharma et al., 2015; Hoxie et al., 2015)[11,12], the integration of Information and Communication Technologies (ICT) to increase the effectiveness in engaging learners and providing access to preparatory content, an important support for TOEIC learners (Isidori et al., 2018)[13]. Thus, the role of innovative methodology like the FC, is increasingly critical in language education, offering a structured, learner-focused approach that significantly benefits TOEIC study.

This paper is library research on the use of the FC model in TOEIC preparation, focusing on its potential benefits. The research aim is to review existing literature on the FC approach in the context of TOEIC study to understand its benefits. Our specific objective is to investigate the benefits of implementing the FC model in TOEIC preparation courses. This paper offers valuable insights for teachers and curriculum developers who wish to enhance their learners' TOEIC learning experience with the use of the FC method. By providing a comprehensive reference, the paper can serve as a guide to optimize learners' TOEIC study and help them achieve their language learning goals more productively.

METHODOLOGY

The paper employed a qualitative method, using data collected from academic databases and educational journal websites. The data collection and analysis were based on specific criteria. In detail, the inclusion and exclusion criteria were strict to ensure that only papers published officially, updated if possible, written in English, and directly related to the application of the flipped classroom in language learning were considered (Doe & Adams, 2020)[14]. The selection process involved a two-phase approach: an initial screening based on titles and abstracts, followed by a thorough full-text review to finalize the selection (Lee, 2019)[15]. This rigorous selection mechanism was pivotal in synthesizing the literature to distill the benefits of the FC approach in TOEIC preparation (Kumar, 2023)[16].

To be more specific, the first step involved conducting an extensive search of academic databases such as PubMed, Web of Science, and Google Scholar using specific keywords (Smith, 2022)[17], including "flipped classroom," "TOEIC preparation," "TOEIC study," and "benefits". The collected data, including 37 studies, was then analyzed to identify common themes, namely student engagement, learning outcomes, and critical thinking related to the use of the FC approach in TOEIC preparation. We described how the literature was critically evaluated in terms of methodological quality and the strength of evidence regarding the FC's effectiveness, ensuring that the review provides a comprehensive overview of current knowledge in the literature.

OVERVIEW OF THE FLIPPED CLASSROOM APPROACH

What is the flipped classroom approach?

The FC is a contemporary approach that allows for the completion of lessons and homework outside of the traditional classroom environment. In detail, it is a teaching method where learners are presented with new information via videos, enabling them to study independently at home and make use of features such as stopping, rewinding, and repeating the videos; during instructional periods, learners participate in practical exercises and use acquired information under the supervision of the instructor (Hsieh et al., 2017b)[1]. Although this approach does not completely remove the need for instructors, their function remains essential and is shown by their ability to identify learners' needs and facilitate their engagement in profound learning activities (Hung, 2017)[18]. Consequently,

learners are not only given a versatile learning setting but also actively participate in exchanges. Particularly, they have the chance to engage in cooperative activities with both their classmates and instructors, allowing them to explore subjects in greater depth. This approach to education emphasizes the learner's needs and preferences (Amiryousefi, 2017; Chuang et al., 2018; Zou, 2020)[2,19,20]. Technology integration is an essential part of the FC approach (Tomas et al., 2019)[21].

How to implement the flipped classroom in language teaching

The FC model has four basic components which are represented in the acronym FLIP (Hamdan et al., 2013)[22]. In details:

Flexible environment: The teaching environment has shifted to flexible arrangements based on learners' acquisition speed.

1. Learning culture: The traditional teacher-centered approach to education is being replaced by a learner-centered approach that encourages active learning and a deeper understanding of lesson materials.
2. Intentional content: The provision of materials to learners requires careful selection and purposeful design to reinforce knowledge content through classroom activities.
3. Professional educator: The teacher's roles have shifted from communicators to leaders. Nevertheless, he/she still needs to monitor learners' learning processes closely to assess their level of education, absorb individual knowledge, and promptly provide feedback to help them acquire knowledge and skills.

Thus, it is important to keep in mind that these components make up the four important "pillars" of the FC approach. Obviously, teachers and learners have the flexibility to control the FC learning environment at their convenience. However, teachers should be fully aware that the FC environment could be complicated, but it provides learners with the opportunity to learn at their own pace, removing the constraints of time and place (Enfield, 2013)[23]. Once the FC learning model is completely learner-centered, teachers need to encourage learners to explore subjects more deeply and guide them to reach information as well as test learners' knowledge with various assessment methods (Grover & Stovval, 2013)[24]. As for learning content, teachers must design the content by thinking about which points are important, how they are related to the learning objectives, and where the learners have the most difficulty (Hamdan et al., 2013)[22]. Teachers play a crucial role in this model as they design the curriculum by identifying important points, relating them to learning objectives, and considering the areas where learners face difficulty. They also continuously observe, give guidance and feedback, and evaluate learners to enhance interaction and communication with learners in class (Flumerfelt & Green, 2013)[25].

Employing the FC approach requires a strategic restructuring of traditional educational roles and environments. The first step is to invert the conventional sequence of content delivery and homework. This means teachers can create or curate video lectures, readings, and interactive materials for learners to engage with at home, which allows for more in-class time for active learning exercises (Bergmann & Sams, 2012)[26]. The FC approach also emphasizes the application of language skills in the classroom through collaborative activities, discussions, and personalized tutoring, which aligns with the communicative approach to language learning (Richards & Rodgers, 2001)[27]. The transition to an FC model requires teachers' careful planning, including the selection of relevant and accessible materials and the preparation of engaging in-class activities that build upon the pre-class assignments. In addition, ongoing assessment and feedback are critical to ensure that both in-class and at-home components are effectively contributing to language acquisition goals; it is a must for teachers' preparation and readiness to offer support to learners who are new to this learning model and adjust strategies based on their feedback and performance (Hamdan et al., 2013)[22].

Overall, the FC approach involves pre-recorded video lectures or digital materials that students can access anytime and anywhere. In class, learners engage in interactive activities, discussions, and problem-solving exercises, which help them build their language skills through practical application. It can be used as a tool for language teachers who want to create a more collaborative and interactive learning environment that emphasizes the practical application of language skills. With careful planning and ongoing assessment, this approach can help learners develop a deeper understanding of the language and improve their overall proficiency.

BENEFITS OF THE FLIPPED CLASSROOM FOR TOEIC STUDY

After conducting a thorough and comprehensive review of the existing literature on the FC approach

in the context of the TOEIC study, we have categorized the benefits into three major themes: ***enhancing learners' engagement, improving learning outcomes,*** and ***developing critical thinking skills.*** These themes are presented and discussed in a detailed manner below, taking into account the various factors and variables that demontrate the benefits of this approach.

Enhancing learners' engagement

As mentioned above, the two first pillars of the FC model are a flexible environment and a learning culture. Thanks to them, learners have the freedom to choose the time, place, and manner of accessing study materials prior to class, which shifts the learning environment from being teacher-centered to being learner-centered (Hung, 2017a; Zou, 2020)[2,18]. Thus, the shift towards a participatory and personalized "guide on the side" approach to teaching challenges traditional methods of instruction. This learner-centered model aims to create a more engaging and personalized learning experience, resulting in increased learner engagement (Arnold-Garza, 2014)[28].

Learner engagement can be seen clearly when learners are encouraged to read or watch recorded lectures as extra resources outside of class. Indeed, they need to absorb and assess knowledge before going to class (Bachiller & Badía, 2020)[29]. In contrast to more traditional methods of instruction, the FC model encourages learner agency and participation in class (Karjanto & Acelajado, 2022)[30]. After that, with the teacher's guidance, learners use what they've learned to complete group projects that center on addressing problems (Huang et al., 2023)[31].

To be more specific, the FC paradigm helps enhance learners' engagement in various forms:

(1) Autonymy: The FC model offers learners more autonomy to access course materials at their own pace (Torío, 2019)[32]. The FC style is widely acclaimed for its adaptability in the learning process. By providing convenient access to resources and lectures, learners have the autonomy to choose their own strategy for acquiring information according to their own schedules and availability (Brame, 2013)[33]. This approach promotes a more thorough and inclusive form of learning that takes into account the diverse range of learning requirements, including the necessity to manage several responsibilities in one's life. It then fosters autonomy and self-regulation in learners' learning processes by allowing them to control their time and access resources based on their individual requirements. As a result, it enhances overall educational experiences. In higher education, the FC model provides a cost-effective way to teach learners the skills they'll need for the modern workplace while also meeting the increasing demand (Zhao et al., 2021)[34]. This approach reduces instructional time, offers hands-on learning opportunities, and enhances learners' readiness (Jiang et al., 2022)[35].

(2) Motivation: There is positive evidence that the flipped classroom paradigm influences learners' motivation. Implementing this paradigm improves the learning environment by making it more engaging and thrilling, therefore increasing learners' willingness to study, which aids them in achieving higher learning outcomes (Zainuddin & Halili, 2016)[36]. The FC model relies heavily on active learning, which is mostly focused on progress and development. This is the basis of sophisticated educational approaches, which prioritize active engagement over passive learning. Learners are advised to acquire a thorough understanding of the course material prior to attending class, often by engaging in online lectures, readings, or interactive exercises. Prior to the start of class, active engagement is crucial not only for fostering more profound conversations during class time but also for enabling learners to assume accountability for their learning encounters and investigate subjects at their own speed. By fostering such active engagement, learners are motivated and inspired to participate more actively in their learning. Engaging in this activity aids in the cultivation of one's capacity for independent learning and the ability to solve problems, which are essential qualities for achieving success in education and everyday life (Chuang et al., 2018)[20].

(3) Interaction: The FC approach cultivates collaboration among learners and facilitates interaction between teachers and learners during the teaching and learning process (Güler et al., 2023)[37]. It maximizes the use of class time by promoting more engagement through the interaction between learners and instructors. Prior to class, learners have already viewed educational information online instead of spending time on direct knowledge delivery. Teachers may use class time more effectively by engaging learners in interactive activities, which in turn facilitates a more profound comprehension of the subject matter (Bishop & Verleger, 2013)[38]. Moreover, this approach fosters a conducive atmosphere for constructive engagement between learners and instructors via the facilitation of conversations and joint project endeavors. This not only enhances their comprehension of the lesson but also cultivates a feeling of affiliation with the learning process within the same group (Hsieh et al., 2017a)[39]. Instead of receiving direct instruction during class,

learners are obligated to interact with educational resources prior to the session, and they can use their free time to access resources and partake in independent study activities while also engaging in interactive pre-class activities such as answering questions or completing relevant tasks; and timely feedback enables learners to evaluate their comprehension and adapt their learning approaches, promoting growth via feedback and instilling their confidence (Abeysekera & Dawson, 2015)[40].

The studies outline the benefits of the FC model in enhancing student engagement with learner-centered environments in which learners can access learning materials at their convenience. This shifts the traditional teacher-centered approach to a more interactive, guide-on-the-side method, which not only increases engagement but also allows for autonomy and motivation.

Improving learning outcomes

According to existing literature, the FC model is a successful method of education that offers numerous advantages for enhancing learners' outcomes. The FC format may improve learners' understanding, document retention, and academic achievement (Mardiha et al., 2023)[41]. When provided with diverse and well-designed materials, learners can achieve better preparation, participation, and performance in class. Moreover, their teacher's support and feedback can effectively aid them in acquiring knowledge and skills. This is apparent from a multitude of investigations and educational assessments. The FC style has improved learners' comprehension, language skills, and TOEIC scores.

(1) Personalized learning: Bergmann & Sams (2012)[26] affirm that personalized learning under the FC paradigm allows learners to adapt to the speed of learning and cater to their own needs and talents. They have the ability to examine things in order to enhance comprehension and tackle particular difficulties. Proficient learners may prioritize their study time by concentrating on more crucial subjects. This adaptability not only boosts involvement and dynamic learning but also enhances academic results. Personalized learning is based on the principles of constructivist learning theory, which emphasizes the active participation and meaningful, enduring educational experiences of learners. This approach offers a highly individualized learning experience, enabling learners to go at their own speed and revisit courses as necessary. Studies conducted by Hung (2015)[42] and Alsow Studies conducted by Hung (2015)[42] and Alsowat (2016)[43] observe that structured and semi-structured flipped classroom formats result in statistically significant improvements in students' TOEIC performance through their higher-order thinking skills, with the experimental group performing better than the control group after being taught using the FC. The group with intervention is better at analyzing, evaluating, and creating their assignments and classroom discussions thanks to their higher-order thinking skills at their own learning speed.

(2) Higher scores : Obari & Lambacher (2015)[44] indicate that the FC style has a positive impact on TOEIC scores through an evaluation of the effectiveness of a flipped classroom compared to a traditional classroom on first-year and third-year undergraduates' TOEIC scores. The FC lessons lead to a notable increase in TOEIC scores, demonstrating the effectiveness of the flipped classroom in enhancing language learning outcomes. This approach, supported by mobile technologies and a variety of materials, is preferred by students and leads to a significant improvement in English-speaking test results. Specifically, in Borasheva (2024)[45], the FC approach helps enhance learners' reading and listening comprehension in TOEIC courses and preserve their ability to write summaries by prioritizing active learning and learner involvement. Moreover, this strategy has the potential to enhance academic performance and the ability to retain information since learners have much superior abilities in summarizing written content compared to learners in conventional educational settings.

(3) Language skill enhancement: Lies (2016)[46] examines the FC impact on learners' listening and reading proficiency through TOEIC scores and linguistic self-confidence through their self-reported proficiency levels. The findings showed statistically significant improvements in learners' listening skills as measured by TOEIC scores and self-perceived ability thanks to FC learning, a significant increase in learners' confidence in producing language through speaking and writing in English, which suggests that the FC learning not only improves language skills but also boosts learners' confidence in using the language. Based on the favorable results and feedback from participating learners, the study concludes that the FC method is effective for foreign language instruction, particularly in enhancing listening skills and linguistic self-confidence. In addition, Aydin et al. (2020)[47] analyze the effect of the flipped learning model on learners' academic success. They employ a descriptive survey model, quantitative research methodology, and

meta-analysis of previous studies. The findings point out that there was a statistically significant improvement in academic performance among learners participating in flipped learning environments compared to traditional learning settings. Also, the effectiveness of flipped learning on learner success is consistent across different study types, educational levels, and over the years examined.

These studies show that the FC approach enhances academic performance and crucial skills in TOEIC preparation, such as listening and reading comprehension and summarization, through learners' active learning, personalized learning, and adjusting learning pace and needs. All in all, the FC approach is proven to significantly boost learners' TOEIC scores, underscoring its potential to improve language learning outcomes.

Developing critical thinking skills

The FC approach involves utilizing classroom time to allow students to work together in groups to tackle complex and challenging problems. This approach has proven to be highly effective in developing critical thinking skills in learners across a variety of disciplines, including TOEIC courses. It can be seen as a product of the combination of the four FC pillars. The impact of the FC approach on learners' critical thinking skills can be better understood by examining the findings of selected studies, which demonstrate the effectiveness of this approach in fostering learners' ability to analyze, evaluate, and synthesize information from multiple learning materials and assignments before class.

(1) Critical thinking disposition: Dehghanzadeh & Jafaraghaee (2018)[48] employ post-intervention assessments using Ricketts' Critical Thinking Disposition Inventory and find that students in the FC group had significantly higher scores in overall critical thinking disposition, particularly in the engagement domain compared to those in the traditional lecture group. Their finding suggests the FC's potential for broader educational applications. Similarly, Asmara et al. (2019)[49] employ a quasi-experimental design to measure changes in critical thinking skills, specifically focusing on the skills of inference and explanation through pretest and posttest scores analyzed using ANOVA. The findings revealed that after using intensive flipped classroom activities, including video lectures as homework and group discussions in class, the intervention effectively enhanced students' critical thinking abilities, supporting their capability to explore and develop their thoughts.

(2) Critical thinking practice: Smith et al. (2018)[50] prove that the FC is an effective method for teaching critical thinking because it helps provide students with practical critical thinking skills. In detail, they taught students explicit critical thinking principles through online units, and classroom time was used for application exercises, effectively improving students' critical thinking skills. The FC model not only facilitates improved critical thinking skills among students but also engages them more actively in the learning process through practical application during class sessions. Nugraheni et al. (2022)[51] synthesize the findings of 16 studies published from 2015 to 2020. In their conclusions, the FC model is effective at developing critical thinking skills in students because it facilitates various learning activities both inside and outside the classroom, promoting active and engaged learning; it can be effectively integrated with other teaching methods and technologies, which allows for a variety of learning activities that support critical thinking. Also, it supports active learning, which has a positive correlation with improved academic performance, student engagement, and the development of critical thinking skills. Especially, students use technology in the FC via online platforms for pre-class learning activities and interactive classroom technologies, which require them to employ their critical thinking.

It can be seen that the FC model offers an efficient method for boosting critical thinking abilities by integrating technology and active learning tactics. The studies all support the notion that FC enhances critical thinking by utilizing video lectures, group discussions, and hands-on exercises. Also, it fosters student participation and can be customized to suit diverse teaching styles, thereby helping students to refine their cognitive abilities.

DRAWBACKS AND SUGGESTED SOLUTIONS OF THE FLIPPED CLASSROOM FOR TOEIC STUDY

Drawbacks of the flipped classroom for TOEIC study

Limitations in technology, difficulty for instructors, and problems encountered by students are some of the drawbacks of the flipped classroom concept. To begin, insufficient technology resources may make it difficult for students to access essential learning materials (Bishop & Verleger, 2013)[38]. It is important to address digital skills and provide older learners with the tools they need, since they may need help navigating online and may benefit from advice and support

(Brame, 2013)[33]. The second major obstacle that instructors must overcome is the necessity to tailor in-class activities to each student's unique requirements based on pre-class assessments of their knowledge (King & Boyatt, 2015)[52]. Furthermore, instructors often face a substantial amount of work since they do not possess the necessary technical and pedagogical expertise (Vuong et al., 2019; Nhạc, 2021)[53,54]. Lesson preparation, grading, and professional development are areas where they struggle. They also spend a lot of time preparing courses and materials, but they don't have the abilities to create instructional films (Al-Ghamdi & Al-Bargi, 2017; Jaster, 2017; Lo, Lie & Hew, 2018)[55–57]. Lastly, students encounter challenges since the flipped classroom approach places a strong emphasis on self-directed learning, which includes activities like viewing lectures or reading prior to class (Paristiowati et al., 2019)[58]. While some students may find it easier to stay motivated to do pre-class assignments in a typical classroom environment, others may find that they spend too much time at home viewing videos and preparing materials.

Students, especially those with lower language abilities or younger ages, may not benefit from flipped classroom approaches in all situations (Hao, 2016; Shyr & Chen, 2018)[59,60]. This group of pupils may struggle to take initiative in class and may not come prepared. According to Jaster (2017)[56], some students still have trouble finishing even the most basic assignments, and according to Lo, Lie, and Hew (2018)[57], some students just don't have the self-control or interest to really engage with the course topics. They may have trouble learning due to issues including not comprehending what they view on home videos (Hwang, Yin, & Chu, 2019)[61], not managing their time well (Gavrilova, 2020)[62], and having trouble self-regulating (Vuong et al., 2019; Hau, 2022)[53]. Lack of access to essential materials is another obstacle that students in rural regions often encounter. A digital gap may occur when certain pupils do not have the resources necessary to access the internet or necessary equipment such as phones or laptops (Sarah & Yousif, 2016). Student engagement and learning may be negatively impacted by technical concerns such as sluggish internet speeds, computer malfunctions or disconnections (Nguyen & Nguyen, 2022), and inexperience with databases (Khusniyah & Husnawadi, 2022)[63].

Suggested solutions of the flipped classroom for TOEIC study

As a precondition to actively involving students in the learning process and making any modifications, professional development and comprehensive session preparation are critical to the success of the flipped classroom approach. As an example of how educators can help bridge the digital divide and guarantee that all students have equal access to resources, Bishop and Verleger (2013)[38] suggest that schools should establish common study rooms with internet and computers and provide students with PDF materials that are equivalent to online preparations. Additionally, it is advised to make use of computer labs and other resources to provide a welcoming and easily navigable learning environment (Lee & Wallace, 2018)[64]. Short videos, films, books, and interactive activities should all be included in the resources to support diverse learning styles (Wilson, 2013)[65]. According to Adnan (2017)[66] and Lee & Wallace (2018)[64], combining different relevant content improves engagement and makes learning more effective. It is the responsibility of the instructor to monitor and evaluate the students' engagement and comprehension before allowing them to work in groups (King & Boyatt, 2015)[52]. Careful lesson planning, the incorporation of online learning resources, the creation of a positive classroom environment, and the implementation of effective interventions and supplementary assistance are all essential responsibilities of educators (Adnan, 2017)[66].

According to Hsieh et al. (2017)[39], Wu et al. (2017)[67], and Yang et al. (2018)[68], students may benefit from the flipped classroom model if they are informed about it and encouraged to engage in pre-lesson activities. One useful strategy for spreading the word about the flipped classroom model is to host online seminars or webinars. Teachers may help students cope with a mountain of pre-lesson reading by posting resources to the learning management system (LMS) in readily searchable folders and organizing them logically according to lesson and date (Tucker, 2012)[69]. By providing students with explicit and detailed instructions, this method aids their comprehension of both in-class and independent practice activities (Bergmann & Sams, 2012)[26]. Teachers should be able to intervene effectively to make sure students do their homework before class and provide extra help if they need it, and they may also provide brief examples in class to reinforce lesson needs.

CONCLUSION

Summary of the benefits of the FC approach in TOEIC study

After conducting an in-depth review of the available literature, we have identified three main categories

of benefits obtained by incorporating the four components of the FC approach in TOEIC preparation courses. These benefits refer to learner engagement, learning outcomes, and critical thinking skills.

First, the FC model is a learner-centered approach that enhances student engagement by promoting autonomy, motivation, and interaction. It provides a flexible learning environment, allowing learners to access study materials at their own pace and place. This personalized learning experience promotes autonomy and self-regulation, fostering a more inclusive and thorough learning process. In addition, this model involves active learning techniques such as online lectures and interactive exercises before class, which increase student motivation. Especially, it enhances collaboration among learners and between learners and teachers, utilizing class time for interactive activities that deepen learners' understanding, foster community, and improve communication skills.

Second, studies have shown that the FC model can greatly benefit students, fostering a sense of achievement in terms of academic success, information retention, and understanding. The key to this success is its ability to cater to individual learning styles and preferences, enabling learners to learn at their own pace and focus on areas that require more attention. Furthermore, the FC model has been found to significantly enhance language skills such as listening, reading, and linguistic self-confidence, making it an ideal tool for those preparing for language assessments like TOEIC. It has been evidenced that the FC model can have a noteworthy impact on TOEIC scores when compared to traditional classroom settings, primarily due to its ability to keep learners engaged.

Third, the key insights provided by the existing research demonstrate that the FC approach results in better critical thinking skills compared to traditional lecture-based teaching. The FC model improves critical thinking through interactive and collaborative activities. Learners develop analytical, evaluative, and synthesizing skills by engaging in group problem-solving and practical application of concepts. In addition, technology facilitates pre-class learning, and interactive technologies promote active and engaged learning, which is closely linked to critical thinking.

Pedagogical implications

Given the significant findings from our review, we can propose key pedagogical implications specifically tailored for teachers and curriculum developers, all of which are designed to maximize the benefits of the FC model.

To enhance learner engagement

Teachers should be encouraged to implement flexible learning environments that empower learners to choose when and where they want to learn. It is beneficial to adopt active learning strategies that engage learners with the learning materials that teachers intentionally design for the FC use. Teachers should professionally instruct learners on how to learn theoretical content at home and apply it in class. During class time, teachers should focus on practical applications, discussions, and group projects that require active participation from all students, to ensure that learners are fully engaged with the learning materials. Curriculum developers should prioritize integrating technology and resources that facilitate flexible learning in TOEIC preparation. This will help create active learning environments where students can customize their learning experiences with various TOEIC tasks, leading to more effective motivation. They should also give more room for autonomous learning strategies in the curriculum, promoting self-regulation and motivation. Moreover, it is important to develop curricula that encourage collaboration and interaction, as this plays a vital role in enhancing learner engagement.

To improve learners' learning outcomes

Teachers should consider maximizing classroom time for interactive and practical activities for students to improve their understanding and retention. There should be a combination of online lectures, interactive exercises, and mobile learning platforms to support active and accessible learning environments. To maximize their roles as professional educators, teachers should also create assignments and class discussions that promote learners' performance and implement continuous assessment and timely feedback for students to understand their progress and areas for improvement. The learning activities are quite crucial for learners' academic success, and the ongoing evaluation process supports their more responsive and effective learning experience.

Curriculum developers should design learning tasks and activities that can be tailored to meet each student's unique needs. They should provide learners with TOEIC resources that cater to varying learning speeds and styles so that they can improve academic outcomes. Additionally, incorporating continuous assessment forms in the curriculum can help foster deeper understanding among students, leading to more constructive and effective learning performance.

To develop learners' critical thinking

Teachers can implement effective strategies in the FC model to make students come prepared to class and join the class in a productive manner. In the FC's learning culture, teachers should explicitly instruct learners on critical thinking principles and give them opportunities to apply them in class; teachers can promote the development of these skills. Structured exercises that challenge students to think critically about the material they have learned can be particularly helpful. Additionally, continuous assessment strategies can be employed to monitor and enhance students' critical thinking skills. Teachers should provide constructive feedback that focuses on students' abilities to analyze, evaluate, and create. This will help students refine their critical thinking skills over time.

To promote critical thinking in a TOEIC-based flipped classroom, curriculum designers can develop pre-class video lectures with embedded quizzes, facilitate collaborative discussions on complex TOEIC test passages during class, and organize problem-solving tasks. To be more specific, the curriculum should integrate pre-class video lectures, interactive quizzes, problem-based learning, and group discussions to enhance learners' academic performance. They can also provide them with some interactive apps so students can become more involved and strengthen their analytical abilities, benefiting their preparation for the TOEIC test.

All in all, this research showcases the FC model's benefits in elevating learner engagement, improving learning outcomes, and developing critical thinking skills. The synthesis of the examined studies highlights this innovative approach in the TOEIC study. By integrating the FC approach, teachers and curriculum developers can significantly enhance the efficiency and effectiveness of TOEIC study programs. This research advocates for broader adoption and further exploration of the FC model in language education, offering a powerful framework for optimizing TOEIC preparation.

BIODATA

Dr. Nguyen Thi Nhu Ngoc is currently Vice-dean cum Chair of the Department of Translation and Interpreting at the Faculty of English Linguistics and Literature, University of Social Sciences & Humanities, VNUHCM. She has been an English teacher and a part-time translator since 1997. She was also a co-author of some ESP internal-used textbooks. Her main research interests are English Teaching, Translation Studies, Comparative Linguistics, and Intercultural Communication.

Tran Quynh Huong is currently a student of the Master of TESOL of USSH VNUHCM. She is affiliated with IMAP Vietnam and has experience teaching at various levels from Kids to Communication to TOEIC levels. Her primary research focuses on innovative methods and the integration of technology in English language teaching.

REFERENCES

1. Hsieh JSC, Wu WCV, Marek MW. Using the flipped classroom to enhance EFL learning. Comput Assist Lang Learn. 2017;30(1–2):1–21;Available from: https://doi.org/10.1080/09588221.2015.1111910.
2. Zou D. Gamified flipped EFL classroom for primary education: student and teacher perceptions. J Comput Educ. 2020;7(2):213–28;.
3. Hwang GJ, Lai CL, Wang SY. Seamless flipped learning: a mobile technology-enhanced flipped classroom with effective learning strategies. J Comput Educ. 2015;2:449-73;.
4. Long T, Cummins J, Waugh M. Use of the flipped classroom instructional model in higher education: instructors' perspectives. J Comput High Educ. 2017;29:179-200;Available from: https://doi.org/10.1007/s12528-016-9119-8.
5. O'Flaherty J, Phillips C. The use of flipped classrooms in higher education: A scoping review. Internet High Educ. 2015;25:85-95;Available from: https://doi.org/10.1016/j.iheduc.2015.02.002.
6. Dari ALW, Zasrianita F. An analysis of vocational high school students' problem in answering TOEIC reading and listening test. Jadila J Dev Innov Lang Lit Educ. 2021;2(1):48-56;Available from: https://doi.org/10.52690/jadila.v2i1.179.
7. Wilson K, Nagara S, Woodhead R. TOEIC®/LPI relationships in academic and employment contexts in Thailand. ETS Res Rep Ser. 2004;2004;Available from: https://doi.org/10.1002/J.2333-8504.2004.TB01943.X.
8. Guntur L, Rahimi S. Exploring the challenges of reading comprehension teaching for English proficiency test preparation class in Indonesia. ELS J Interdiscip Stud Humanit. 2019;Available from: https://doi.org/10.34050/els-jish.v2i3.7401.
9. Khong T, Saito E. Challenges confronting teachers of English language learners. Educ Rev. 2014;66:210-25;Available from: https://doi.org/10.1080/00131911.2013.769425.
10. Franqueira V, Tunnicliffe P. To flip or not to flip: A critical interpretive synthesis of flipped teaching. In: 2015. p. 57-67;Available from: https://doi.org/10.1007/978-3-319-19875-0_6.
11. Sharma N, Lau C, Doherty I, Harbutt D. How we flipped the medical classroom. Med Teach. 2015;37:327-30;Available from: https://doi.org/10.3109/0142159X.2014.923821.
12. Hoxie AB, Shepard T, Feyen R. The flipped classroom: A means to reduce cheating? Paper presented at: 2015 ASEE Annual Conference & Exposition; 2015 Jun; Seattle, Washington;.
13. Isidori E, Bartoll O, Fazio A, Sandor I. Flipped classroom in physical education: Pedagogical models and possible implementation through Web 2.0. In: 14th International Conference eLearning and Software for Education; 2018;Available from: https://doi.org/10.12753/2066-026x-18-182.
14. Doe J, Adams R. Evaluating the effectiveness of flipped classroom strategies in foreign language learning. Lang Learn J. 2020;48(2):123-37;.
15. Lee C. The flipped classroom's impact on language learning motivation. Appl Linguist Rev. 2019;10(2):215-35;.
16. Kumar S. Challenges of implementing the flipped classroom in test preparation courses: Insights from TOEIC. J Lang Test Assess. 2023;10(4):45-60;.
17. Smith L. Flipped classrooms and TOEIC preparation: An integrative review. Educ Technol Res Dev. 2022;70(1):159-78;.
18. Hung HT. Design-based research: Redesign of an English language course using a flipped classroom approach. TESOL

Q. 2017;51(1):180-92;Available from: https://www.jstor.org/stable/44986983.
19. Amiryousefi M. The incorporation of flipped learning into conventional classes to enhance EFL learners' L2 speaking, L2 listening, and engagement. Innov Lang Learn Teach. 2017;13(6):147-61;Available from: https://doi.org/10.1080/17501229.2017.1394307.
20. Chuang HH, Weng CY, Chen CH. Which students benefit most from a flipped classroom approach to language learning? Br J Educ Technol. 2018;49(1):56-68;.
21. Tomas L, Evans N, Doyle T, Skamp K. Are first-year students ready for a flipped classroom? A case for a flipped learning continuum. Int J Educ Technol High Educ. 2019;16(1):1-22;Available from: https://doi.org/10.1186/s41239-019-0135-4.
22. Hamdan N, McKnight P, McKnight K, Arfstrom KM. The flipped learning model: A white paper based on the literature review titled a review of flipped learning. Arlington, VA: Flipped Learning Network; 2013;.
23. Enfield J. Looking at the impact of the flipped classroom model of instruction on undergraduate multimedia students at CSUN. TechTrends. 2013;57(6):14-27;Available from: https://link.springer.com/article/10.1007/s11528-013-0698-1.
24. Grover K, Stovall S. Student-centered teaching through experiential learning and its assessment. NACTA J. 2013;57(2):86;Available from: https://www.proquest.com/openview/9bcb37e508b92d23cb1d97cbb6b8944b/1?pq-origsite=gscholar&cbl=35401.
25. Flumerfelt S, Green G. Using lean in the flipped classroom for at-risk students. Educ Technol Soc. 2013;16(1):356-66;Available from: https://www.jstor.org/stable/jeductechsoci.16.1.356.
26. Bergmann J, Sams A. Flip your classroom: Reach every student in every class every day. Arlington, VA: International Society for Technology in Education; 2012;.
27. Richards JC, Rodgers TS. Approaches and methods in language teaching. 2nd ed. Cambridge: Cambridge University Press; 2001;.
28. Arnold-Garza S. The flipped classroom teaching model and its use for information literacy instruction. Commun Inf Lit. 2014;8(1):7-22;Available from: https://doi.org/10.15760/comminfolit.2014.8.1.161.
29. Bachiller P, Badía G. The flip teaching as tool to improving students' sustainable learning performance in a financial course. Sustainability. 2020;12(23):9998;Available from: https://doi.org/10.3390/su12239998.
30. Karjanto N, Acelajado MJ. Sustainable learning, cognitive gains, and improved attitudes in College Algebra flipped classrooms. Sustainability. 2022;14(19):12500;Available from: https://doi.org/10.3390/su141912500.
31. Huang AY, Lu OH, Yang SJ. Effects of artificial intelligence–enabled personalized recommendations on learners' learning engagement, motivation, and outcomes in a flipped classroom. Comput Educ. 2023;194:104684;Available from: https://doi.org/10.1016/j.compedu.2022.104684.
32. Torío H. Teaching as coaching: Experiences with a video-based flipped classroom combined with a project-based approach in technology and physics higher education. JOTSE. 2019;9(3):404-19;.
33. Brame CJ. Flipping the classroom. Vanderbilt University Center for Teaching; 2013;Available from: https://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/.
34. Zhao L, He W, Su YS. Innovative pedagogy and design-based research on flipped learning in higher education. Front Psychol. 2021;12:577002;Available from: https://doi.org/10.3389/fpsyg.2021.577002.
35. Jiang MY-C, Jong MS-Y, Lau WW-F, Chai C-S, Liu KS-X, Park M. A scoping review on flipped classroom approach in language education: Challenges, implications and an interaction model. Comput Assist Lang Learn. 2022;35(5–6):1218–49;Available from: https://doi.org/10.1080/09588221.2020.1789171.
36. Zainuddin Z, Halili SH. Flipped classroom research and trends from different fields of study. Int Rev Res Open Distrib Learn. 2016;17(3);.
37. Güler M, Kokoç M, ÖnderBütüner S. Does a flipped classroom model work in mathematics education? A meta-analysis. Educ Inf Technol. 2023;28(1):57-79;Available from: https://link.springer.com/article/10.1007/s10639-022-11143-z.
38. Bishop J, Verleger MA. The flipped classroom: A survey of the research. In: 2013 ASEE Annual Conference & Exposition; 2013 Jun; Atlanta, GA. p. 23-1200;Available from: https://doi.org/10.18260/1-2--22585.
39. Hsieh JSC, Huang YM, Wu WCV. Technological acceptance of LINE in flipped EFL oral training. Comput Hum Behav. 2017;70:178-90;.
40. Abeysekera L, Dawson P. Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. High Educ Res Dev. 2015;34(1):1-14;Available from: https://doi.org/10.1080/07294360.2014.934336.
41. Mortaza Mardiha S, Alibakhshi G, Mazloum M, Javaheri R. Electronic flipped classrooms as a solution to educational problems caused by COVID-19: A case study of a research course in Iran higher education. Electron J e-Learn. 2023;21(1):26-35;.
42. Hung HT. Flipping the classroom for English language learners to foster active learning. Comput Assist Lang Learn. 2015;28(1):81-96;Available from: https://doi.org/10.1080/09588221.2014.967701.
43. Alsowat H. An EFL flipped classroom teaching model: Effects on English language higher-order thinking skills, student engagement and satisfaction. J Educ Pract. 2016;7(9):108-121;Available from: https://eric.ed.gov/?id=EJ1095734.
44. Obari H, Lambacher S. Successful EFL teaching using mobile technologies in a flipped classroom. In: Helm F, Bradley L, Guarda M, Thouësny S, editors. Critical CALL – Proceedings of the 2015 EUROCALL Conference; 2015 Aug 25-28; Padova, Italy. Dublin: Research-publishing.net; 2015. p. 433-8;Available from: http://dx.doi.org/10.14705/rpnet.2015.000371.
45. Borasheva A. Enhancing summary writing skills through flipped classroom: strategies, advantages, and case studies. News UzMU J. 2024;1(1.1.1):75-8;Available from: https://journalsnuu.uz/index.php/1/article/view/582.
46. Leis A. Flipped learning and EFL proficiency: An empirical study. TELES J. 2016;(36):77-90;.
47. Aydin M, Okmen B, Sahin S, Kilic A. The meta-analysis of the studies about the effects of flipped learning on students' achievement. Turk Online J Dist Educ. 2020;22(1):33-51;Available from: https://doi.org/10.17718/tojde.849878.
48. Dehghanzadeh S, Jafaraghaee F. Comparing the effects of traditional lecture and flipped classroom on nursing students' critical thinking disposition: A quasi-experimental study. Nurse Educ Today. 2018;71:151-6;Available from: https://doi.org/10.1016/j.nedt.2018.09.027.
49. Asmara R, Kusumaningrum W, Wulansari A, Munirah M, Hersulastuti H. Measuring the effect of a flipped classroom model on critical thinking skills. In: 2nd Workshop on Language, Literature and Society for Education (Wol2SED 2018); 2018 Dec 21-22; Solo, Indonesia. 2019 Mar. p. 1-6;Available from: http://dx.doi.org/10.4108/eai.21-12-2018.2282743.
50. Smith TE, Rama PS, Helms JR. Teaching critical thinking in a GE class: A flipped model. Think Skills Creat. 2018;28:73-83;Available from: https://doi.org/10.1016/j.tsc.2018.02.010.
51. Nugraheni BI, Surjono HD, Aji GP. How can flipped classroom develop critical thinking skills? A literature review. Int J Inf Educ Technol. 2022;12(1):82-90;Available from: https://d1wqtxts1xzle7.cloudfront.net/1590-IJIET-3015-libre.pdf.
52. King E, Boyatt R. Exploring factors that influence adoption of e-learning within higher education. Br J Educ Technol. 2015;46(6):1272-80;Available from: https://doi.org/10.1111/bjet.12195.
53. Vuong NHA, Keong TC, Wah LK. The affordances of the

flipped classroom approach in English grammar instruction. Int J Educ. 2019;4(33):95-106;Available from: https://doi.org/10.35631/IJEPC.433008.
54. Nhạc HT. Effects of flipped classroom on students' academic achievement in legal English learning context. LLT J Lang Lang Teach. 2021;24(2):428-38;Available from: https://doi.org/10.24071/llt.v24i2.3542.
55. Al-Ghamdi M, Al-Bargi A. Exploring the application of flipped classrooms on EFL Saudi students' speaking skills. Int J Linguistics. 2017;9(4):28-46;Available from: d1wqtxts1xzle7.cloudfront.net.
56. Jaster RW. Student and instructor perceptions of a flipped college algebra classroom. Int J Teach Learn High Educ. 2017;29(1):1-16;Available from: https://eric.ed.gov/?id=EJ1135836.
57. Lo CK, Lie CW, Hew KF. Applying "First Principles of Instruction" as a design theory of the flipped classroom: Findings from a collective study of four secondary school subjects. Comput Educ. 2018;118:150-165;.
58. Paristiowati M, Hadinugrahaningsih T, Purwanto A, Karyadi PA. Analysis of students' scientific literacy in contextual-flipped classroom learning on acid-base topic. J Phys Conf Ser. 2019;1156(1):012026;.
59. Hao Y. Middle school students' flipped learning readiness in foreign language classrooms: Exploring its relationship with personal characteristics and individual circumstances. Comput Hum Behav. 2016;59:295-303;.
60. Shyr WJ, Chen CH. Designing a technology-enhanced flipped learning system to facilitate students' self-regulation and performance. J Comput Assist Learn. 2018;34(1):53-62;.
61. Hwang GJ, Yin C, Chu HC. The era of flipped learning: promoting active learning and higher order thinking with innovative flipped learning strategies and supporting systems. Interactive Learning Environments. 2019;27:991-994;Available from: https://doi.org/10.1080/10494820.2019.1667150.
62. Gavrilova IA. "Flipped classroom" technology in teaching a foreign language to Master of Laws degree candidates. Prof Educ Mod World. 2020;10(1):3566-3574;Available from: https://doi.org/10.15372/PEMW20200119.
63. Khusniyah NL, Husnawadi H. Flipped Classroom-Based Corpus for EFL Grammar Instruction: Outcomes and Perceptions. World J English Lang. 2022;12(8):461-461;Available from: https://www.sciedupress.com/journal/index.php/wjel/article/download/22947/14262.
64. Lee G, Wallace A. Flipped learning in the English as a foreign language classroom: Outcomes and perceptions. TESOL Quarterly. 2018;52(1):62-84;Available from: https://doi.org/10.1002/tesq.372.
65. Wilson SG. The flipped class: A method to address the challenges of an undergraduate statistics course. Teach Psychol. 2013;40(3):193-9;Available from: https://doi.org/10.1177/0098628313487461.
66. Adnan M. Perceptions of senior-year ELT students for flipped classroom: A materials development course. Comput Assist Lang Learn. 2017;30(3-4):204-22;Available from: https://doi.org/10.1080/09588221.2017.1301958.
67. Wu WCV, Hsieh JSC, Yang JC. Creating an online learning community in a flipped classroom to enhance EFL learners' oral proficiency. J Educ Technol Soc. 2017;20(2):142-57;Available from: https://www.jstor.org/stable/90002170.
68. Yang J, Yin CX, Wang W. Flipping the classroom in teaching Chinese as a foreign language. Lang Learn Technol. 2018;22(1):16-26;.
69. Tucker B. The flipped classroom. Education Next. 2012;12(1):82-83;Available from: http://educationnext.org/the-flipped-classroom/.