

The Effectiveness, Benefits and Challenges of the Implementation of Flipped Classroom in English Teaching and Learning: A Systematic Review

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Abstract

The aim of doing this systematic review is to fill up the gap on the benefits, challenges, and impacts of flipped classrooms in English language instruction and learning. The research incorporates data from 36 empirical studies that were published between 2017 and 2023. Examining peer-reviewed literature from databases including Web of Science, ERIC, and Scholar Google, the review's content analysis shows the findings are: Flipped classrooms have a positive impact on (1) student learning outcomes, which increased students' academic achievement; (2) students' motivation to learn and classroom engagement; (3) enhances social interaction skills and independent learning through group activities. The challenges include that: (1) Some students lack motivation; therefore, they skip watching lectures and materials on video outside of the classroom; (2) there are issues related to technology, include unreliable internet connections and insufficient technical assistance and so on will set back the outcome. Despite the potential of the flipped classroom model to promote the effectiveness of English language learning, in order to fully realize this potential, improved technological infrastructure, professional development opportunities for teachers, and the cultivation of students' self-directed learning skills are required to address the pedagogical and technological obstacles that arise during implementation. Future studies should concentrate on standardized assessment techniques, cross-cultural and educational environment comparisons, and long-term learning results.

Keywords: Flipped Classroom, English Learning, Systematic Literature Review, Effectiveness, Benefits And Challenges

Abstrak

Tujuan semakan sistematik ini adalah untuk mengisi jurang pengetahuan tentang kelebihan, keburukan, dan kesan kelas berbalik dalam pengajaran dan pembelajaran bahasa Inggeris. Penyelidikan ini menggabungkan data daripada 36 kajian empirikal yang diterbitkan antara 2017 dan 2023. Meneliti literatur yang disemak rakan sebaya daripada pangkalan data termasuk Web of Science, ERIC dan Scholar Google, analisis kandungan ulasan menunjukkan penemuannya ialah: Kelas berbalik mempunyai kesan positif terhadap (1) hasil pembelajaran pelajar, yang meningkatkan pencapaian akademik pelajar; (2) motivasi pelajar untuk belajar dan penglibatan dalam bilik darjah; (3) meningkatkan kemahiran interaksi sosial dan pembelajaran bebas melalui aktiviti berkumpulan. Cabarannya termasuklah: (1) Sesetengah pelajar kurang motivasi, oleh itu mereka melangkau menonton kuliah dan bahan video di luar bilik darjah; (2) Terdapat isu yang berkaitan dengan teknologi, termasuk sambungan internet yang tidak boleh dipercayai dan bantuan teknikal yang tidak mencukupi dan sebagainya akan mengecilkan hasilnya. Walaupun potensi model kelas berbalik untuk meningkatkan keberkesanan pembelajaran bahasa Inggeris, untuk merealisasikan potensi ini sepenuhnya, infrastruktur teknologi yang lebih baik, peluang pembangunan profesional untuk guru, dan penerapan kemahiran pembelajaran sendiri pelajar diperlukan untuk menangani halangan pedagogi dan teknologi yang timbul semasa pelaksanaan. Kajian masa depan harus menumpukan pada teknik penilaian piawai, perbandingan silang budaya dan persekitaran pendidikan, dan hasil pembelajaran jangka panjang.

Kata kunci: kelas berbalik, pembelajaran Bahasa Inggeris, tinjauan literatur sistematik, keberkesanan, faedah dan cabaran

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1.0 INTRODUCTION

With the escalating integration of technology in educational settings, scholarly interest in the impacts of technology-supported learning and teaching on students has surged. Among them, flipped classroom, an important area of educational technology application, has received a great deal of attention (Hung, 2015), particularly since Bergmann and Sams (2012) promoted it. Flipped classrooms rely largely on the support of educational technology, which is better at inspiring students to learn under the technology-enhanced teaching strategies (Yıldız et al., 2022). By educational technology, the flipped classroom approach seeks to reverse the traditional teaching model and provide instruction that was previously provided in class outside of the classroom (Huang, et al., 2023). Flipped classrooms stimulate students to engage in preparatory material review through video viewing, book reading, and other resources, while fostering in-class communication, knowledge sharing, and analysis (Bachiller & Badia, 2020). Lastly, group activities facilitate students' mentoring interactions and collaborative conversations as they jointly tackle exercises and problems within the classroom environment. They also give students more learning and practical chances to put concerns into action (Lopes, et al., 2019). By empowering students to learn at their individual pace and presenting a diverse array of learning modalities, flipped classroom technology (Jiang, et al., 2022) amplifies their enthusiasm and

preparedness for learning. In and outside the classroom, students can work together. Compared to previous methods, this one is more student-centered and dynamic (Karjanto & Acelajado, 2022). As a result, it can enhance students' confidence and critical thinking abilities in addition to their academic performance, engagement, and comprehension of the subject matter (Mortaza, et al., 2023).

Given that flipped classrooms facilitate deeper, self-paced learning from course materials (Namaziandost et al., 2020; Torio, 2019; Wanner & Palmer, 2015), this pedagogical approach heightens students' capacity for collaborative problem-solving across various disciplines, such as engineering education (Lo, et al., 2019), mathematics study (Lo, et al., 2017), health professions learning (Hew & Lo, 2018), nursing training (Xu, et al., 2019), and second language acquisition (Turan & Akdag-Cimen, 2019), thereby enhancing learning outcomes, academic performance, and practical understanding across educational levels, encompassing K-12, vocational colleges, training schools, and universities (Lundin, et al., 2018). The research on flipped learning has sparked a number of meta-analyses and systematic reviews, which exhibit a steady upward trend in the quantity of studies pertaining to flipped classrooms over time, underscoring the growing impact of this approach in educational research. There are also further supporting the growing popularity of flipped learning is extensive reviews that compare its effectiveness across several educational domains (for example, Låg & Saele, 2019; Cheng, et al, 2019; Shi, et al, 2020). Despite the potential benefits, the successful implementation of flipped classrooms in English teaching requires a robust technological infrastructure, comprehensive teacher training, and effective student engagement strategies (Westerfield, 2019). It is essential to provide teachers with the necessary tools and professional development to integrate technology effectively and to guide students in taking responsibility for their learning process. The flipped classroom model's potential to enhance English language learning is not limited to improving academic performance; it also boosts students' confidence and motivation, critical for language learning success (Patel & Chen, 2023). In conclusion, the flipped classroom stands as a pivotal technology-augmented learning and teaching approach within the wide field of education.

■2.0 LITERATURE REVIEW

Flipped learning is an innovative instructional approach that has garnered significant attention due to its versatility in diverse educational contexts, its potential to enhance student learning, and its demonstrated capacity to boost student performance (O'Connor & Ferreri 2013; Zappe, et al., 2009). Numerous scholars have explored the definition of flipped classrooms. According to Bishop and Verleger (2013), they are computer-based, one-to-one tutorials before class that help prepare students for group work in the classroom. The flipped classroom is classified by FLN (2014) as pre-class. To learn and comprehend the course material ahead of time, students watch instructional films that are based on the instructional content. This allows students to actively learn, integrate and apply the knowledge they have acquired throughout the course. According to Braiek and Onaiba (2018) and Shehata (2019), the flipped classroom is a teaching paradigm based on active learning in which the time allotted for classroom instruction and student homework is reversed. Didactic lectures are delivered online as teacher-produced materials that students prepare on their own at a convenient time and place away from the classroom. Students are then expected to apply what they have learned in class to complete a group problem-solving activity under peer supervision (Huang, et al., 2023). Despite numerous scholars having provided definitions of the flipped classroom, there remain ongoing debates surrounding its precise characterization (Lo & Hew, 2021). However, most scholars agree that the concept of flipped learning is rooted in student-centered learning, where students take charge of their own education. This is the reason behind the flipped classroom approach, which enriches student-teacher interaction and learning activities at all stages by integrating various forms of computer-assisted learning through the network platform to deliver content that cannot be accomplished in traditional classrooms (Wach, 2012).

As a result, taking the material covered in regular English classes out of the classroom is how the term "flipped classroom" is defined in this article. Using micro-lectures, PowerPoint presentations and other multimedia resources, the instructors provide students with self-paced learning materials to be completed outside class, giving students a head start, stimulating their curiosity and giving them the tools they need to participate in class discussions. The simultaneous implementation of text analysis, comprehension and communication in the classroom leads to the ultimate achievement of learning objectives through consistent mutual support and communication (Wang, 2010). The implementation of flipped learning in various courses across disciplines and fields has been the subject of numerous published studies on flipped classrooms (Stryer, 2012). These studies have mainly focused on science and engineering, where flipped learning has been implemented in algebra, biology, computer programming, engineering, information and communication technology (ICT), medical learning, and multimedia production, among others. According to Chen Shanshan, computer multimedia technology can deliver teaching material in a variety of ways, reducing the likelihood of students becoming tired and significantly increasing their engagement and productivity in the classroom. Its use in electrical engineering was reported by Papadopoulos and Roman in 2010, and Missildine, Fountain, Summers, and Gosselin (2013) showed a positive effect on the performance of nursing students. In another review, Divjak and his friends highlights the use of flipped classroom techniques during the epidemic (Divjak, et al., 2022). Senali (2022) offer an innovative flipped classroom in entrepreneurship and business. Jiang et al. (2022) provide a summary of research on flipped language teaching. Huang et al. (2023) propose the utilization of video tutorials in flipped classrooms for systems programming courses as a means to stimulate students' interest in learning. To help students better understand English learning, flipped classrooms have also been explored in higher education courses related to science and engineering (Chen Xie et al., 2017). Numerous analytical studies (Presti, 2016; Chen et al., 2017; Lo & Hew, 2017) have shown that FL can promote effective learning and increase students' motivation and engagement at all levels of education. To illustrate, consider the following: reading comprehension (Abaecian & Samadi, 2016), English speaking (Li & Suwanthep, 2017), English writing (Ahmed, 2016), English pronunciation (Zhang, et al., 2016), and translation (Shu, 2015).

Despite its widespread use in many different disciplines, there is still a notable lack of empirical study to explain the myriad effect, benefits, and challenges of using the flipped classroom technique, particularly in English language learning. This paper aims to fill this information gap by undertaking a systematic assessment and comprehensive evaluation of the effectiveness, advantages, and challenges of using a flipped classroom approach in English learning. We have synthesized both qualitative and quantitative data using a thorough and transparent review process based on the content analysis (Chong and Plonsky, 2023) and the principles of systematic review (Liberati et al., 2009) to provide a comprehensive picture of the use of the flipped classroom in higher education. The implementation of flipped classrooms in China faces unique challenges and requires further research. China's traditional teaching paradigm is characterized by teacher-centeredness and exam-driven priorities, potentially creating friction with the student-centered, collaborative essence of flipped

learning (Zhou & Xu, 2022). Furthermore, cultural norms that discourage public speaking and active participation in class may hinder the acceptance and effectiveness of the flipped classroom model among Chinese students (Liu & Xu, 2021). At a global level, the digital divide is a pressing issue, as differential access to flipped learning technologies may exacerbate existing educational inequalities (UNESCO, 2023). Furthermore, the lack of consensus on the best methods to assess the effectiveness of flipped classrooms highlights the need to develop assessment tools that are sensitive to contextual and cultural factors (OECD, 2023). As a result, the following research questions are examined in the analysis of this study:

- Q1 What effectiveness does the implementation of flipped classroom have on English teaching and learning?
- Q2 What benefits does the implementation of flipped classroom have on English teaching and learning?
- Q3 What challenges does the implementation of flipped classroom have on English teaching and learning?

■3.0 METHODOLOGY

In this article, content analysis is employed to analyze 36 articles published from 2017 to 2023, focusing on English language teaching in the context of flipped classrooms. Content analysis serves as the analytical tool for examining the selected papers. This methodology is recognized for its capacity to discern underlying themes and patterns within textual data (Hsieh & Shannon, 2005), and for generating a systematic, quantifiable dataset amenable to statistical analysis (Krippendorff, 2004), thereby revealing significant trends. Content analysis systematically summarizes data from a body of research, adhering to PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Liberati, et al., 2009), emphasizing the significance of methodological rigor and reproducibility. Compliance with the Standards for Reporting Qualitative Research (SRQR) (Bowen, 2009) bolsters the trustworthiness and generalizability of the findings related to English language teaching and the flipped classroom approach, by imbuing the qualitative research narrative with added transparency and credibility. Collectively, the content analysis guided by both PRISMA and SRQR frameworks offers a lucid and robust structure for exploring the role of the flipped classroom in English language teaching contexts. The empirical literature on educational innovation within the domain of flipped classrooms in English language teaching is fortified by this methodological decision, crucial for ensuring that the study's conclusions rest upon a meticulous and replicable process. Numerous researchers in the realm of educational technology employ content analysis methodologies for their investigations (Özyurt & Özyurt, 2015; Bozkurt et al., 2015).

Table 1 The Inclusive and Exclusive Criteria of Searching

	Inclusive	Exclusive
Language	Written in English.	Written not in English.
Time period	Papers published between 2017 to 2023.	Papers published before 2017 or after 2023.
Research field	The effectiveness, benefits and challenges of flipped classroom in English learning and teaching.	Irrelevant to the benefits and challenges of flipped classroom in English learning.
Setting	The higher education, university, college	K12, vocational education; MA, PHD
Scopes	Journal articles with full text.	Conference articles, report, dissertations literature review and journals without full text.
Design	The empirical studies are chosen.	Non-empirical studies

Pre-established inclusion and exclusion criteria were applied in the process of selecting the papers for the present evaluation (see Table 1). According to research methodology experts (Johnson & Christensen, 201), pre-established inclusion and exclusion criteria are predetermined sets of conditions used to systematically determine eligibility for study participation, ensure sample homogeneity, minimise confounding factors, and protect participant safety. The initial step involved searching for relevant papers on flipped learning in the English discipline using databases such as Web of Science (WOS), ERIC, and Google Scholar, which collectively index a vast number of journals. Boolean 'AND' operators were employed between each keyword in the search string, adhering to suggested practices, to guarantee thorough coverage (Gough et al., 2017). Based on this, the search string consisted of the following combination of phrases using the Boolean 'AND' operator: ("flipped learning", "flipped classroom", "reverse classroom" OR "inverted classroom") AND ("English", "English Class" OR "English learning") AND ("challenges" OR "benefits") AND ("higher education", "university" OR "college"). This formed the search criteria for the present review. This made it possible to include English learning with flipped classrooms and a number of terms often used in this context, such as inverted classroom, flipped learning and flipping a class. Studies that met the inclusion criteria had to be written in English and published in peer-reviewed journals. The search covered 2017-2023.

A total of 287 studies from the above databases were found during the search (see Figure 1). Following the elimination of conference papers, dissertations, reports, news and so on, together with the papers which are not published in 2017-2023, 98 studies were left in the pool for additional evaluation. Following a careful review of the abstracts and titles, 52 works that were judged unnecessary due to repetition or belong to literature review or meta-analysis. Additionally, research that was incomplete or written in languages other than English were excluded, leaving 46 papers. Upon closer examination, it was discovered that 10 studies had no empirical study at all and were thus disqualified from the analysis. Following this process, a total of 36 studies were deemed eligible for inclusion and underwent further scrutiny.

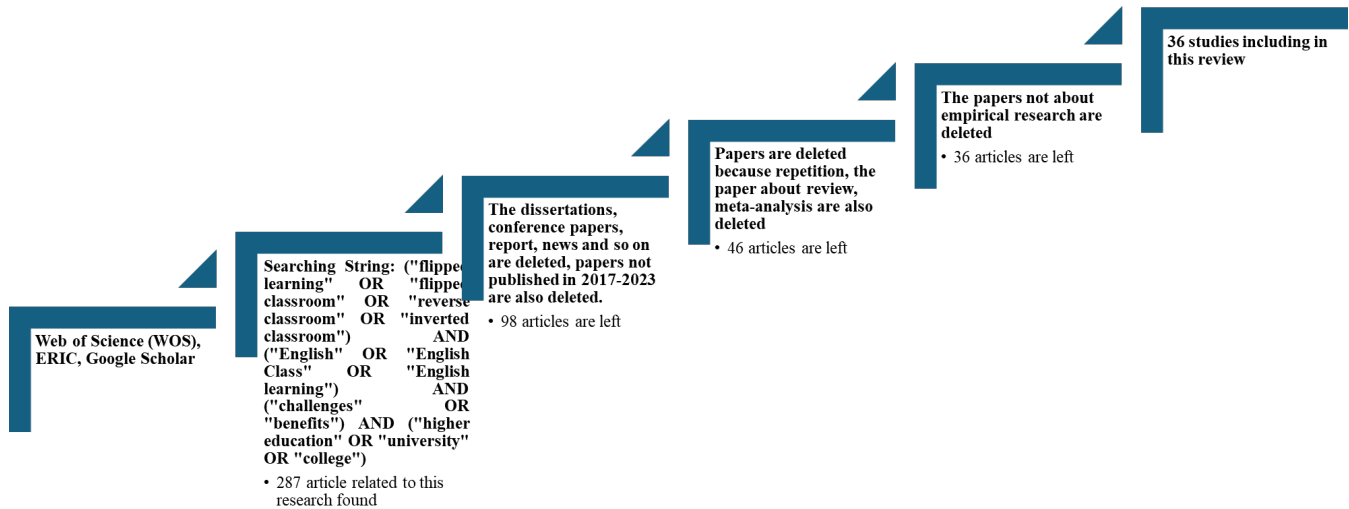


Figure 1 The flow of systematic review process

After all qualifying studies were evaluated, 36 papers were found to require more evaluation. The papers are from different countries. It shows that it is a hot topic that attracts scholars from different countries. Table 2 shows the countries of the papers are from.

Table 2 The countries previous research on flipped classroom

Countries	Published numbers	The references
China	6	Chen, et al. (2017); Han, S. (2022); Ho, J. (2020); Lin, & Hwang, (2018); Lin, et al. (2018); Liu, et al. (2019);
Iran	6	Abedi, et al. (2019); Amiryousefi (2017), (2019); Hashemifardnia, et al. (2018); Haghighi, et al. (2018); Mirshekaran (2018);
Israel	1	Blau & Shamir-Inbal (2017).
Malaysia	1	Fauzan & Ngabut (2018)
Oman	2	Abdullah, et al. (2019); Al-Hamdani & Al-Breiki (2018).
Portugal	1	Araujo & Fidalgo-Blanco (2017).
Russia	1	Farrah & Qawasmeh, (2018)
Saudi Arab	2	Elmaadaway (2017); Mirshekaran, R. (2018)
South Korea	3	Kim, et al. (2017); Lee, J., Park, T., & Davis, R. O. (2018); Lee, Y., & Martin, K. I. (2019)
Spain:	1	Angelini & Garcia-Carbonell (2019).
Thailand	1	Chavangklang & Suppatsereee (2018).
Turkey	4	Bakla (2018); Kurt (2017); Çakıroğlu & Öztürk (2017); Koroglu & Cakır (2017)
United States	6	Ansori & Nafi (2018); Doman & Webb (2017); Kim, et al. (2017); Karimi & Hamzavi (2017); Lee & Wallace (2017); Snyder (2017);

In addition, the papers chosen are all empirical, with some utilizing quantitative methodology, others employing qualitative methodology, and some adopting a mixed-method approach. Table 3 reveals the methodology of the chosen paper. Two researchers examined randomly chosen papers in separate analyses to guarantee uniformity in coding. Cohen's Kappa coefficient value was calculated using the Statistical Package for the Social Sciences (SPSS), and the result was 0.725. Viera and Garrett state in 2005 that this figure, which ranges from 0.61 to 0.80, is the ideal level of agreement amongst researchers.

Table 3 The methodologies of the previous study

Methodology	Number of the articles	Reference
Quantitative	14	Abdullah & Ismail (2019); Al-Hamdani & Al-Breiki (2018); Amiryousefi (2019); Çakıroğlu & Öztürk (2017). Chavangklang & Suppatsereee (2018). Chen et al. (2017). Elmaadaway (2017). Haghighi, et al (2018); Hashemifardnia, et al (2018). Ho (2020). Karimi & Hamzavi (2017). Koroglu, & Cakır (2017). Lin, et al. (2018) Mirshekaran (2018).
Qualitative	15	Alghasab (2020); Ansori & Nafi (2018); Amiryousefi (2017); Angelini & Garcia-Carbonell (2019); Araujo & Fidalgo-Blanco (2017); Blau & Shamir-Inbal (2017); Farrah & Qawasmeh (2018); Fauzan & Butter (2018); Han (2018); Kim et al (2017); Kurt (2017); Lee & Wallace (2017); Lee & Martin (2019); Liu, Sands-Meyer & Audran (2019); Snyder (2017)
Mixed methods	7	Amiryousefi (2019); Angelini & Garcia-Carbonell (2019); Bakla (2018); Doman & Webb (2017); Haghighi, et al (2018); Lee, et al. (2018); Lin & Hwang (2018)

■ 4.0 RESULTS

There are three research questions to be answer in this paper. The first question is “What effectiveness does the implementation of flipped classroom have on English learning?” The second research question is “What benefits does the implementation of flipped classroom have on English learning?” The third research question is “What challenges does the implementation of flipped classroom have on English learning?” Next, we will analyze it one by one. In this paper, effectiveness describes how successfully something accomplishes its intended objectives or yields the desired outcomes. Effectiveness in the environment of the flipped classroom would be the degree to which it achieves. Numerous measures are frequently used to assess effectiveness, such as academic success, student satisfaction, and instructor perceptions.

Table 4 The effectiveness of flipped learning in English class

Categories	Sub-categories	Researchers
Improved Learning Outcomes:	Higher Test Scores Better Academic Performance Increased Retention of Knowledge	Abdullah, et al., 2019; Al-Hamdani & Al-Breiki, 2018; Elmaadaway, 2017; Hashemifardnia, et al., 2018; Karimi & Hamzavi, 2017; Koroglu & Cakır, 2017; Lee, et al., 2018; Lin & Hwang, 2018; Mirshekaran, 2018)
Increased Student Engagement:	Active Participation Enhanced Motivation Improved Attendance	Alghasab, 2020; Chavangklang & Suppasetsee, 2018; Farrah & Qawasmeh, 2018; Fauzan & Ngabut, 2018; Haghighi et al., 2018; Lee & Wallace, 2017; Lin et al., 2018
Enhanced Teaching Methods:	More Effective Instructional Strategies Improved Classroom Management Greater Teacher Satisfaction	Amirousefi, 2019; Angelini & García-Carbonell, 2019; Bakla, 2018; Doman & Webb, 2017; Kim et al., 2017; Kurt, 2017; Snyder, 2017

Table 4 includes relevant scholars along with numerous important aspects of how effectively flipped classrooms work for English language acquisition, such as learning results, student involvement, and teaching strategies. Flipped classrooms are thought to enhance students' test scores and academic performance in terms of learning outcomes. This implies that changing the way students learn could improve their understanding of the material and improve their performance on quizzes and evaluations. Flipped classrooms are said to boost student motivation, raise engagement levels, and increase attendance for students. Flipped classrooms are thought to provide educators with the opportunity to implement more productive teaching techniques and enhance classroom management, which in turn boosts teacher satisfaction. All things considered, these research show that flipped classrooms are beneficial for raising student engagement and increasing teaching effectiveness in the context of English language learning. Nevertheless, as these conclusions are based on particular studies, further thorough investigation could be required to confirm the findings' generalizability and application.

Table 5 The benefits of flipped classroom in English class

Categories	Sub-categories	Researchers
Improved Student Performance:	Improved Writing Skills Better Speaking Abilities Making Progress in Reading Comprehension	(Amirousefi, 2019; Angelini & García-Carbonell, 2019; Araujo & Fidalgo-Blanco, 2017; Blau & Shamir-Inbal, 2017; Chen, et al., 2017; Lee & Wallace, 2017; Lee & Martin, 2019; Liu, et al., 2019; Snyder, 2017)
Increased Student Motivation:	More Interest in Learning Increase Confidence Greater Willingness to Participate	Abdullah, et al., 2019; Ansori & Nafi, 2018; Kim, et al., 2017; Lee & Wallace, 2017; Lee & Martin, 2019
Enhanced Student Interaction:	More Collaborative Learning Increased Peer-to-Peer Communication Greater Student Engagement in Discussions	Angelini & García-Carbonell, 2019; Araujo & Fidalgo-Blanco, 2017; Lee & Martin, 2019; Snyder, 2017
Positive Teacher Perceptions:	Favorable Attitudes Towards Flipped Learning; More Confidence in Methodology Improved Teacher-Student Relationships	Ansori & Nafi, 2018; Farrah & Qawasmeh, 2018; Fauzan & Ngabut, 2018; Haghighi et al., 2018; Lee & Wallace, 2017; Lee & Martin, 2019; Liu et al., 2019; Snyder, 2017
Improved Classroom Dynamics:	More Interactive Classroom Environment Enhanced Learning Atmosphere Increased Student-Teacher Interaction	Angelini & García-Carbonell, 2019; Araujo & Fidalgo-Blanco, 2017; Lee & Wallace, 2017; Lee & Martin, 2019; Snyder, 2017
Enhanced Language Skills Development:	Improved Vocabulary Acquisition Better Pronunciation Increased Fluency	Bakla, 2018; Koroglu & Cakır, 2017
Increased Autonomy and Self-regulated Learning:	Improved Time Management Greater Self-directed Learning Enhanced Critical Thinking Skills	Çakıroğlu & Öztürk, 2017

Benefits is about the positive qualities or favorable results that anything offers, we are speaking about the benefits. Benefits highlight the advantages or good things that come with using a specific technique or approach. Table 5 indicates that there are learning benefits associated with the flipped classroom model. First, by offering online resources and video lectures, the flipped classroom encourages individual study among students after class. Students will find this flexibility to be very convenient (Improved Time Management). By

customizing their study schedules to their individual learning styles and comprehension levels, students can increase the effectiveness of their learning. Second, by promoting active participation in class discussions and group projects, the flipped classroom model enhances student interaction and increases willingness to participate. This interaction helps students learn more collaboratively and enhances their ability to actively participate in class discussions. Additionally, by using more targeted instruction in the classroom, the flipped classroom approach helps students' language skills, including writing (Enhanced Writing Skills), speaking (Better Speaking Abilities), and reading comprehension (Improved Reading Comprehension), to improve. of instruction and evaluation. In addition to fostering better teacher-student relationships, flipped classrooms allow teachers to offer more individualized support and guidance to students in place of traditional lectures. In conclusion, the implementation of the flipped classroom approach fosters an enhanced learning climate, leading to increased confidence in students to participate in learning activities and a heightened interest in learning about English (Higher Interest in Learning). In summary, the benefits of a flipped classroom include giving students the freedom to learn on their own schedule, fostering better classroom collaboration and interaction, advancing language proficiency, strengthening the bond between teachers and students, and fostering a supportive learning environment. Together, these elements offer pupils a more effective and interesting educational experience. Table 6 shows a few challenges in applying flipped learning to the English classroom.

Table 6 The challenges of flipped learning in English class

Categories	Sub-categories	Researchers
Technical Challenges	Internet Connectivity Issues	Al-Hamdani & Al-Breiki (2018); Hashemifardnia et al. (2018) Ho (2020)
	Access to Technology	Alghasab (2020); Ansori & Nafi (2018); Elmaadaway (2017) Haghighi, et al. (2018); Lee, et al. (2018); Lin, et al. (2018)
Pedagogical Challenges	Technical Support:	Angelini & García-Carbonell (2019); Doman & Webb (2017); Lin, et al. (2018)
	Content Adaptation:	Abdullah, et al. (2019); Amiryousefi (2017); Blau & Shamir-Inbal (2017); Lee & Wallace (2017); Lin, et al. (2018)
	Lack of Teacher Training:	Abdullah, et al. (2019); Alghasab (2020); Angelini & Garcia-Carbonell (2019); Ansori & Nafi (2018); Blau & Shamir-Inbal (2017); Doman & Webb (2017); Farrah & Qawasmeh (2018) Fauzan & Ngabut (2018); Haghighi, et al. (2018); Kim, et al. (2017); Koroglu & Cakır (2017); Lee & Wallace (2017) Lin, et al. (2018); Liu, et al. (2019); Snyder (2017)
	Student Readiness:	Amiryousefi (2017); Lee & Wallace (2017)
	Time Constraints:	Abdullah, et al. (2019); Amiryousefi (2017); Blau & Shamir-Inbal (2017); Lee & Wallace (2017); Lin, et al. (2018)
	Assessment Challenges:	Abdullah, et al. (2019); Angelini & García-Carbonell (2019); Ansori & Nafi (2018); Blau & Shamir-Inbal (2017); Elmaadaway (2017); Farrah & Qawasmeh (2018); Fauzan & Ngabut (2018) Haghighi, et al. (2018); Karimi & Hamzavi (2017); Lee & Wallace (2017); Lee & Martin (2019); Liu, et al. (2019) Snyder (2017)

There are several issues and difficulties with flipping classrooms when they are first implemented. One of the main problems with flipped classrooms is the technical aspects, such as access to technology, internet connectivity problems, and technical support. These issues could hinder students' access to internet resources and have an impact on their academic performance. Two of the teaching-related challenges are inadequate teacher preparation and content adaptation. In order to successfully deploy the flipped classroom, teachers might require more time, resources, and relevant training to modify course material to the flipped format. Another difficulty with student preparation is that they could not have the self-motivation or ability to learn on their own, which will have an impact on how well they learn in the flipped classroom approach. Time limits and evaluation difficulties are two other frequent issues with flipped classrooms. It could be challenging for teachers and students to cover all the material in the allotted class period, and evaluating students' learning may be more difficult than in conventional teaching techniques. In conclusion, even though there are a lot of potential benefits to flipped classrooms, there are certain obstacles that must be overcome during implementation, including those related to technology, instruction, student readiness, and time management.

5.0 DISCUSSION AND RECOMMENDATION

The flipped classroom approach, acknowledged as a noteworthy advancement in the field of English language education, has attracted a lot of interest due to its capacity to completely transform the methods of instruction and learning. This systematic review compiles and evaluates a corpus of current research that highlights the model's ongoing ability to improve student learning outcomes, simplify educational experiences, and strengthen problem-solving skills (Zhang & Liu, 2021). The influence of the flipped classroom on pedagogy and English language acquisition is examined in order to define the boundaries of existing research and set the direction for future studies. A review of academic publications that demonstrate the revolutionary potential of the model in the field of English language teaching highlights the effectiveness of the model in improving learning effectiveness, convenience and problem-solving skills.

The flipped classroom model distinguishes itself from conventional educational approaches by reorienting the learning process, enabling students to engage with instructional materials externally, often through digital platforms, and reserving in-class sessions for targeted practice and interactive discourse. This reconfiguration has been linked to a range of positive outcomes, including heightened academic performance and more robust knowledge retention (Wang & Chen, 2021). The model's emphasis on interactive engagement during class is particularly beneficial for the development of critical language skills, with evidence suggesting improvements in reading comprehension, writing, and speaking abilities (Johnson & Lee, 2021). Additionally, the flipped classroom fosters a learning environment that enhances student motivation, self-assurance, and collaborative learning, which are instrumental for cultivating a confident and interactive classroom community (Kim & Park, 2020).

Despite these advantages, the implementation of flipped classrooms is not without challenges. Technological issues, such as limited internet access and inadequate technical support, can impede the model's effectiveness (Zhou & Xu, 2022). Additionally, teachers may face barriers related to professional development, curriculum adaptation, and the mastery of new evaluation techniques (Liu & Wang, 2022). Students, too, may struggle with the self-directed learning required by the flipped model, particularly if they are not adequately prepared or face time constraints (Abdullah et al., 2019).

In light of these difficulties, the following actions are advised:

1. Boost technology infrastructure: To guarantee that all students have access to the tools they need and reliable internet connections, schools should make investments in technology infrastructure.
2. Teacher professional development: To assist instructors in adjusting to the new teaching paradigm and successfully creating and executing courses, educational establishments ought to offer them thorough training on the flipped classroom (Doman & Webb, 2017).
3. Direction for students' autonomous learning: Teachers should give instructions on how to learn on their own, offer tools and strategies for learning, and help students become more motivated and self-reliant learners (Lee & Wallace, 2017).
4. Optimize mechanisms for assessment and feedback: Create efficient tools for assessments to track students' progress and give prompt feedback to make sure the flipped classroom's instructional objectives are met (Snyder, 2017).
5. Time management and course design: Instructors must carefully design their courses to make sure that all required material is covered in the allotted class time and that students have adequate time to do extracurricular assignments.
6. Encourage student participation: Teachers should motivate students to actively participate in the classroom and develop their collaboration and communication skills through activities like group discussions, cooperative projects, and others.
7. Ongoing monitoring and enhancement: Academic establishments must persist in monitoring the outcomes of the flipped classroom's deployment and adapt as needed in response to input.

These suggestions are meant to help educators and legislators apply the flipped classroom model more successfully, get beyond its obstacles, and realize its full potential in the teaching of English. The findings of this study offer a valuable point of reference for flipped classroom investigations in the future. They first emphasize the necessity for educational institutions to evaluate and upgrade their technological infrastructure before introducing a flipped classroom. Second, the successful implementation of the flipped classroom model depends on the professional development and training of teachers, for which educational institutions must provide the necessary resources and support. The effectiveness of flipped classrooms is also significantly influenced by students' preparedness and involvement, which encourages educators and researchers to focus more on the unique requirements and characteristics of each student.

However, there are major gaps in the present research on flipped classrooms. First, there is still a lack of knowledge regarding long-term consequences because most studies concentrate on short-term learning outcomes. Second, study samples may not accurately reflect the use of flipped classrooms in various cultural and educational contexts since they are frequently restricted to particular areas or schools. Furthermore, there is still a lack of standardization in the requirements and evaluation procedures for flipped classrooms, which complicates the comparison of study findings.

In conclusion, the flipped classroom has issues related to technology, teaching, and student readiness, but it also offers major benefits in terms of increasing the efficacy, ease, and engagement of English learning. To further delve into the impact of flipped classrooms, future research should concentrate on long-term learning outcomes, comparative study across cultural and educational contexts, and standardization of assessment methodologies.

■6.0 CONCLUSION

To sum up, this paper's systematic review emphasizes the significant role that flipped classrooms play in enhancing English language proficiency. The empirical evidence from 36 selected studies indicates that the flipped classroom concept positively influences students' academic performance, motivation, engagement, and autonomous learning skills. Its promotion of a stronger sense of community and collaboration between students and teachers renders it particularly advantageous, as it potentially offers a more individualized and participatory learning experience.

The adoption of flipped classrooms is not without difficulties, despite all of its benefits. To enable the successful integration of this teaching technique, common hurdles such as teacher training deficiencies, technical challenges, and student preparation must be addressed. To address these issues, the evaluation recommends that funding technology infrastructure, giving educators chances for professional growth, and putting students in position for self-directed learning are essential first steps.

The review's conclusions add to the expanding body of knowledge on flipped classrooms and offer insightful information to researchers and teachers alike. The flipped classroom concept shows potential as a cutting-edge strategy to raise the caliber of English language instruction and learning as the educational landscape changes further. To fully realize the potential of flipped classrooms in English language teaching, future research should concentrate on long-term outcomes, investigate the model's efficacy across a variety of educational situations, and develop standardized assessment techniques.

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