INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PROGRESSIVE EDUCATION & DEVELOPMENT

OPEN ACCESS JOURNAL

Vol 13, Issue 1, (2024) E-ISSN: 2226-6348

Blended Learning Strategies of College English Learning in Chinese Higher Education: A Systematic Review

Su Dongying[1], Nurhasmiza Sazalli[2], Miskam, Nuraqilah Nadjwa[3]

[1,2,3] Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, Malaysia,
[1]Department of Foreign Languages, Ningxia Medical University, China
Corresponding Author Email: sudongying@graduate.utm.my

To Link this Article: http://dx.doi.org/10.6007/IJARPED/v13-i1/20553 DOI:10.6007/IJARPED/v13-i1/20553

Published Online: 15 January 2024

Abstract

Chinese higher education innovates through technological advancement to meet various learning needs. Blended learning, an emerging teaching model, has filled many gaps in traditional teaching methods and is welcomed by a large number of teachers and students, occupying an increasingly important position in Chinese higher education. However, despite the significant importance of blended learning in Chinese college English education being widelycommitted, the system evaluations on it remain inadequate. In this paper, the researcher adopted the "Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)" framework to assess current studies. Based on four prominent journal databases (i.e., Science Direct, Scopus, Web of Science, and Taylor & Francis), a systematic keyword search has been conducted with the terms such as "blended learning," "strategies," "college English courses," and "China higher education". This study identified a total of 35 articles, primarily uncovered four key themes: cooperative-based learning, learning management systems, the integration of mobile apps, and technology-based learning. These themes shed light on various aspects of blended learning in the context of Chinese college English education. In conclusion, the researcher presented a set of recommendations at the end of the study, providing valuable insights for future research endeavors.

Keywords: Blended Learning, Strategies, College English Learning, Chinese Higher Education

Introduction

Technology development in the Artificial Intelligence Age has revolutionized the field of education. Chinese highereducation institutions must keep pace with the advancement of technological innovations. Widely used to integrate mobile technology into the education process, blended learning is an innovative teaching form combined with even distributed online and offline modes (Lee et al., 2016). The combination of online and offline teaching activities (Lee et al., 2016), it facilitates an "accessible, flexible, active, interactive, encouraging, and inspiring" teaching and learning environment (Zhang and Zhu, 2018). As the name suggests, this innovative teaching model involves both traditional practices (i.e.,

physical student-to-student, student-teacher interactions that occur in the classroom) and virtual activities (i.e., online courses with mobile applications) (Wang, 2021).

Blended learning combines face-to-face classroom interaction with computer-based systems to create courses that carefully balance the proportions of physical presence and virtual performance (Graham et al., 2013). Blended learning refers to "the thoughtful integration of face-to-face classroom learning experiences with online experiences"(Garrison & Kanuka, 2004). Additionally, attempts to combine face-to-face and technology-supported teaching formats also fall under the term blended learning (Porter et al., 2014). Blended learning methods based on computers or mobile technologies provide new opportunities for designing innovative teaching models that can effectively integrate online resources and activities with offline classes into a dynamic and sustainable teaching experience that is independent of time and space. limits. Since the 2000s, various technologies and devices have been introduced Rasheed et al (2020) and are still under development in educational institutions (Serdyukov, 2017). In the past few decades, blended learning, as an emergent technology, has been adopted by many educational institutions (Mims-Word, 2016). Lots of efforts have been made by China to improve the education environment of universities via the transformation of teaching methods from traditional to be innovative for the new generation (Fan, 2020). Chinese universities and colleges have been able to integrate many of the latest technologies, teaching frameworks, and techniques to revolutionize the quality of education (Lee and Yuan, 2018). The development of certain technologies fosters the application of many innovative technologies into teaching practice, such as English teaching.

With the combination of online and offline activities, a hybrid teaching model (i.e., blended learning) has formed, which has been regarded as one of promising technologies and an effective solution to problems encountered in fully online or face-to-face teaching practices (Fan, 2020). China is committed to developing its higher education landscape by integrating the latest educational frameworks and adopting various technologies such as hybrid learning models and big data. In addition, some projects introducing blended learning in educational institutions across the country have also been welcomed (Zhu, 2019; Fan, 2020). Chinese higher education sector is already equipped with the most promising and latest frameworks (Rui, 2014), and blended learning has been used as a tool to promote the adoption of these models and transform the higher education sector for the next generation (Lim et al., 2019).

Despite the increased trends of research in Chinese English learning, the systematic reviews are focused more on comparing traditional teaching methods and blended learning models Sun (2018); Jiang (2022), students' or teachers' perspectives on blended learning methods Lin (2019); Qian (2022); Jiang (2021), thereby leaving a gap. Therefore, there is an urgent need to review blended learning strategies used for Chinese college students in the Chinese English courses. This article conducts a comprehensive and systematic review of blended learning strategies in higher education English courses in China, with a view to outlining the application of blended learning in higher education English learning environments. Subsequently, this study is expected to provide insights to the field of blended learning in Chinese higher education.

Research Questions

Review questions arise from an analysis of previous research and needs for future research. Specifically, the researchers searched for reviews in the field of blended learning related to learning college English. Judging from the results, review articles focusing on blended learning

in college English learning are still insufficient and do not meet its importance in English teaching and learning practice. In addition, further identification of blended learning strategies implemented for Chinese college students' English learning is needed. Therefore, this study is necessary to answer the following question

RQ: What are the blended learning strategies implemented for Chinese college students in English learning?

Literature Review

Past research has predominantly focused on investigating various blended learning strategies adopted by higher education institutions in China and other countries. Scholars have scrutinized these strategies from multiple perspectives. Some earlier studies have underscored diverse blended learning strategies employed in teaching and learning. However, these studies remain inadequate, as not many scholars have systematically reviewed current research. Systematically reviewing past studies is crucial. For instance, Telegram is utilized for teaching reading comprehension (Fathi, 2018), Wiki and Microblogs (Hosseinpour, 2019; Abu Bakar, 2017) for writing instruction (Hosseinpour, 2019; Abu Bakar, 2017; Ma, 2021), and smartphones and mobile apps for learning and practicing English speaking (Abugohar, 2019; Sītú, 2018).

Traditional literature reviews have some drawbacks, such as susceptibility to reviewer bias, lack of comprehensiveness, and minimal attention to variations in research quality (Lame, 2019). This paper contributes to the existing body of knowledge by undertaking the challenge of creating a Systematic Literature Review (SLR) on blended learning strategies employed in higher education institutions. An SLR is immensely helpful in reviewing current literature using established methods. Additionally, it is a rigorous process that categorizes, selects, and critically evaluates past research to address research questions (Dewey, 2016). Researchers conducting systematic literature reviews establish protocols or guidelines before the review process. The processes in a systematic literature review are transparent, as the identification process in SLR is conducted through multiple databases, allowing other researchers to replicate and reproduce the procedure.

The core research question of this review is: What are the blended learning strategies implemented for Chinese college students in English learning? The study aims to address this gap by carefully examining past similar research, filling knowledge voids in the relevant field, and gaining a better understanding of the implementation of blended learning strategies in the context of higher education in China. Additionally, considering the challenges faced by college students studying English in China and the difficulties encountered during the implementation of blended learning (Yin, 2019; He, 2020), this research is of significant importance. Therefore, identifying the current blended learning strategies adopted by Chinese college students in learning English is crucial to assist them in choosing appropriate strategies.

Methodology

The systematic review was executed following the PRISMA guidelines, aiming to pinpoint pertinent papers across four databases: Science Direct, Scopus, Web of Science, and Taylor & Francis. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) delineates a peer-reviewed and standardized method, articulating a set of guideline items for

systematic reviews and meta-analyses to guarantee the review's quality and replicability (Liberati, 2009). Then, this systematic process continued with a few phases of identification, screening, eligibility, and exclusion (Moher, 2009).

Throughout the entire process of preparing this systematic review paper, we have adopted PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) as guidance. PRISMA is widely used in the field of education. Sierra-Correa (2015) outlined the advantages of PRISMA: it clearly states research questions for systematic research, identifies exclusion and inclusion criteria, and enables researchers to examine a vast database of scientific literature. PRISMA provides researchers with the opportunity to conduct a rigorous search on terms related to blended learning strategies. This approach can be employed to identify the blended learning practices used in English teaching and learning across various Chinese higher education institutions.

The study relied on four databases (Science Direct, Scopus, Web of Science, and Taylor & Francis). Science Direct is an online document retrieval and access service provided by Elsevier, a leading academic publishing company. It is a comprehensive academic database that offers access to thousands of scholarly journals, books, and reference works, covering nearly all disciplinary fields, including natural sciences, engineering, medicine, social sciences, and humanities. Scopus is regarded as one of the largest abstract and citation databases including peer-reviewed literature. It covers a wide range of subject areas such as environmental sciences, social science, as well as agriculture and biological sciences.Web of Science is an academic database that encompasses a wide range of disciplinary fields, covering areas such as natural sciences, social sciences, humanities, and engineering and technology. It aggregates high-quality academic resources globally, including scholarly journals, conference papers, and patents. Taylor & Francis is an international academic publishing company headquartered in London, United Kingdom. Founded in 1852, the company has since become one of the leading publishers in the global academic, scientific, and medical fields. It covers multiple disciplines, including humanities, social sciences, natural sciences, engineering and technology, medicine, and law. Its publications span a diverse range of topics, providing the researcher with a broad array of academic resources.

Several eligibility and exclusion criteria have been established. Firstly, in terms of literature type, the selection is limited to research articles, excluding review articles, book series, books, book chapters, and conference proceedings. Secondly, to ensure clarity and avoid translation difficulties, non-English publications have been excluded, focusing exclusively on articles published in English. Thirdly, a specific timeframe of 5 years, spanning from 2018 to 2022 (as the data retrieval for this study was conducted until October 2023, excluding literature published in the full year of 2023), has been chosen to provide an adequate window for capturing the evolution of research and related publications. Lastly, for enhanced accessibility, only open-access articles have been included (refer to Table 1).

Table 1
Inclusion and exclusion criteria

Criterion	Eligibility	Exclusion
Literature type	Journal (research articles)	Journals (systematic review), book series, book, chapter in book, conference proceeding
Language	English	Non-English
Timeline	Between 2018-2022	<2018 > 2022
Open Access	All open access	Others

Several stages were involved in the systematic review process: identification, screening, and eligibility. The review process was conducted in October 2023. The first phase involved identifying keywords for the search process. Drawing from previous studies, keywords that were similar to and related to "blended learning," "strategies," "hybrid learning," and "ESL in China" were used (refer to Table 2).

Table 2
The search string used for the systematic review process

Database	Keyword used
Science Direct	Blended learning AND hybrid learning AND flipped classroom AND strategies ESL in China OR English learning in China
Scopus	TITLE-ABS-KEYY(("blended learning" OR "blended education" OR "blended courses" OR "hybrid learning" AND "flipped classroom" OR "mobile techniques" OR "mobile applications" AND "English Learning in China" OR "ESL in China"))
Web of Science	TS = (("blended learning" OR "blended education" OR "blended courses" OR "hybrid learning" AND "flipped classroom" OR "mobile techniques" OR "mobile applications" AND "ESL in China" OR "English learning in China"))
Taylor & Francis	Blended learning AND hybrid learning AND "flipped classroom" AND ESL in China OR English learning in China

The second phase is the screening process. In the beginning, 52 duplicate articles were eliminated after exporting the search reports from the databases and importing them into Mendeley to identify duplicates. Following the application of the inclusion and exclusion criteria, 115 articles were deemed ineligible as they did not meet the specified criteria outlined in Table 1. The third phase pertains to eligibility, during which full articles were carefully reviewed according to the quality criteria listed in Table 3.

Table 3
Quality criteria

Quality criteria
1.The research objectives are focused on enhancing blended learning and strategies in Chinese English learning.
2. The research context is in Chinese higher education.
3. The areas of using blended learning and strategies are clearly stated.
4. The research is aimed to explore the blended learning strategies implemented for Chinese college students in English learning.
5. The strategies is clearly described in the conclusion based on the results.

There are three main stages in the systematic searching strategies, namely identification, screening, and eligibility (Figure 1).

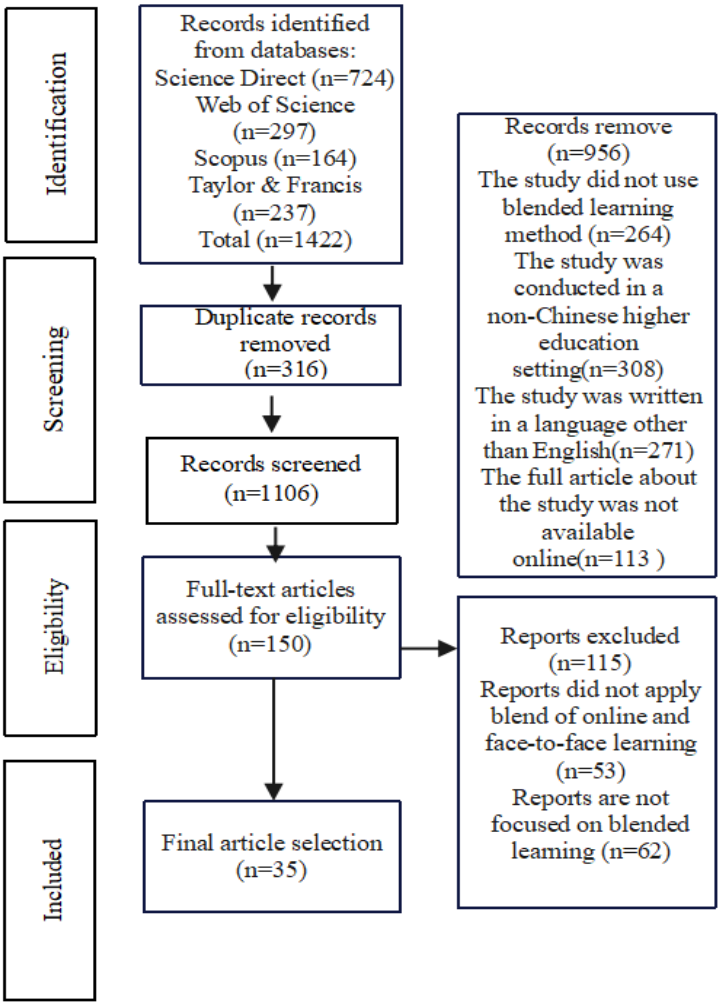

Figure 1. PRISMA Flow Diagram (Adapted from Moher et al., 2009)

Results

Publication Year

Among the 35 articles selected for the systematic review, 5 were published in 2018, 4 in 2019,

6 in 2020, 8 in 2021, and 12 in 2022 (Figure 2). In 2020 and 2021, there are endless research results on blended learning for English higher education in China.

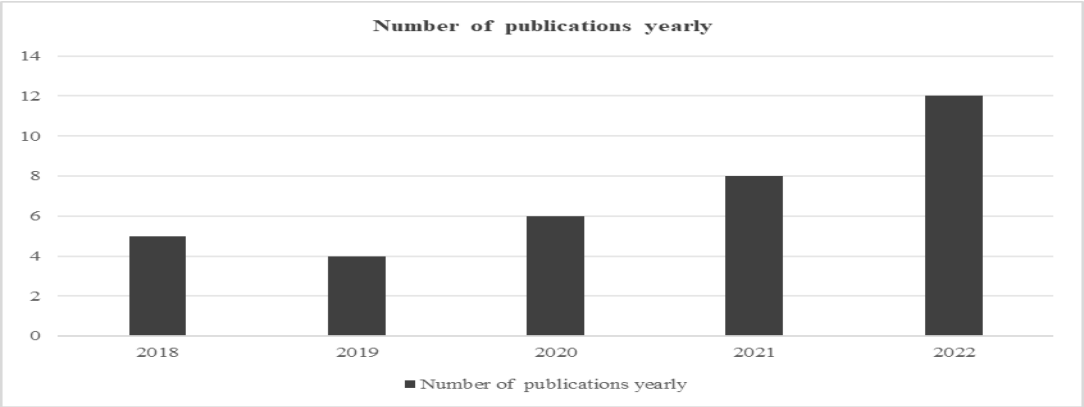

Figure 2.The yearly distribution of the publications included in this study (2018-2022)

Level of Samples used in the study

Figure 3 classifies the articles selected in the current systematic review, and draws into the conclusions: The selected paper samples are students from colleges and universities. 69% of the selected articles used students as samples, 11% used teachers as samples, and 20% used teaching models and teaching strategies.

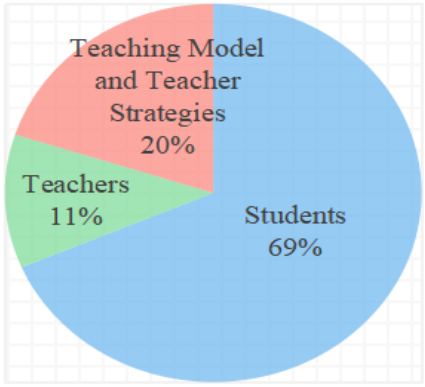

Figure 3. Level of Articles used in the study

Main Findings

Strong proficiency in the English language is deemed essential for English learners. Nevertheless, English language skills continue to pose challenges for these learners, encompassing reading, writing, speaking, and listening (Yao, 2019; Jiang, 2022; Wang, 2020). Previous literature has unveiled that the subpar writing abilities of English learners stem from the intricacies of writing conventions and the predicaments associated with anticipating reader responses (Li, 2022). Furthermore, previous studies focusing on speaking skills have indicated that English learners exhibit limited engagement and participation in speaking activities (Teng, 2022). In a study pertaining to reading skills, English learners were reported to contend with disruptions such as unfamiliarity with learning software and sudden pop-up advertisements when utilizing online reading materials (Wang, 2020). All these findings from prior research underscore the challenges faced by English learners when engaging in English language lessons and activities. Nonetheless, these issues can be mitigated through the implementation of appropriate blended learning strategies in the English classroom.

This section explains four themes or categories of blended learning strategies that can be used in college English teaching in China to address the challenges English learners face in terms of language proficiency. The four themes are collaborative learning, learning management systems, mobile application integration, and technology-based instruction (Table 4). A total of 19 sub themes emerged within these four themes identified in this systematic review. The following subtopics explain each topic and the corresponding subtopics in more detail.

Table 4
The Findings

Author and Year	Study Design	Cooperative Based Instruction	Learning Management System	Mobile Apps Application	Technology Based Instruction
Gary Cheng 2022	Mixed Methods				/
Li Zhou 2022	Quantitative	/			
Yan fang Su et al. 2021	Qualitative	/			
Hang Shu et al. 2018	Quantitative				/
Yu-Ju Lina, Hung-Chun Wang 2018	Mixed Methods				/
Chunlin Yao 2019	Quantitative		/		
Shu ting Cao, Hai yuan Liu 2019	Quantitative		/		
Yuhong Jiang, Yingying Chen 2021	Mixed Methods				/
Ling Li 2022	Mixed Method				/
Shuhan Yang and Rui hui Pu 2022	Quantitative				/
Jingjing Lia Nab and Ji you Jia 2021	Quantitative				/
Rui Xian Ma 2022	Quantitative		/		
Mingyu Sun 2018	Quantitative	/			
Yi-Ti Lin 2019	Qualitative	/			
Ju Xiang Wen	Qualitative			/	

2018					
Yichao Jiang 2022	Quantitative				/
Shu jun Han 2022	Quantitative			/	
Yong Wang 2020	Qualitative	/			
Ling Li 2020	Qualitative	/			
Juan Qian 2022	Quantitative				/
Jing Tao 2020	Quantitative				/
Wang Lu 2020	Mixed Method		/		
Zhao Xia Ding 2021	Qualitative				/
Xuan Teng 2022	Quantitative		/		
Huan Zhang 2022	Qualitative				/
Liping Jiang 2022	Qualitative				/
Rui hua Chen 2022	Quantitative				/
Xiao liang Cheng 2021	Quantitative				/
Ren Zhong Peng 2021	Mixed Method				/
Chunying Wang 2021	Quantitative				/
Wei Zhang, Chang Zhu 2020	Quantitative				/
Bin Shen 2020	Quantitative				/
Na Wang 2021	Quantitative				/
Ren Feng Wang 2019	Quantitative				/
Hang Shu 2018	Quantitative			/	

Cooperative Based Instruction

In this systematic review, collaborative teaching is divided into (1) group activities, (2) group-based collaborative reasoning, (3) MOOCs, and (4) flipped classrooms. Based on the literature review, these subgroups were created to appropriately categorize the implementation of blended learning in the context of Chinese English learning in higher education. Table 5 shows different types of classification and the relevant articles used in this study.

Table 5
Findings regarding cooperative based instruction

No	Author and Year	Cooperative Based Instruction
1	Li 2022	Group activities
2	Su et al. 2021	Group-based collaborative argumentation
3	Sun 2018	MOOC
4	Lin 2019 Wang 2020 Li 2020	Flipped classroom

Learning Management System

Based on the review of 35 articles, the researchers found that 7 articles discussed learning management systems in their study (Table 6). In their articles, the researchers extensively discussed various learning management systems, including online learning platforms, automated essay scoring systems, and the Blackboard platform. As mentioned by Zhou (2022), learning a language in multimedia environments, including automated essay scoring systems, can assist students in improving their writing abilities. Tao (2020) conducted a study investigating learners' perceptions of learning English and their online self-regulation in an online learning environment. According to the survey of respondents, learners with different English learning philosophies demonstrated varying strategies in self-regulation for online learning. Teng (2022) discussed the impact of blended learning on the development of English speaking ability among foreign language learners through empirical research.

Table 6
Findings regarding Learning Management System

No	Author and Year	Learning Management System
1	Zhou 2022	Machine Learning Automatic Composition Scoring System
2	Yao 2019 Teng 2022	Online Learning Platform
3	Cao 2019	Edomodo
4	Lu 2018	Ios and Android
5	Lian 2021	Blackboard Platform
6	Ma 2022	LLSs

Mobile Apps Application

The use of mobile applications was another theme that emerged in the reviews of 35 articles. The types of social media applications used in English classes vary depending on sociocultural practices. Tiktok, WeChat, WhatsApp, Telegram, Facebook, and Youtube are a few social media tools commonly used for learning English in English classes. However, in the articles of this systematic review (Table 7), only Wechat and Social media tools were discussed by the authors. Two articles discussed the use of mobile apps in English blended learning (Shu, Gu,

2018; Wen, 2018). Wechat has proven to be particularly useful for English learners, especially in English speaking practice and teacher-student interaction (Wen, 2018). As mentioned by Shu and Gu (2018), the integration of various social media tools in college English classrooms can enhance learners' interest in learning, improve their engagement in activities, and consequently enhance their English language skills.

Table 7
Findings regarding Mobile Apps Application

No	Author and Year	Mobile Apps Application
1	Shu, Gu 2018	Social Media tools
2	Wen 2018	Wechat

Technology Based Instruction

In these 35 articles, based on the literature review, technology-supported instruction is a topic of great interest among scholars, with the majority of the articles discussing this theme. Table 7 illustrates the articles that explain technology-supported instruction in the context of college English learning. The findings indicate that most authors associate technology-supported instruction with language skills, namely reading, writing, speaking, and listening.

Lin & Wang (2018) discussed the use of audio-video materials when teaching listening and speaking skills in Chinese college English classrooms. Li (2022) emphasized the effectiveness of audio-video materials for improving speaking skills, while Chen (2022) highlighted factors affecting learners' progress in English reading skills. Early research results showed some notable achievements in speaking skills. As for the latter, several factors affecting students' reading comprehension have been identified, including limited vocabulary, restricted use of original English reading materials, and difficulties in accessing the learning platform due to network issues.

Jiang (2022) explained the use of Quizlet software by Chinese college students to learn English. The results showed that students have positive attitudes towards using Quizlet software to help them learn English and believe that it can increase their motivation to learn the language. In addition to Quizlet software-assisted English learning, Qiu (2022) also integrated online video materials into his blended English courses. The findings indicatedthat the use of authentic online video material contributes significantly to improving students' English skills. This highlights the important role of online video materials in college English learning.

Furthermore, as shown in Table 8, four articles mentioned the use of web-based systems in English language learning classrooms. These articles Tao (2020); Sun (2018); Lu (2020); Ma (2022) had similar findings, suggesting that implementing web-based systems in college English language classrooms can offer various benefits.

Table 8
Findings regarding Technology-Based Instruction

NO	Author and Year	Technology Based Instruction
1	Cheng 2022	BYOD
2	Lin & Wang 2018	OER Videos
3	Jiang 2021	Quizlet Software
4	Li 2022	Micro-videos online
5	Jiang 2022	Automatic Speech Recognition (ASR)
6	Tao 2020 Sun 2018 Lu 2020 Ma 2022	Web-based Learning System
7	Yang 2022 Li 2020 Qian 2022 Ding 2022 Wang 2021 Shu & Gu 2019 Zhang 2022 Zhang & Zhu 2020 Shen 2020 Peng 2020 Han 2022	Online Learning

Another type of technology-based instruction is virtual learning or online learning. Many authors have discussed this issue in their articles (Yang, 2022; Li, 2020; Qian, 2022; Ding, 2021; Wang, 2021; Shu & Gu, 2018; Zhang 2022; Peng, 2021; Han, 2022).Students' acceptance, students' achievement, students' satisfaction, students' engagement, self-regulation, and motivation were among the aspects focused on by the authors.

Most studies indicated that integrating online learning tools into English language learning has yielded positive findings. Many authors confirmed through their studies that integrating online learning can improve students' motivation and enhance their English scores compared to traditional learning (Cao, 2019; Sun, 2018). Furthermore, the results of research indicated that the use of online learning tools can have a positive impact on students' English skills (Peng, 2021). All these results highlight the importance of online learning tools for English teaching. However, the challenges of implementing technology-based teaching cannot be ignored. Gao conducted a study on first-year undergraduate students, revealing that students face challenges in blended English learning classrooms, including limited technology access, limited proficiency in dealing with complex technology, and a lack of usage experience 2021.

Discussion

This study highlights various blended learning strategies used in Chinese college English classes. Overall, a range of blended learning strategies were identified based on the findings, including collaborative teaching, learning management systems, mobile application

applications, and technology-enhanced teaching. However, the review results highlight that technology-enhanced teaching is the most commonly used blended learning approach in college English teaching compared to the other three strategies. This highlights the widespread recognition of technology-enhanced teaching as an effective means of addressing the challenges of college English teaching.

Research findings indicate that audio-video materials can effectively address students' English speaking issues Li (2022), while online authentic materials have proven highly advantageous in improving students' English proficiency (Qiu, 2022). Other technology-supported instructional methods, such as mobile applications and augmented listening and speaking activities, contribute significantly to enhancing students' engagement, motivation, and self-regulation (Tao, 2020; Sun, 2018; Lu, 2020; Ma, 2022).

Despite technology-supported instruction being the most prevalent form of blended learning, the roles of other blended learning applications in addressing issues in university English teaching cannot be dismissed. Social media applications like Wechat and Social Media tools can also effectively address students' English language skills issues (Shu, Gu, 2018; Wen, 2018). Additionally, MOOCs have shown promise in enhancing students' English language skills. For students grappling with writing difficulties, the Machine Learning Automatic Composition Scoring System offers valuable assistance (Zhou, 2022). Group activities are another useful tool in university English classrooms for boosting students' engagement and fostering an interest in English learning (Li, 2022).

The review's findings reveal that students hold a favorable view of technology-related tools integrated into university English classrooms. This positivity may stem from the characteristics of technology tools, such as flexibility and self-directed learning (Ding, 2021). These characteristics empower students to access these technologies anytime and anywhere, provided they have a reliable internet connection. Consequently, students can select the most suitable technology or tools for their English learning. Moreover, technology tools reduce students' dependence on teachers and promote self-directed learning.

Furthermore, it can save students time by providing online access to learning materials. Cost-effective technology tools are especially advantageous for students as they can facilitate language learning without a substantial financial burden (Wang, 2021). Insufficient motivation is recognized as one of the factors contributing to students' speaking challenges (Teng, 2022). Furthermore, these tools offer supplementary support to students and enable them to engage in collaborative learning. All these attributes of technology enhance students' engagement and motivation, ultimately boosting their English learning efficiency. This underscores the significant role of blended learning strategies in enhancing students' English language achievements.

Despite its favorable attributes, some scholars (Jiang, 2022; Ma, 2022; Cao, 2019) contended that blended learning is conceptually straightforward but somewhat intricate to implement. Effective integration of blended learning necessitates collaborative efforts from teachers and students. Such efforts are indispensable for mitigating challenges students face when incorporating blended learning into English classrooms.

Conclusion

In summary, this study has conducted a comprehensive review of literature related to the application of blended learning in the context of English language learning in China. The research objective of this paper is to examine the latest trends in blended learning practices

within university-level English classrooms. Consequently, this paper contributes to addressing the scarcity of systematic reviews in the realm of university-level English language learning and blended learning practices. We systematically accessed four databases and meticulously selected 35 articles based on predefined inclusion and exclusion criteria.

The primary findings underscore four prominent trends in blended learning within the context of university-level English language education. These trends encompass collaborative learning, learning management systems, mobile application integration, technology-based instructional methods, and 19 subcategories within these overarching trends. Although this review has identified four noteworthy trends, the one that particularly stands out is technology-based instruction. This category includes the use of audio and video materials, authentic online resources, web-based systems and online learning tools. Technology-based teaching plays a vital role in addressing the challenges of teaching English in universities in China, especially those related to English proficiency and other aspects such as student motivation and engagement.

Insights from this review enable educators and learners to carefully select appropriate technology-based tools and materials for teaching and learning English. Additionally, various forms of blended learning strategies enable English teachers to use technology-based teaching as an additional teaching method. As indicated by the findings of this review, technology-related tools associated with university-level English learning have shown a positive influence on the acquisition of English language skills. This perspective opens up further possibilities for the integration of an expanded array of technology-based tools in future university-level English teaching and learning.

This study has several limitations. Since most university-level English education research focuses on undergraduate students, educational level is not mentioned as a trend in this review. This limitation certainly opens up new possibilities for the future, especially with regard to the choice of English education at different levels of study. Second, this review is based on articles from influential journals in databases such as Web of Science, Scopus, and Science Direct. Therefore, if other databases (e.g., Google Scholar) were used to conduct this review, the results may be slightly different. Future research could explore these two aspects in more depth to further analyze the elements of integrating blended learning practices in Chinese college English education.

In summary, this systematic review makes significant contributions to both theoretical and practical aspects of blended learning strategies in Chinese higher education, especially within the context of college English courses. Theoretically, the study enriches academic discussions about blended learning by identifying and analyzing key themes such as cooperative learning, learning management systems, mobile app integration, and technology-based learning. This comprehensive exploration deepens the theoretical framework of blended learning in college English teaching. Moreover, by systematically reviewing 35 articles from prestigious academic databases, this research provides a comprehensive perspective on the current practices and trends in blended learning within the realm of college English education in China. It offers invaluable insights for English educators and policymakers in effectively integrating mobile technology into blended learning teaching strategies.

The study underscores the importance of cooperative learning, technology integration, and innovative management systems in the context of college English education in China, demonstrating how blended learning can enhance student engagement and learning outcomes in a rapidly evolving educational environment.The recommendations presented at

the end of the study lay a foundation for further exploration into the effectiveness, challenges, and long-term impacts of blended learning strategies in college English education. Overall, this research marks a crucial step in understanding and optimizing blended learning strategies in the field of Chinese college English education. It highlights the necessity for continuous adaptation and innovation in educational practices to align with technological advancements and the evolving needs of students.

References

Abu Bakar, N., Latif, H., Yaacob, A. (2017). Fusion of Technology with Language Learning: Blog Community. 3L Southeast Asian J. Engl. Lang. Stud. 23, 200–211.

Abugohar, M. A., Yunus, K., Ab Rashid, R. (2019). Smartphone Applications as a Teaching Technique for Enhancing Tertiary Learners' Speaking Skills: Perceptions and Practices. Int. J. Emerg. Technol. Learn. 14, 74–92.

Alammary, A. (2019). Blended learning models for introductory programming courses: A systematic review. PloS one, 14(9), e0221765.

Ashraf, M. A., Yang, M., Zhang, Y., Denden, M., Tlili, A., Liu, J., ... & Burgos, D. (2021). A systematic review of systematic reviews on blended learning: Trends, gaps and future directions. Psychology Research and Behavior Management, 1525-1541.

Cao, S., & Liu, H. (2019). Effectiveness Analysis of Edmodo-Based Blended English Learning Mode. *International Journal of Emerging Technologies in Learning*, 14(18).

Chen, R., Iqbal, J., Liu, Y., Zhu, M., & Xie, Y. (2022). Impact of self-concept, self-imagination, and self-efficacy on English language learning outcomes among blended learning students during COVID-19. Frontiers in psychology, 13, 784444.

Cheng, G. (2022). Using the community of inquiry framework to support and analyse BYOD implementation in the blended EFL classroom. The Internet and Higher Education, 54, 100854.

Dewey, A., Drahota, A. (2016). Introduction to systematic reviews: Online learning module Cochrane Training. Available online:http://training.cochrane.org/path/introduction-systematic-reviews-pathway/1.

Ding, Z. (2021). Research on the application status and countermeasures of college English blended teaching model under big data. In Journal of Physics: Conference Series. 1955(1), 012025.

Fan, G. (2020). "Changes in Educational Institutions in China: 1978–2020," in Handbook of Education Policy Studies, eds G. Fan and T. Popkewitz.

Fathi, H. (2018) Blended Language Learning Using Social Media Networks (Telegram vs. Instagram) as Pedagogical Tool to Enhance Reading Comprehension. J. Linguist. Lit. 2, 30–35.

Garrison, D. R., and Kanuka, H. (2004). Blended learning: uncovering its transformative potential in higher education. Internet High. Educ. 7, 95–105.

Garrison, D. R., and Vaughan, N. D. (2008). Blended Learning in Higher Education: Framework, Principles, and Guidelines. Hoboken, NJ: John Wiley & Sons.

Gao, C., & Shen, H. Z. (2021). Mobile-technology-induced learning strategies: Chinese university EFL students learning English in an emerging context. ReCALL, 33(1), 88-105.

Graham, C. R., Woodfield, W., and Harrison, J. B. (2013). A framework for institutional adoption and implementation of blended learning in higher education. Internet High. Educ. 18, 4–14.

Han, S. (2022). Flipped classroom: Challenges and benefits of using social media in English language teaching and learning. *Frontiers in Psychology*, 13, 996294.

He, H. M. (2020). Research on Mobile Technology-Supported Blended Learning Model of English for College Students. Southwest University of Science and Technology.

Hosseinpour, N.; Biria, R.; Rezvani, E. (2019). Promoting Academic Writing Proficiency of Iranian EFL Learners through Blended Learning. Turk. Online J. Distance Educ. 20, 99–116.

Jiang, M. Y. C., Jong, M. S. Y., Wu, N., Shen, B., Chai, C. S., Lau, W. W. F., & Huang, B. (2022). Integrating automatic speech recognition technology into vocabulary learning in a flipped English class for Chinese college students. Frontiers in Psychology, 13, 902429.

Jiang, Y., Chen, Y., Lu, J., & Wang, Y. (2021). The effect of the online and offline blended teaching mode on English as a foreign language learners' listening performance in a Chinese context. Frontiers in psychology, 12, 742742.

Lame, G. (2019). Systematic Literature Reviews: An Introduction. Proc. Des. Soc. Int. Conf. Eng. Des. 1, 1633–1642.

Lee, R. M., and Yuan, Y. (2018). "Innovation education in China: preparing attitudes, approaches, and intellectual environments for life in the automation economy," in Higher Education in the Era of the Fourth Industrial Revolution, ed. N. Gleason (Singapore: Palgrave Macmillan).

Lee, Y. C., Lau, K. C., and Yip, V. W. Y. (2016). Blended learning for building student-teachers' capacity to learn and teach science-related interdisciplinary subjects: the case of Hong Kong. Asian Assoc. Open Univ. J. 11, 166–181.

Li, L. (2020). Action research of o2o blended learning in the integrated English class under the context of a Chinese private language university. *The Online Journal of Distance Education and e-Learning*, 8(1), 10.

Li, L. (2022). Students' Academic Achievement and Satisfaction in a Blended Learning Community of College English in China: A Quasi-experimental Study. SAGE Open, 12(3).

Lianab, J., & Jiab, J. A. (2021). A Quasi-Experimental Study of Chinese University English Learners' Engagement in a Flipped Classroom. In 29th International Conference on Computers in Education (1),493-502.

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., ... & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. Annals of internal medicine, 151(4), 65.

Lim, C. P., Wang, T., and Graham, C. (2019). Driving, sustaining and scaling up blended learning practices in higher education institutions: a proposed framework. Educ. 1, 1–12.

in, Y. J., & Wang, H. C. (2018). Using enhanced OER videos to facilitate English L2 learners' multicultural competence. *Computers & Education*, 125, 74-85.

Lin, Y. T. (2019). Cooperative experiential learning in a flipped translation classroom. International Journal of English Linguistics, 9(5), 29.

Lu, J., & Price, J. (2018). Chinese students' ICT readiness for a blended teaching and learning environment. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(7), 2907-2914.

Lu, W., & Mustapha, S. M. (2020). Relationship between Assessment for Learning and English learning motivation of university students in blended learning environment. *Journal of Education and Practice*, 11(5), 65-71.

Ma, R., & Abdul Samat, N. (2022). Chinese Undergraduate Students' Language Learning Strategy Use in Flipped English Learning and its Relationships to Gender and Proficiency. *Ma, R., & Abdul Samat*, (2022), 170-184.

Mims-Word, M. (2016). Enhancing students' language skills through blended learning. Electron. J. e-Learn 14, 220–229.

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Bouton, I., Hoffmann, T. C., Mulrow, C. D., et al. (2021). The Prisma 2020 statement: an updated guideline for reporting systematic reviews. BMJ 372:71.

Peng, R., & Fu, R. (2021). The effect of Chinese EFL students' learning motivation on learning outcomes within a blended learning environment. *Australasian Journal of Educational Technology*, 37(6), 61-74.

Porter, W. W., Graham, C. R., Spring, K. A., and Welch, K. R. (2014). Blended learning in higher education: institutional adoption and implementation. Compute. Educ. 75, 185–195.

Qian, J. (2022). Blended Learning Attitudes, Engagement, and Effectiveness among Chinese EFL College Students. *education*, 6(20), 138-145.

Qiu, N., & Qiu, X. (2022). A Study on the Application Model of Blended Teaching in English Language Teaching in Colleges and Universities under the Ecological and Internet Perspectives. *Journal of Environmental and Public Health*. (2022), 1-11.

Rao, V. C. S., and Science, E. F. (2019). Blended learning: a new hybrid teaching methodology. Rasheed, R. A., Kamson, A., and Abdullah, N. A. (2020). Challenges in the online component of blended learning: a systematic review. Compute. Educ. 144:103701.

Rasheed, R. A., Kamsin, A., & Abdullah, N. A. (2020). Challenges in the online component of blended learning: A systematic review. Computers & Education, 144, 103701.

Rui, Y. (2014). China's strategy for the internationalization of higher education: an overview. Front. Educ. China 9, 151–162.

Serdyukov, P. (2017). Innovation in education: what works, what doesn't, and what to do about it? (10), 4–33.

Shu, H., & Gu, X. (2018). Determining the differences between online and face-to-face student–group interactions in a blended learning course. *The Internet and Higher Education*, 39, 13-21.

Sierra-Correa, P. C., Kintz, J. R. C. (2015). Ecosystem-based adaptation for improving coastal planning for sea-level rise: A systematic review for mangrove coasts. Mar. Policy, 51, 385–393.

Jinni, S. (2018). An Empirical Study on the Application of the Mobile Software "English Liulishuo" in Oral English Learning for Non-English Major Students. Northwest Normal University.

Su, Y., Liu, K., Lai, C., & Jin, T. (2021). The progression of collaborative argumentation among English learners: A qualitative study. *System*, 98, 102471.

Sun, M., & Li, S. (2018). MOOC-based flipped classroom of college English: reconstruction of an efficient model of teaching and learning. In 4th International Conference on Arts, Design and Contemporary Education (ICADCE 2018) (pp. 1032-1036). Atlantis Press.

Tao, J., Zheng, C., Lu, Z., Liang, J. C., & Tsai, C. C. (2020). Cluster analysis on Chinese university students' conceptions of English language learning and their online self-regulation. *Australasian Journal of Educational Technology*, 36(2), 105-119.

Teng, X., & Zeng, Y. (2022). The effects of blended learning on foreign language learners' oral English competence. *Theory and Practice in Language Studies*, 12(2), 281-291.

Wang, C. (2021). Employing blended learning to enhance learners' English conversation: A preliminary study of teaching with Hitutor. *Education and Information Technologies*, 26(2), 2407-2425.

Wang, Y. (2020). A study on college English high-efficiency class based on blended teaching mode of flipped classroom. *Theory and Practice in Language Studies*, 10(9), 1066-1071.

Wen, J. (2018). Practice of Flipped Classroom in College English Listening and Speaking Based on WeChat. In 2nd International Conference on Culture, Education and Economic Development of Modern Society (pp. 135-138). Atlantis Press.

Yin, H. (2019). A Practical Study on the Blended Learning Model Based on the WeChat Public Platform. Sichuan Normal University.

Yang, J., Yu, H., & Chen, N. S. (2019). Using blended synchronous classroom approach to promote learning performance in rural area. Computers & Education, 141, 103619.

Yang, S., & Pu, R. (2022). The effects of contextual factors, self-efficacy and motivation on learners' adaptability to blended learning in college English: a structural equation modeling approach. Frontiers in Psychology, 13, 847342.

Yao, C. (2019). A case study of Chinese adult learners' English acquisition in a blended learning environment. *Australian Journal of Adult Learning*, 59(1), 115-135.

Zhang, H., & Fisher, B. (2022). The implications of active blended learning for English teaching in a Chinese university. Journal of Learning Development in Higher Education, 23, 1-18.

Zhou, L. (2022). Construction of English writing hybrid teaching model based on machine learning automatic composition scoring system. *Procedia Computer Science*, 208, 384-390.

Zhu, Y. (2019). New national initiatives of modernizing education in China. ROE 2, 353–362.