

## Development of Blended Teaching Model for College English Reading Course Based on Unipus Platform

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### Abstract

This study uses a mixed method to investigate, develop, and evaluate a blended teaching Model for College English Reading Courses based on the Unipus platform. The research sample is divided into three groups: The first group (9 experts): 3 experts in blended teaching, 3 College English teachers, and 3 online platform managers, using semi-structured interviews. The second group (21 experts): 7 blended teaching experts, 7 College English teachers, and 7 online platform managers, using a Research Evaluation Form and five-point scale for data collection. The third group (9 experts): 3 modeling experts, 3 blended teaching experts, and 3 online platform experts, providing feedback through expert consultation.

The research results show that the blended teaching model for College English reading courses based on the Unipus platform incorporates nine essential elements: teaching objectives, content, methods, process, environment, resources, activities, evaluation, and time allocation. Expert interviews revealed that the teaching objectives, such as understanding complex texts (100%) and increasing reading enthusiasm (88.89%), are critical. The teaching content prioritizes techniques for active reading (100%) and vocabulary expansion (88.89%). Regarding teaching methods, , 100% of experts supported the flipped classroom, while 88.89% backed

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synchronous—and asynchronous learning. 100% favored comprehensive course planning and , online learning activities in the teaching process. The integration of the physical classroom and online platform was fully endorsed by 100% of the experts.

as part of the teaching environment. Evaluation methods showed 100% agreement on goals like student engagement and reading comprehension, highlighting the effectiveness of mixed assessments. Additionally, time allocation for online and offline learning varied, with 77.78% supporting a 50% online and 50% offline split.

Overall, the model effectively improves independent learning and critical thinking, as noted by unanimous expert agreement (100%). This data-driven approach aligns with modern educational requirements, ensuring adaptability and improved student outcomes.

**Keywords:** Blended teaching, College English reading, Unipus platform

## Introduction

The development of College English reading instruction has been a subject of extensive research and debate, particularly as it pertains to improving students' language proficiency, comprehension, and academic success. College English reading courses aim to enhance students' ability to read and understand texts in English, develop critical thinking skills, and apply reading strategies to diverse materials.

Research has highlighted the shift from traditional, teacher-centered approaches to more student-centered, interactive methodologies in College English reading instruction. Scholars such as Barnum (2007) and Guo (2003) argued for using reading as a tool not just for linguistic development but for cultural exposure and fostering real-world communication skills. Studies such as Garrison (2008) and Xu (2012) have shown that task-based language teaching can increase student engagement and improve both reading comprehension and language acquisition by providing contextually rich, goal-oriented reading tasks. In the context of College English, content-based instruction encourages students to read academic texts and develop higher-level comprehension and critical thinking skills (Staker, 2011). Despite advancements in teaching methods, numerous challenges remain in College English reading instruction. One

significant challenge is student motivation. Many students, particularly in non-English-speaking countries, struggle with the perceived difficulty of reading academic texts in English. Research by Wang (2019) found that intrinsic motivation and interest in the subject matter significantly influence reading success, suggesting that educators should make reading tasks more relevant and engaging.

Compared with traditional teaching, the blended teaching mode based on the Unipus platform has shown great advantages. It is of great significance to carry out college English blended teaching based on Unipus platform to improve the efficiency and effect of college English teaching. This teaching method also makes up for the gap of traditional English classroom teaching to a large extent, and plays an important role in deepening the reform of English teaching and promoting the transformation of English teaching.

## **Theoretical Framework and Research Questions**

### **1. Theoretical Framework**

The blended teaching model is an educational approach that combines traditional face-to-face classroom methods with online and digital learning technologies. This model is increasingly being adopted worldwide due to its flexibility, accessibility, and potential for personalized learning experiences. The effectiveness of blended teaching is influenced by various key elements.

The academic community generally believes that teaching model, as an independent category in education research, started from the research of American scholars Joyce & Weil et al. (1972) In their monograph *Teaching Model*, teaching model is defined as "a plan or model for setting up courses (long-term learning courses), selecting textbooks, and guiding teaching activities in classrooms and other environments".

According to relevant theories and long-term teaching reform practice, Chinese scholars have explained the connotation of teaching mode in detail. For example, Ye (1991) believes that the teaching mode is an integral and systematic operation mode from teaching principle, teaching content, teaching goal and task, teaching process to teaching organization form, which is theorized.

To carry out the research on the construction of teaching mode, it is necessary to clarify the constituent elements of teaching mode. At present, there are generally "four-element theory", "five-element theory" and "six-element theory" in the educational circle. According to the four-element theory, a complete teaching mode should include four elements: theoretical basis, functional objectives, realization conditions and activity procedures (He, 2016).

According to the theory of five elements, the teaching model should include five parts: theoretical basis, teaching objectives, operating procedures, teaching means and strategies, and teaching evaluation. According to the theory of six elements, the teaching mode should include teaching ideas (or teaching theories), teaching objectives, operating procedures, teacher-student combination, conditions and evaluation (Li, 2017).

The language teaching community has also carried out theoretical and practical research on the elements of the teaching model. Ma (2018) proposed in his research on the teaching model of Chinese as a foreign language that the teaching model should contain five basic elements, including theoretical basis, teaching objectives, operating procedures, realization conditions (means and strategies) and evaluation. Chen (2021) proposed to reconstruct the teaching mode of college English writing from the aspects of teaching objectives, teaching resources, teaching forms, teacher-student relationship and evaluation system. Liu (2022) constructed a mixed audio-visual teaching model of college English from four aspects, including teaching objectives, teaching content, content presentation and evaluation. Yang et al. (2023) designed the blended college English teaching model from five aspects: teaching objective, teaching content, teaching form, teaching arrangement and teaching evaluation.

## **2. Research Purpose**

The purpose of this research is to study the elements and sub-elements of blended teaching model and develop a new blended teaching model for College English reading course based on Unipus platform. The specific objectives are:

(1) To study the elements of blended teaching Model for College English Reading Course based on Unipus platform.

(2) To evaluate elements and create the blended teaching Model for College English Reading Course based on Unipus platform.

(3) To evaluate the blended teaching Model for College English Reading Course based on Unipus platform.

## Methods

This study employs mixed methods to investigate, develop and evaluate a blended teaching model for College English Reading Course based on the Unipus platform.

**1. Population:** The population consists of experts in blended teaching, teachers of College English Reading courses, online platform specialists, and experts in teaching model development.

**2. Sample Group:** The sample is divided into three groups:

2.1 The first group (9 experts): 3 experts in blended teaching, 3 College English teachers, and 3 online platform managers, using semi-structured interviews.

The selection criteria for experts in the field of blended teaching are: engaged in blended teaching for more than 10 years. The selection criteria for teachers of College English Reading Courses are: engaged in College English teaching for over 10 years, and having been accumulated abundant experiences in blended teaching. The selection criteria for online platform managers are: having more than 8 years of work experience in overseeing the operations and performance of online digital platforms.

2.2 The second group (21 experts): 7 blended teaching experts, 7 College English teachers, and 7 online platform managers, using a Research Evaluation Form and five-point scale for data collection. The selection criteria for Experts in the Field of Blended Teaching are: having blended teaching experience for more than 10 years, and have successfully applied for province-level hybrid research projects. The selection criteria for Teachers of College English Reading Courses are: having over 15 years of college English teaching experience and have published influential academic articles in college English blended teaching. The selection criteria for Online platform managers are: having more than 10 years of work experience in online platform construction and maintenance.

2.3 The third group (9 experts): 3 modeling experts, 3 blended teaching experts, and 3 online platform experts, providing feedback through expert consultation. The selection criteria for Modelling Experts are: Having more than 20 years of relevant work experience, holding a senior professional title, having qualifications to supervise doctoral students, and having research achievements in modeling. The selection criteria for Experts in Blended teaching of College English Reading Courses are: Having more than 15 years of relevant teaching experience, holding a senior professional title, having qualifications to supervise doctoral students, and having research achievements in blended teaching. The selection criteria for Online platform experts are: Having more than 10 years of relevant work experience, holding a national senior researcher professional qualification, and being familiar with blended English teaching in universities.

### **3. Instruments and Procedures:**

#### **Step 1: Literature Review and Semi-Structured Interviews**

A comprehensive review of Chinese and foreign literature on blended teaching models was conducted to build a research framework. Based on this framework, a semi-structured interview outline of 24 questions was created and used to interview 9 experts. Before that, research interview form was submitted to conduct a consistency evaluation on the completeness and accuracy of the language. Three experts conducted IOC evaluations on the 10 items of the interview outline one by one. The highest score was 1.00 and the lowest score was 0.70. The consistency of the interview outline was good. The first part of the interview outline is the demographic characteristics, and the second part is Teaching objective, Teaching content, Teaching method, Teaching process, Teaching environment, Teaching resources, Teaching activities, Teaching evaluation, and Teaching time allocation, totaling 9 elements.

#### **Step 2: Expert Interviews and Questionnaires**

A theoretical framework for blended teaching was established, from which an expert consultation table and a questionnaire were developed. The questionnaire was distributed in three rounds to gather feedback from 21 experts, using a Research Evaluation Form and five-point scale for data collection (1=totally disagree; 2= disagree; 3=uncertainty; 4=agree; 5=totally agree). Three experts in blended teaching were invited to conduct a consistency evaluation on the completeness and accuracy of the elements evaluation form. The highest score for the

evaluation form was 1.00 and the lowest score was 0.80. The consistency of the evaluation form was good.

### **Step 3: Expert Scoring and Consultation**

The results from previous steps were compiled into a scoring table and feedback forms, allowing experts to assess the model and offer modifications. The model evaluation form consists of 4 sections and , including Section 1: Overall Effectiveness of the Model; Section 2: Completeness of Model Elements; Section 3: Interrelationship of Model Elements; Section 4: Additional Evaluation Aspects, totaling 25 questions. Three experts in model design were invited to conduct a consistency evaluation on the completeness and accuracy of the model rating form. The highest score for the questionnaire was 1.00 and the lowest score was 0.80. The consistency of the questionnaire was good.

### **4. Data Collection and Analysis:**

Collect, classify and organize interview data and questionnaire data, and establish a database. It has been verified that all the above questionnaire data are valid.

Analysis of interview content, consistency, and course teaching plans was performed using frequency analysis, percentage, median scores and IQR analysis to ensure the reliability and validity of the blended teaching model.

## **Results**

### **1. The elements and sub-elements of blended teaching Model for College English Reading Course based on Unipus were determined through expert interviews**

Based on a literature review, it was determined that the elements of blended teaching Model for College English Reading Course based on Unipus include: Teaching objective, Teaching content, Teaching method, Teaching process, Teaching environment, Teaching resources, Teaching activities, Teaching evaluation, and Teaching time allocation, totaling 9 elements. An interview outline was formulated according to these 9 elements. The data analysis results of the interviews are as follows:

**Table 1** Expert interview data analysis results of Model elements

Element	Element detail	Frequency	Percentage
Teaching objective	1. Understand and analyze complex texts	9	100.00
	2. Critically evaluate reading materials	9	100.00
	3. Expand students' vocabulary	9	100.00
	4. Facilitate Independent Learning	8	88.89
	5. Increase students' enthusiasm for reading	8	88.89
	6. Equip students with practical strategies	7	77.78
	7. Collaboration & Peer Learning	6	66.67
	8. Technology Integration	6	66.67
	9. Create a supportive environment	4	44.44
Teaching content	1. Techniques for active reading	9	100.00
	2. Techniques for expanding vocabulary	8	88.89
	3. Exploration of different genres	9	100.00
	4. Critical Reading and Analysis	9	100.00
	5. Understanding the background and context	8	88.89
	6. Analysis of text structure	6	66.67
	7. Utilizing digital tools and resources	6	66.67
	8. Regular assessment of reading comprehension	7	77.78
Teaching method	1. Flipped Classroom	9	100.00
	2. Interactive Reading	7	77.78
	3. Collaborative Learning	8	88.89
	4. Scaffolded Instruction	9	100.00
	5. Differentiated Instruction	8	88.89
	6. Synchronous and Asynchronous Learning	8	88.89
	7. Instructor-Led and Self-Directed Learning	8	88.89
	1. Course Planning and Design	8	88.89
	2. Pre-Class Preparation	9	100.00
	3. In-Class Instruction	9	100.00
	4. Online Learning Activities	9	100.00

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<b>Teaching Process</b>	5. Integration of Face-to-Face and Online Components	6	66.67
	6. Assessment and Feedback	8	88.89
	7. Reflection and Improvement	8	88.89
	8. Course Evaluation and Adjustment	6	66.67
<b>Teaching environment</b>	1. Physical Classroom	9	100.00
	2. Online Learning Platform	9	100.00
	3. Digital Tools	8	88.89
	4. Communication Channels	9	100.00
	5. Learning Analytics Tools	7	77.78
	6. Library and Research Facilities	6	66.67
	7. Flexible Learning Spaces	4	44.44
	8. Assessment and Feedback Mechanisms	5	55.56
<b>Teaching Resources</b>	1. Instructor-Led Resources	9	100.00
	2. Digital Texts and E-Books	8	88.89
	3. Audio and visual materials	8	88.89
	4. Vocabulary and Language Learning Apps	6	66.67
	5. Reading and Writing Software	7	77.78
	6. Reading Comprehension Tools	8	88.89
	7. Discussion and Communication Platforms	9	100.00
<b>Teaching Activities</b>	1. Pre-Reading Online Modules	8	88.89
	2. Interactive Digital Discussions	8	88.89
	3. Peer Review Platforms	9	100.00
	4. Online quizzes and assignments	8	88.89
	5. Multimedia Presentations	9	100.00
<b>Teaching evaluation</b>	1. Attainment of learning goals	9	100.00
	2. Student Engagement	9	100.00
	3. Comprehension and Learning Outcomes	8	88.89
	4. Feedback Mechanisms	9	100.00
	5. Instructor Effectiveness	8	88.89
	6. Technology Utilization	7	77.78
	7. Overall Course Satisfaction	6	66.67

	1. Online time 30% +Offline Time70%	1	11.11
	2. Online time 40% +Offline Time60%	1	11.11
<b>Teaching Time</b>	3. Online time 50% +Offline Time50%	7	77.78
<b>Allocation</b>	4. Online time 60% +Offline Time40%	--	--
	5. Online time 70% +Offline Time30%	--	--

Overall, the expert interview data analysis provides valuable insights into the essential elements of blended teaching model for College English reading course. Across various dimensions including teaching objectives, content, methods, environment, and evaluation, there is a remarkable level of consensus among experts. However, slight variations in agreement exist regarding certain aspects such as specific teaching content or teaching environment. These findings underscore the importance of a comprehensive and dynamic approach to college English reading teaching so as to cater to the diverse needs of college students.

## 2. Results of data analysis of expert evaluations on the elements of the blended teaching model, and development of the blended teaching model for College English Reading Course based on Unipus

Building upon the initial round of interviews, we distilled nine primary elements and sixty-four sub-elements. These elements were formulated into an expert assessment form, and twenty-one experts were invited to rate these elements using a five-point scale. Throughout the evaluation process, notable discrepancies emerged in expert opinions, inconsistencies in element descriptions, and suggested modifications from the experts. These issues were thoroughly addressed through iterative communication with the experts. Subsequently, the data was compiled, summarized, and analyzed. The results are presented below:

**Table 2** Expert evaluation data analysis results of model elements

Element	Element detail	Mdn	IQR
1.	Understand and analyze complex texts	5.00	0.00
2.	Critically evaluate reading materials	5.00	0.50
3.	Expand students' vocabulary	5.00	0.00
4.	Facilitate Independent Learning	4.00	1.00

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<b>Teaching objective</b>	5.	Increase students' enthusiasm for reading	4.00	0.50
	6.	Equip students with practical strategies	5.00	0.00
	7.	Collaboration & Peer Learning	4.00	1.00
	8.	Technology Integration	5.00	1.00
	9.	Create a supportive environment	4.00	1.00
<b>Teaching content</b>	1.	Techniques for active reading	5.00	0.00
	2.	Techniques for expanding vocabulary	5.00	0.00
	3.	Exploration of different genres	4.00	1.00
	4.	Critical Reading and Analysis	5.00	0.50
	5.	Understanding the background and context	4.00	0.50
	6.	Analysis of text structure	5.00	0.50
	7.	Utilizing digital tools and resources	4.00	1.00
	8.	Regular assessment of reading comprehension	4.00	0.50
<b>Teaching method</b>	1.	Flipped Classroom	5.00	0.00
	2.	Interactive Reading	4.00	0.50
	3.	Collaborative Learning	4.00	1.00
	4.	Scaffolded Instruction	5.00	0.50
	5.	Differentiated Instruction	5.00	1.00
	6.	Synchronous and Asynchronous Learning	5.00	0.00
	7.	Instructor-Led and Self-Directed Learning	5.00	0.00
<b>Teaching Process</b>	1.	Course Planning and Design	5.00	0.00
	2.	Pre-Class Preparation	5.00	0.00
	3.	In-Class Instruction	5.00	0.00
	4.	Online Learning Activities	5.00	0.50
	5.	Integration of Face-to-Face and Online Components	5.00	0.00
	6.	Assessment and Feedback	4.00	0.50
	7.	Reflection and Improvement	4.00	1.00
	8.	Course Evaluation and Adjustment	5.00	0.50
	1.	Physical Classroom	5.00	0.00
	2.	Online Learning Platform	5.00	0.00
	3.	Digital Tools	5.00	1.00

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<b>Teaching environment</b>	4.	Communication Channels	4.00	0.50
	5.	Learning Analytics Tools	5.00	0.50
	6.	Library and Research Facilities	4.00	1.00
	7.	Flexible Learning Spaces	4.00	1.00
	8.	Assessment and Feedback Mechanisms	4.00	1.00
<b>Teaching Resources</b>	1.	Instructor-Led Resources	5.00	0.00
	2.	Digital Texts and E-Books	5.00	0.00
	3.	Audio and visual materials	4.00	0.50
	4.	Vocabulary and Language Learning Apps	4.00	1.00
	5.	Reading and Writing Software	4.00	0.50
	6.	Reading Comprehension Tools	4.00	1.00
	7.	Discussion and Communication Platforms	5.00	0.50
<b>Teaching Activities</b>	1.	Pre-Reading Online Modules	5.00	0.00
	2.	Interactive Digital Discussions	4.00	1.00
	3.	Peer Review Platforms	5.00	0.50
	4.	Online quizzes and interactive assignments	4.00	0.50
	5.	Multimedia Presentations	5.00	1.00
<b>Teaching evaluation</b>	1.	Attainment of learning goals	5.00	0.00
	2.	Student Engagement	5.00	0.00
	3.	Comprehension and Learning Outcomes	5.00	0.50
	4.	Feedback Mechanisms	5.00	1.00
	5.	Instructor Effectiveness:	4.00	1.00
	6.	Technology Utilization	4.00	1.00
	7.	Overall Course Satisfaction	4.00	1.00
<b>Teaching Time Allocation</b>	1.	Online time 30% +Offline Time70%	3.00	2.00
	2.	Online time 40% +Offline Time60%	4.00	2.00
	3.	Online time 50% +Offline Time50%	5.00	0.50
	4.	Online time 60% +Offline Time40%	3.00	2.00
	5.	Online time 70% +Offline Time30%	3.00	2.00

From Table 2, it is clear that many elements received a median score of 5.00, indicating strong consensus among experts on the importance and effectiveness of these aspects of teaching. This is particularly notable in objectives and methods, such as understanding complex texts, active reading techniques, and the flipped classroom approach. A low IQR (especially 0.00) suggests that there is little variability in the experts' ratings, reflecting a strong agreement on the effectiveness or importance of specific teaching strategies and objectives. For instance, the elements under "Teaching Objectives" generally have low IQR values, indicating consensus on their importance. However, some elements, particularly under "Teaching Activities," "Teaching Evaluation," and "Teaching Time Allocation," have higher IQR values, suggesting more variability in expert opinions. For instance, the various allocations of online versus offline teaching time show more disagreement among experts.

In addition, objectives related to critical evaluation and facilitating independent learning received slightly lower median scores compared to other objectives, indicating a potential area for further development in teaching practices. Elements like "Technology Integration" and "Utilizing digital tools" received high scores, reflecting the growing emphasis on technology in education, particularly in modern teaching environments.

Overall, the evaluation data demonstrates a strong agreement among experts regarding the importance of various elements in teaching, with specific strengths in teaching objectives, methods, and resources. However, areas with higher variability, especially in teaching activities and evaluation processes, suggest opportunities for further investigation and refinement of strategies. These insights can guide educators in prioritizing effective practices and addressing areas that may require more focus in professional development initiatives.

After conducting interviews with 9 experts and evaluations from 21 experts, this study selects the elements with  $PCT > 70\%$  or  $Mdn > 4$ , and  $IQR < 1$  as the content of further research according to the actual situation, and resulted in 9 main elements and 48 sub-elements for the blended teaching model. The specific model is illustrated in the diagram 1 below:

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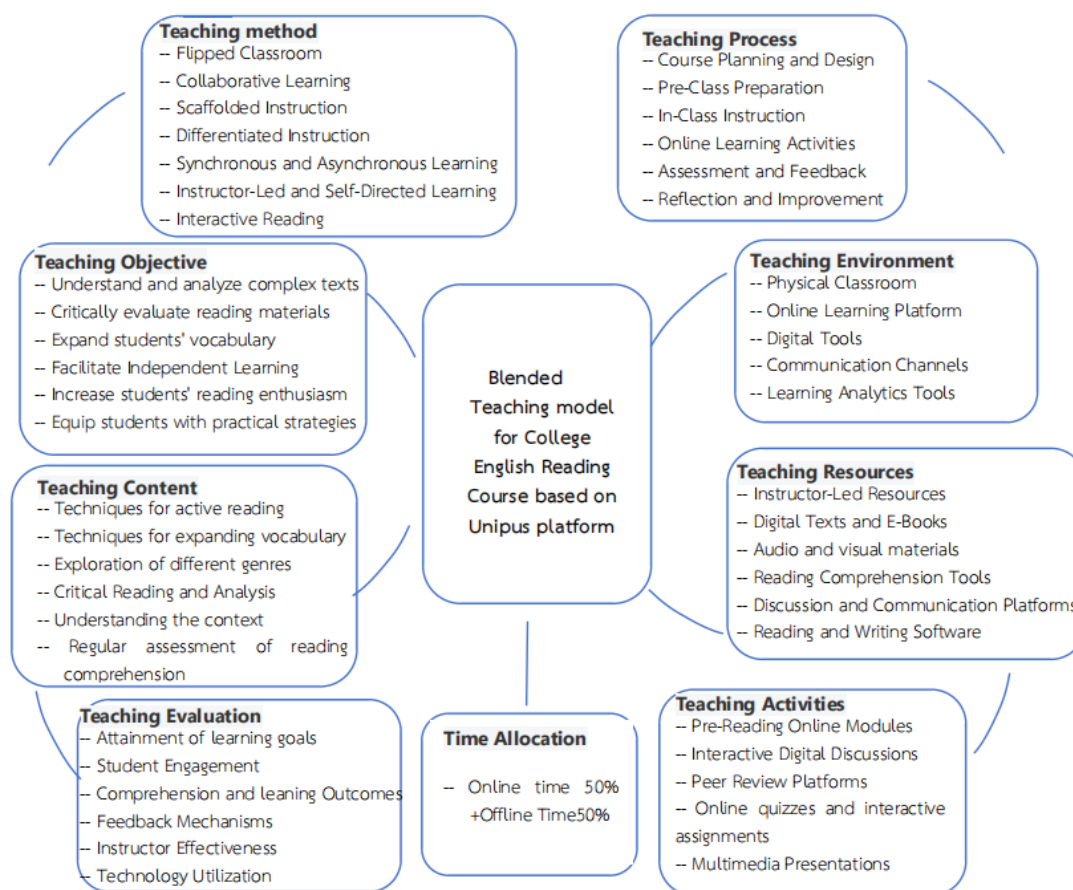


Diagram 1 Blended teaching model for college English reading course based on Unipus platform

### 3. Results of data analysis of expert evaluations on the blended teaching model for college English reading course based on Unipus.

The expert evaluation questionnaire for designing the blended teaching model comprises four sections: Overall Effectiveness of the Model, Completeness of Model Elements, Interrelationship of Model Elements, and Additional Evaluation Aspects, totaling 25 questions. See table 3 for details.

**Table 3** Expert evaluation for designing the blended teaching model

Questionnaire Sections	No. of agree	Percentage
<b>Part 1: Overall Effectiveness of the Model</b>		
1. This model can effectively cultivate students' critical thinking and learning willingness.	9	100.00
2. This model comprehensively covers the knowledge and skills required for students in the provided teaching content.	9	100.00
3. This model effectively stimulates learners' learning enthusiasm and enhance practical abilities through the adopted teaching methods.	9	100.00
4. Regarding the teaching process, this model can integrate before-class, in-class and after-class into a whole.	9	100.00
5. In terms of the provided teaching environment, this model can offer enough resources and space to support students' autonomous learning.	9	100.00
6. This model can increase the guidance of students' interactive activities, and avoid students' burnout.	9	100.00
7. With respect to teaching resource, this model can provide ample support and incentive measures for learners.	9	100.00
8. Regarding assessment and evaluation, this model can accurately assess learners' English reading proficiency and capability.	9	100.00
9. In terms of time allocation, Online time 50% +Offline time50% is appropriate in current college English blended teaching.	8	88.89
<b>Part 2: Completeness of Model Elements</b>		
1. In the setting of teaching objectives, these objectives cover the comprehensiveness of college English reading education.	9	100.00
2. Regarding the arrangement of teaching content, these contents cover various aspects required forcollege English reading teaching.	9	100.00
3. Concerning the selection of teaching methods, these methods fully utilize different teaching tools and resources.	9	100.00

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4.	For the requirements of teaching activities, they possess necessary teaching activities.	9	100.00
5.	In the construction of teaching environment, sufficient resources and support are provided.	9	100.00
6.	Regarding the design of teaching process, this model covers all the teaching procedures.	9	100.00
7.	Concerning resource allocation, sufficient learning materials are provided.	9	100.00
8.	Regarding assessment and evaluation systems, they possess comprehensiveness and objectivity.	9	100.00
<b>Part 3: Interrelationship of Model Elements</b>			
1.	In the evaluation of overall effectiveness, there is good coordination and cooperation among various elements.	9	100.00
2.	Regarding the assessment of the completeness of model elements, they form an organic whole.	9	100.00
3.	In the interrelationship of model elements, there are few conflicts between some elements	8	88.89
4.	There are relationships between some elements that can be further strengthened or improved.	9	100.00
<b>Part 4: Additional Evaluation Aspects</b>			
1.	This model has long-term sustainability and can continuously provide effective college English reading teaching.	9	100.00
2.	In terms of social impact and contribution, this model can have a positive impact on current college English teaching.	9	100.00
3.	Regarding internationalization and cross-cultural adaptability, this model possesses sufficient characteristics to operate effectively in different cultural backgrounds and provide reference for foreign language teaching.	8	88.89
4.	Regarding the innovativeness and forward-looking nature of the model, it can keep up with the times and continuously innovate and improve.	8	88.89

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The expert evaluation data indicates unanimous agreement across all sections of the questionnaire, with each question receiving a 100% agreement rate. This suggests a high level of satisfaction with the model's effectiveness, completeness, and interrelationship of elements. However, some areas for improvement were identified, particularly in promoting interrelationship of model elements and enhancing internationalization and cross-cultural adaptability, where agreement rates were slightly lower at 88.89%. Overall, the data reflects positive feedback on the model's strengths and highlights areas for further enhancement.

The suggested modifications proposed by the experts are to incorporate a feedback mechanism from students into the evaluation system to better understand their needs and feedback.

## **Discussion**

In this section, we will discuss the research results and findings based on the nine main elements and 48 sub-elements identified in the study:

### **1. Teaching Objectives**

Our research has found that clear teaching objectives are crucial for enhancing students' English reading capabilities. According to the requirements of the teaching syllabus, teachers adhere to the principle of student-oriented, fit the interest points of college students, set up teaching objectives to meet the students' independent and personalized learning in a multi-modal environment, and focus on the mix of "online" and "offline". These objectives are designed to enhance students' reading skills, critical thinking, and engagement by leveraging the unique benefits of both online learning and traditional classroom experiences. They provide a roadmap for the instructional process and help in assessing student progress and success.

### **2. Teaching Content**

The materials, topics, and resources used to facilitate learning through both online and in-person methods. It includes the selection and organization of reading materials and instructional resources designed to meet the course objectives and enhance students' reading and analytical skills, such as Core Texts: Academic articles, literature excerpts, and essays;

Supplementary Materials: Vocabulary lists, comprehension exercises, and critical essays, Interactive Elements: Online quizzes, discussion forums, and multimedia content.

### 3. Teaching Method

Under the blended teaching mode, the teaching organization is mainly based on students' online autonomous learning, combined with offline group cooperative learning, to ensure organic collaboration inside and outside the classroom. On the one hand, in view of the detailed analysis of reading teaching on the "Unipus" platform, students are required to practice, think and remember more in accordance with the platform tutorials. On the other hand, for the difficulties and problems that cannot be resolved in group discussion, teachers should adopt the method of collective teaching, focus on the explanation of major and difficult points, and choose more appropriate teaching strategies to ensure the benefits of all students.

### 4. Teaching Process

In blended English reading teaching, the teaching steps are divided into three stages: before class, during class and after class. First, assign self-study tasks before class. With the help of the independent learning "Unipus" platform, pre-class research tasks are published, course discussion areas are set up, and uploaded to the "Unipus" platform, which is convenient for students to focus on feedback. Teachers use the platform to organize student discussions, let students summarize, exercise students' practical ability and thinking, and ensure the effectiveness of training. Secondly, in the class, in order to promote the improvement of students' high-level critical thinking in reading, select discussion topics, carry out cross-group discussions, and jointly discuss the problems in order to stimulate students' learning enthusiasm. Random inspection or random questions are adopted to understand students' learning progress and improve the effectiveness of students' learning. Finally, after class, the design of output tasks should be strengthened. Students can choose to complete extension tasks. Under the premise of adhering to operability and objectivity, students are encouraged to reflect and summarize, make mind maps, and guide students to explore and discover new knowledge.

### 5. Teaching Environment

The combined physical and digital spaces where instruction and learning occur. This environment integrates both online and face-to-face elements to create a cohesive and

interactive learning experience. The offline smart teaching platform is composed of advanced equipment and technology such as multimedia classroom, multifunctional display screen of smart classroom, electronic blackboard, and network teaching platform (smart learning space). The online Intelligent network learning and assessment platform is composed of foreign language learning software and systems such as Unipus, iTest, etc., covering English reading and writing skills training, which meets the actual language level and development needs of students. The platform supports the seamless learning mode of computers and mobile devices, and meets the diversified mobile learning needs of students. In addition, the platform provides real-time quantitative online learning behavior data, such as learning time, accuracy rate, interaction amount, etc., which is convenient for teachers to track and monitor learning situation, carry out personalized guidance, and promote the formation of students' autonomous learning habits.

#### 6. Teaching Resources

Teaching resources are the various materials and tools employed in a blended College English reading course to deliver instruction, engage students, and support learning across both online and in-person components. These resources include digital content, physical materials, and interactive tools that aid in the effective teaching and understanding of reading concepts.

#### 7. Teaching Activities

Teaching activities in the context of blended teaching for a College English reading course refer to the diverse instructional and interactive tasks designed to facilitate student learning across both online and face-to-face formats. These activities aim to engage students, reinforce reading skills, and achieve course objectives by integrating digital and traditional teaching methods. The offline smart teaching supports teachers and students to access multiple mobile intelligent terminal devices such as mobile phones and tablets, and supports interactive teaching activities such as resource sharing, voting questionnaires, brainstorming, timed answers and group presentations, forming tangible physical learning space and intangible digital learning space, assisting the presentation of teaching content, facilitating the acquisition of learning resources, and enriching classroom interaction forms.

## 8. Teaching Evaluation

Evaluation model is the main basis for testing the effectiveness of teaching practice. The Unipus platform is powerful and provides a multidimensional formative assessment. The overall evaluation design of English reading teaching includes formative assessment and final assessment. Formative assessment includes learning portfolio (platform learning record, homework completion, learning reflection), class performance (translation class performance, group task achievement and class homework), process test (platform unit learning test, class quiz), and final assessment is the final exam.

## 9. Teaching Time Allocation

The 50% online and 50% offline blended teaching model for college English reading is a flexible and engaging approach that can enhance the overall learning experience. By carefully integrating online and offline components, educators can provide students with a well-rounded educational experience that promotes critical thinking, collaboration, and a love for reading. Proper implementation, continuous assessment, and instructor training are essential for the success of this model, ensuring that students gain the maximum benefit from their learning experience.

## Conclusion

The implementation of blended teaching represents an essential requirement for the informatization of higher education. Starting from the elements of the teaching model, this study proposes to design a blended teaching model for college English reading course based on Unipus platform from nine key elements: teaching objective, teaching content, teaching method, teaching process, teaching environment, teaching resources, teaching activities, teaching evaluation, teaching time allocation. Expert interviews revealed that the teaching objectives, such as understanding complex texts (100%) and increasing reading enthusiasm (88.89%), are critical. The teaching content prioritizes techniques for active reading (100%) and vocabulary expansion (88.89%). Regarding teaching methods, 100% of experts supported the flipped classroom, while 88.89% backed synchronous and asynchronous learning.

In the teaching process, 100% favored comprehensive course planning and online learning activities. The physical classroom and online platform integration were fully endorsed

by 100% of experts as part of the teaching environment. Evaluation methods showed 100% agreement on goals like student engagement and reading comprehension, highlighting the effectiveness of mixed assessments. Additionally, time allocation for online and offline learning varied, with 77.78% supporting a 50% online and 50% offline split. Overall, the model effectively improves independent learning and critical thinking, as noted by unanimous expert agreement (100%). This data-driven approach aligns with modern educational requirements, ensuring adaptability and improved student outcomes.

Grounded in humanistic and outcome-based education theories, the model prioritizes quality-driven outcomes while being knowledge-based and competency-oriented. By establishing an intelligent teaching environment, it offers students ample opportunities for innovative language application. The integration of formative and summative assessments clarifies the content, subjects, and methodologies employed in each classroom to enhance learning through evaluation. This model embraces a multi-dimensional hybrid perspective by synthesizing effective components from traditional face-to-face instruction, project-based guidance in physical settings, and online autonomous learning at the practical level; incorporating various information technology tools such as multimedia classrooms, online teaching platforms, language learning software, and instant messaging applications at the technical level; as well as integrating cognitive, emotional, and skill dimensions at the theoretical level to foster a conducive ecosystem that promotes student development.

## References

- Barnum, C. & Parmann, W. (2007). Bringing introduction to teacher: A blended learning model. *T.H.E Journal*. 2(02), 56-64.
- Chen, Q. (2021). Reconstruction of college English writing teaching model in the era of big data. *Journal of Foreign Languages*. 28(3), 129–132.
- Dong, X. (2016). Application of flipped classroom in college English teaching. *Journal of Creative Education*. 18(9), 14–19.
- Garrison, D. R. (2008). *Blended Learning in Higher Education: Principles and Guidelines*. Jossey-Bass.

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- Guo, Q. (2003). Formative assessment and its implications for college English teaching and testing. *Tsinghua University Teaching Research*. (05), 103-108.
- Hao, Z. & Xu, J. (2003). 20 years of research on teaching model: Course, problems and direction. *Educational Theory and Practice*. 15(3), 51–55.
- He, K. K. (2016). The New development of educational technology theory from the perspective of Blended learning. *Research in Audio-visual Education*. (03), 1-6.
- Hu, J. (2021). The theoretical connotation and research paradigm of blended foreign language teaching. *Journal Foreign Language Field*. 42(4), 2–10.
- Joyce, B., Weil, M., & Calhoun, E. (1972). *Models of Teaching*. Allyn and Bacon.
- Li, R. (2017). Discussion on some theoretical issues about teaching model. Curriculum, Teaching Materials. *Teaching Methods*. 15(4), 25–29.
- Liu, X. (2022). A study on a new hybrid audio-visual teaching model for college English: A case study of Beijing University of Chemical Technology. *Modern Educational Technology*. 35(11), 100–106.
- Maudjaddai. (2022). A study on VR English cross-cultural teaching model oriented by wisdom education. *Foreign Language Audio-Visual Teaching*. 30(3), 15–26.
- Staker, H. (2011). *The Rise of K-12 Blended Learning Profiles of Emerging Model*. Innosight Institute.
- Wang, X. (2019). Innovation of college English teaching model based on mobile micro-learning technology. *Frontiers in Educational Research*. 20(2), 21–26.
- Xu, H. (2012). Exploring the ASPIRE model of Blended Learning. *Journal of Hubei Institute of Adult Education*. 18( 6),1-3.
- Yang, F., Wei, X., & Zhang, W. (2023). An analysis of blended college English teaching model. *Foreign Language Audio-Visual Teaching*. 12(1), 21–28.
- Ye, R. (1991), Research on activity-oriented Blended teaching model with multiple teaching modes, *Foreign Language Audio-visual Education*. (09), 104-113.
- Zhang, K., Sarawong, N., Teekasap, S., & Phokheaw, S. (2024). Development of innovative entrepreneur short course for undergraduate students of Leshan Normal University. *Journal of Information Technology and Innovation*. 23(1), 16-36.

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Zhong, J., Zeng, C. Q., & Yu, Q. M. (2019). Construction of the evaluation index system and evaluation model for innovative entrepreneur talents. *Research on Scientific and Technological Innovation and Development Strategy*. 17(5), 74–83.