

Research and Practice of Blended Learning in College English Teaching in Chinese Universities from a Multimodality Perspective

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Abstract

College English teaching exhibits characteristics of diversification, multimodality, and digitization in terms of teaching resources, teaching activities, teaching approaches and means, as well as teaching evaluation. Based on the theory of multimodality, this study analyzes the application and practical paths of blended teaching in college English courses, explores the role of this teaching mode in promoting the effectiveness of curriculum reform in Chinese universities and improving students' academic performance, and puts forward some operational suggestions for using this teaching mode in instruction.

Keywords

Multimodality; College English; Blended Teaching.

1. The Current Situation of College English Teaching

With the advent of the Internet plus era, various communication tools have been widely applied in the field of education, ushering in a new stage for college English teaching in China. However, students still face multiple difficulties and obstacles in learning college English courses. According to some statistics from a university in Jiangsu Province which ranks the top 100 among Chinese universities, about 38% of students have little or no interest in foreign language learning and lack a clear purpose for learning English; over 50% of students lack initiative and autonomous learning ability in English learning; more than 50% of students are unable to summarize or grasp effective English learning methods and strategies; nearly 60% of students suffer from obstacles in English listening, speaking, reading, and writing due to insufficient basic knowledge of the English language; and almost 60% of students experience difficulties in understanding English language due to inadequate knowledge of foreign cultural backgrounds. These learning obstacles are primarily caused by difficult teaching content, unsuitable teaching methods, and environmental factors. For example, 35% of students believe that the articles in textbooks are too long, or the content is obscure, or there are too many new words, making them difficult to understand; 42% of students think that the content of textbooks is not close to real life or is outdated and uninteresting, lacking sufficient authentic language materials; 58% of students feel that the school lacks good opportunities for English communication and an English learning atmosphere. Overall, the current college English teaching has not satisfied the majority of students, instead presenting issues such as diminished learning motivation, inadequate mastery of learning methods, and monotonous and uninteresting learning content. These issues provide some reference for the future direction of college English teaching.

College English Curriculum Guidelines (2020 edition) (hereafter referred to as *The 2020 Guidelines*) issued by the Ministry of Education stipulates that in addition to textbooks as the primary teaching content, online courses should be developed and constructed so as to expand students' learning space and orient them to choose materials and methods suitable for their

own needs for autonomous learning in multimedia, multimodal, and diverse environments [1]. Institutions of higher learning are encouraged to fully leverage information technology to actively create diverse teaching and learning environments [1]. Teachers are encouraged to develop and utilize micro-lectures, MOOCs (Massive Open Online Courses), and transform and expand teaching content by using high-quality online educational resources, implementing blended teaching such as flipped classrooms that combine in-class and online courses [1]. It can be seen that college English teaching in the future will exhibit characteristics such as maximized teaching resources, diversified teaching methods, and pluralistic teaching evaluations. These new features can, to some extent, address the various issues encountered by students in their learning. However, to achieve the teaching objectives mentioned in *The 2020 Guidelines*, the following issues must first be addressed: (1) How to create teaching conditions that incorporate multimedia, multimodality, and multiple environments; (2) How to effectively implement blended teaching that combines traditional classroom and online courses; (3) How to implement an evaluation system that integrates formative and summative assessments. Drawing on multimodal teaching theory, the author attempts to construct a blended teaching mode for college English courses centered on the multimodal resources, with the aim of improving the existing teaching issues, helping students overcome difficulties and obstacles in their learning, and ultimately maximizing teaching effectiveness.

2. The Development of Multimodal Teaching Theory in China

The multimodal theory originated from the multimodal discourse analysis theory proposed in Western countries in the 1990s, which posits that discourse encompasses not only language but also other non-linguistic symbols (such as painting, music, dance, etc.), all of which are sources of meaning expression. Over the following two decades, the multimodal discourse analysis theory was applied to the field of education, gradually evolving into the multimodal teaching theory. In 1994, the New London Group introduced the concept of multiliteracies, which is regarded as the first application of multimodal theory in instructional practice. Research on multiliteracies abroad is also considered the origin of multimodal teaching research in China. Notable figures in China's multimodal teaching research include Z. L. Hu, W. Q. Guo, D. L. Zhang and so on. Z. L. Hu was the first scholar to propose the concept of "multimodal literacy" in China [2]. Subsequently, Y. G. Gu, based on distinguishing between multimedia learning and multimodal learning, introduced cognitive psychology into the study of multimodal learning and analyzed the model of multimodal learning [3]. Q. H. Wei analyzed students' multiliteracy awareness and abilities from the perspective of modal use, using students' PPT presentations as language data [4]. D. L. Zhang systematically studied the framework and mode of multimodal foreign language teaching [5]. His book *Multimodal Discourse Analysis Theory and Foreign Language Teaching* comprehensively elaborates on the foundation, framework, design, grammatical construction, and research methods of multimodal discourse analysis theory, as well as the construction of multiliteracy theory and the cultivation of multiliteracy abilities [6]. In practice, through the analysis of actual corpus and empirical research, he has developed a series of operable models for foreign language teaching practice, addressing specific issues in foreign language teaching [6]. D. L. Zhang's research achievements reflect both the overall framework of multimodal teaching from a macro perspective and the specific teaching design and arrangement of multimodal teaching from a micro perspective. W. Q. Guo constructed the MAP (Multimodal Apple Pie) model used in multimodal teaching in college English courses, which emphasizes the main teaching activities of Apple (Activation, Presentation, Peer learning, Learning reinforcement and Evaluation) while implementing the PIE (Productive, Interactive, Engaging) teaching principles [7].

Another group of scholars has conducted empirical research on multimodal teaching, with some representative findings. Y. S. Zhu, based on introducing a case study of multiliteracy research from a Western country, explored the implications of multiliteracy research for educational reform in China [8]. Y. F. Long and P. Zhao, through empirical research, demonstrated a strong interaction between multimodality and metacognitive strategies, and found that the combination of the two is more effective in promoting listening comprehension than either metacognitive strategies or multimodality alone [9]. J. X. Xie and J. Q. Dong, by selecting listening texts under multimedia and multimodal conditions, pointed out how to better design listening tasks [10]. Q. W. Song used empirical research methods to compare the effects of multiliteracy instructional approach and traditional instructional approach in college English teaching, and the results showed that the multiliteracy instructional approach has significant advantages and positive value [11]. Y. F. Jiang proposed the construction of a teaching mode for foreign language courses in the context of multimodal discourse, especially the teaching mode of flipped classroom for college English courses in a multimodal discourse context, and conducted empirical research in combination with teaching practice [12]. Drawing on multimodal theory and multimodal teaching concept, H. J. Wang and H. L. Wang constructed a flipped classroom from a multimodal perspective and proposes some operational suggestions for teaching [13]. Y. L. Cao found that implementing multimodal classroom teaching for college English courses based on micro-lecture resources helps to promote students' learning motivation and improve their overall English performance [14]. X. Che, through empirical research methods, investigated students' acceptance of the multimodal teaching in college English newspaper reading course and their actual learning effects, and found that students' learning interest, reading ability, and learning initiative were all enhanced [15]. L. J. Wu, taking foreign language live video classrooms as the research object, constructed a framework for analyzing multimodal teaching behaviors in foreign language live video classrooms, and analyzed the linguistic behaviors, bodily actions, and information technology application behaviors of teachers and students in live video classrooms [16].

In summary, research on multimodal teaching in China began at the beginning of this century and has emerged as a new research field over the past decade, with a significant increase in the number of studies. A considerable portion of this research focuses on the application of multimodal teaching theory in language teaching. This paper will explore how to implement blended teaching in college English courses in Chinese universities based on multimodal teaching theory.

3. Practical Path of Blended Teaching in College English Courses Based on the Theory of Multimodality

In the context of the Internet plus era, by fully utilizing information technology, teachers can construct multimodal traditional and online classrooms, and implement blended teaching based on both offline and online classes, thus fully mobilizing students' autonomous learning and promoting personalized and self-directed learning. The author conducted a one-semester practice of blended teaching in college English courses based on multimodal instruction among 80 students in two parallel Classes at a university in Jiangsu Province, with 40 students in the experimental class and 40 in the control class. The study aims to investigate whether this new instructional approach can help improve students' academic performance and enhance their satisfaction with the teaching.

3.1. Design of Blended Teaching in College English Courses Based on Multimodality

The design of blended teaching based on multimodal instruction mainly includes four aspects: teaching resources, teaching activities, teaching approaches and teaching evaluation.

3.1.1. Design of Teaching Resources

The design of teaching resources for blended teaching primarily revolves around the construction of online course resources, with the development of micro-lecture series being the core component. Unlike conventional micro-videos, micro-lectures have a unique appeal to students due to their concise, engaging, and vivid nature. They are an integration of multiple modalities, including pictures, images, videos, audio, and paralanguage, encompassing elements such as PPT presentations and voice explanations by teachers. This provides the prerequisite and guarantee for the implementation of blended teaching.

Multimodal teaching can be carried out throughout the entire instructional process such as lead-in, vocabulary, reading, listening, speaking and writing via multimodal teaching resources, see Table 1.

Table 1. Multimodal Teaching Resources

Classroom Activities	Classroom Resources	Classroom Teaching Modalities
Lead-in	a micro-video introducing the unit theme	videos
vocabulary	a PPT presentation of vocabulary、 a micro-lesson explaining vocabulary	Text, images, graphics, videos, audio, and paralanguage, etc.
Reading	Articles related to the unit theme for further expansion、 a micro-lesson explaining reading skills	Text, images, graphics, videos, audio, and paralanguage, etc.
Listening	Audio related to the unit theme、 a micro-lesson explaining listening skills	Images, graphics, videos, audio, and paralanguage, etc.
Speaking	Video related to the unit theme、 a micro-lesson explaining speaking skills	Images, graphics, videos, audio, and paralanguage, etc.
Writing	a micro-lesson explaining writing skills	Images, graphics, videos, audio, and paralanguage, etc.

3.1.2. Design of Teaching Activities

The teaching activities primarily comprise three parts: pre-class, in-class, and post-class, following the steps of student preview before class, teacher-student discussion in class, and evaluation and assessment after class. Specifically, teachers require students to watch micro-lectures and other learning resources for each unit before entering the traditional classroom, ensuring that students can engage in holistic and fragmented learning of the course anytime and anywhere, using any terminal device, thus achieving personalized and autonomous learning. Alternatively, the discussion can be extension of online class, enabling students to gain a deeper understanding and insight into the theme of the unit. Post-class activities include, an evaluation and assessment of the students' entire learning process and learning outcome both in the offline and online classes are conducted. These three steps constitute the core of the blending teaching, with the teacher-student discussion during the class being the true essence of the blending teaching.

3.1.3. Design of Teaching Approaches

Multimodal teaching is mainly reflected in two aspects: the multimodal symbol system and the multimodal communication methods. Due to the multimodal characteristics of teaching resources, the symbol system for expressing meaning becomes multimodal as well. Coupled with the implementation of blended teaching, the forms of teacher-student and student-student interactions exhibit greater interactivity and bidirectionality. Student-student interaction can be realized in the form of group discussions, group negotiations, role-playing, etc.; The form of teacher-student interaction include classroom presentations, teacher comments, classroom questioning, etc. In addition, in the era of the Internet, modern information technology is widely used in college English teaching. Human-computer interaction and person-to-person interaction make modern teaching methods more convenient, easy to operate, and easy to monitor. Students can use online classrooms, computers, QQ, WeChat, Email, and other online communication software for teacher-student and student-student interactions.

Instructional approaches can be diversified such as task-based, collaborative, project-based, inquiry and instructional tools in both traditional class and online class can be multiple, see Table 2.

Table 2. Multimodal Instructional Approaches and Tools

Instructional Approaches	Task-based	Students are divided into several groups to complete the relevant task-based assignments in the traditional classroom.
	collaborative	Students carry out knowledge exploration, assignment practice, and course presentations in small groups.
	Project-based	Students are divided into several groups to complete the relevant project-based assignments in the online classroom.
	inquiry	Students propose their own questions and provide solutions to solve them.
Instructional Tools	Traditional class	teacher-student interaction and student-student interaction
	Online class	human-computer interaction, autonomous learning, personalized learning

3.1.4. Design of Teaching Evaluation

The evaluation for blended teaching based on multimodality includes formative assessment and summative assessment, which evaluates students' learning processes and outcomes in a diversified, multi-channel, and comprehensive manner from multimodal dimensions and approaches. The implementation of evaluation is also diversified, which can be conducted by teachers, or through self-assessment by students, or peer assessment among students, or group assessment among groups. Both formative assessment and summative assessment can be carried out in multiple forms, see Table 3.

3.2. Analysis of the Effectiveness of Blended Teaching Based on Multimodality

At the end of the semester, the author conducted a questionnaire survey on teacher and course satisfaction among 40 students in the experimental class. The survey covered specific evaluations of the college English course, assessments of the teacher, and appraisals of the multimodal learning approach. The questionnaire employed a Likert five-point scale, with each question providing five options: strongly agree, agree, uncertain, disagree, and strongly disagree. The students in the experimental class were asked to make their choices anonymously based on their true feelings. The questionnaire survey covers eight statement about the course and the teacher, see Table 4.

Table 3. Pluralistic Teaching Evaluation

Formative Assessment	attendance, learning attitude, and participation in the traditional classroom	teacher assessment
	group discussion and group collaboration processes in the traditional classroom	group assessment
	Learning time in the online classroom, and completion rate of online course resources	teacher assessment
Summative Assessment	test result	teacher assessment
	Class presentation	teacher assessment, self-assessment, peer assessment
	Role play	teacher assessment, self-assessment, group assessment
	presentation of works	teacher assessment, self-assessment, peer assessment

Table 4. Questionnaire on Course and Teacher

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. Studying courses online has allowed me to learn a lot of additional knowledge.	26.67%	55.56%	13.33%	4.44%	0
2. I believe that combining digital media is much more effective for learning than simply relying on text, blackboards, chalk, and teacher's explanations.	48.89%	37.78%	11.11%	0	2.22%
3. The teaching methods employed by the teacher are diverse and not limited to explaining language points from the textbook.	37.15%	50.24%	6.90%	4.52%	1.19%
4. The teacher possesses strong personal charisma and is able to create a comfortable yet vibrant learning atmosphere.	42.86%	45%	7.86%	3.33%	0.95%
5. The classroom atmosphere is lively, and there is good and effective interaction between teachers and students.	35.72%	47.86%	9.52%	5.71%	1.19%
6. Taking this course has given me a strong sense of self-fulfillment.	22.22%	40%	31.11%	6.67%	0
7. The course has enhanced my comprehensive English skills in listening, speaking, reading, and writing.	33.33%	48.89%	15.56%	0	2.22%
8. My overall satisfaction with this course is extremely high.	46.67%	40%	11.11%	2.22%	0

The results of the questionnaire survey clearly indicate that students hold a very positive attitude towards the multimodality-based blended teaching. They have given high evaluations in terms of teachers, classroom atmosphere, teaching methods, and overall satisfaction with the course. Many students believe that the multimodality-based blended teaching in college English courses not only allows them to learn from textbooks but also provides access to online learning resources outside the classroom, which has been extremely beneficial. The class formats are diverse, with group discussions fostering a great classroom atmosphere. Homework is assigned promptly, focusing on cultivating students' multifaceted English skills and comprehensive application abilities. The classes emphasize the practical use of knowledge rather than just preparing students for exams. The teaching methods are varied and conducive to their future development. These evaluations fully demonstrate the advantages and effectiveness of applying multimodality in blended teaching.

In terms of the academic performance, this paper conducts a comparative analysis by setting up an experimental group and a control group. The author collects the initial and final grades and analyzes them using SPSS 26.0, yielding the following results, see Table 5 & Table 6.

Table 5. At the Beginning of the Semester

	Group	mean	standard deviation	T	P
initial	experimental group	74.31	7.702	-2.540	0.387
	control group	69.08	9.337		

At the beginning of the semester, the mean score of the experimental group is 74.31, while that of the control group is 69.08, with a P-value of $0.387 > 0.05$, indicating that there was no significant difference in the overall English proficiency between the two classes before the implementation of this teaching experiment.

Table 6. At the End of the Semester

	Group	mean	standard deviation	T	P
final	experimental group	71.72	7.185	-4.598	0.036
	control group	61.92	10.683		

At the end of the semester, the mean score of the experimental group is 71.72, while the mean score of the control group is 61.92, with a P-value of $0.036 < 0.05$, indicating that there is a significant difference in English proficiency between the two classes after the teaching experiment, with the experimental class demonstrating significantly higher English proficiency than the control class.

4. Insights from Multimodality-Based Blended Teaching in College English Courses

College English teaching has undergone years of reform and transformation, ushering in a new era where the impact and influence of ever-evolving new technologies and new media on teaching are unstoppable. The application of multimodal teaching, which integrate new technologies and new media, in blended classrooms is also a trend for future teaching. This study provides the following insights for the reform of college English teaching.

4.1. Enhance college English teachers' multimodal teaching capabilities.

Teachers of college English courses need to possess educational literacy, academic literacy, teaching competence, research competencies, and information literacy. Among these, information literacy is a prerequisite for implementing multimodal teaching. Teachers should have a keen awareness of information, rational attitudes towards information, extensive knowledge of information, and proficient information skills. They should also be familiar with information laws and regulations and cultivate information ethics. Specifically, teachers need to master skills such as literature retrieval, multimedia production, computer and network knowledge. When acquiring information, they must critically evaluate and filter it, use modern information technology to edit and innovate information, and transform it into effective information that aligns with teaching objectives. In the process of searching for, filtering, and innovating information, they should abide by relevant laws and regulations, have correct ethical views and a strong sense of social responsibility, and always adhere to the fundamental principle of "cultivating students' moral character and abilities," strictly prohibiting the transmission of information that contains distorted values, incorrect ethics, or false reports to students.

4.2. Various modalities should be appropriately and moderately utilized in teaching.

Multimodal teaching can enhance students' learning efficiency and effectiveness on the one hand, but on the other hand, improper use of multiple modalities can cause confusion and burden to learners. For example, in the production of instructional micro-videos, using animations at inappropriate times can not only distract students' attention but also affect their learning outcomes from the micro-lectures. In principle, the mixing of multiple modalities should be avoided within a single time period because the human brain's thinking process is orderly, and the use of various modalities should also follow a reasonable and orderly principle. In each teaching activity, the use of various modalities should be interconnected and focused. Additionally, teachers should reasonably utilize multimodal teaching resources in classroom instruction. It is important to note that the purpose of using these teaching resources is to assist teachers in their lectures, make up for any deficiencies in their explanations, and address the boredom of verbal explanations, without overshadowing the main content or over-relying on multimodal resources, thereby weakening the teacher's role as a knowledge imparter, classroom manager, organizer, and facilitator of student learning.

4.3. Develop a multimodal online classroom to promote personalized learning for students.

Each learner prefers a different learning style. Some are visual learners who respond well to modalities such as images, pictures, charts, colors, and maps. Some are auditory learners who prefer modes like speech, discussions, music, conversations, and lectures. Others are kinesthetic learners who are better suited to modalities like movement, touch, physical activity, experiments, and exploration. Traditional face-to-face classrooms find it difficult to accommodate these individualized learning preferences. Therefore, when developing online courses, teachers should consider the characteristics of each student and reasonably use various modalities, fully utilizing media in difference forms such as text, images, animations, audio, and video to provide a vast amount of shared resources for different types of learners. This approach will leverage each student's strengths and talents, promote personalized learning, and maximize learning outcomes. It is recommended that teachers assign tasks, so that regardless of which modal resources students use to master the course content, as long as they complete the tasks, they are considered to have completed the course study.

4.4. Multimodality should be integrated throughout the entire process of blended teaching.

Multimodal teaching embodies diversification, multidimensionality, and dynamism in knowledge absorption and internalization, classroom interaction and communication, and course evaluation and assessment. Therefore, multimodality theory should be applied in the design of teaching resources, teaching activities, teaching approaches, and teaching evaluation in blended teaching, so that the entire process of blended teaching reflects the advantages and effects of multimodality. Specifically, teachers should coordinate various media resources to leverage their respective strengths and form systematic and abundant learning resources. It is recommended to create customized micro-lectures based on the actual situation of students for pre-class preview. During the class, reinforce the content that students have previewed before the class, adopt task-based, cooperative, project-based, inquiry-based, and other teaching methods, and actively encourage students to engage in language output. After class, students are required to complete individual and group assignments centered on language output using various discourse modes such as oral presentations, written reports, and video recording.

5. Conclusion

The landscape of college English teaching is undergoing profound transformations due to the revolution in modern information technology. Traditional teaching tools such as textbooks, lecture notes, workbooks, chalk, and blackboard have fallen short of meeting the current demands of students in their English learning. Instead, new media and multimodal resources, exemplified by audio, animations, and micro-lectures, are emerging as the mainstream of learning vehicles. Consequently, college English teachers in the new era must keep abreast of the times, continuously enhance their information literacy, and make full and rational use of modern information technology to establish blended teaching for college English courses based on multimodality. This approach aims to foster students' autonomous learning, proactive learning, and collaborative learning.

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