

Research Article

Analysis of the Influencing Factors of English Majors' Cross-Cultural Communicative Competence under Mobile Internet

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In order to study the influencing factors of cross-cultural communicative competence of English majors under mobile Internet, firstly, we made an empirical study on cross-cultural communication teaching for English majors. Then, we performed a comparative experiment between the mobile Internet-assisted high school English cross-cultural communication teaching model and the traditional teacher culture teaching-based teaching model. Finally, through questionnaires, informal interviews, and teachers' observation of the teaching process, this paper aims to make an empirical study on the feasibility and effectiveness of mobile Internet assisted foreign language teachers in cultivating students' awareness and ability of cross-cultural communication, so as to provide a basis for the follow-up research of cross-cultural communication teaching for English majors. The experimental results show that 93.4% of the students are satisfied with the mobile network-assisted English cross-cultural communication teaching model, and the integration of mobile network technology into English cross-cultural communication teaching has brought great changes to the teaching process. Compared with the traditional teaching mode of "chalk and blackboard," multimedia organically integrates text, pictures, audio, video, and network, which greatly attracts the attention of teachers and students.

1. Introduction

In order to realize the exchange of information, the dissemination and innovation of knowledge, and the creation of material and spiritual wealth under the background of internationalization and diversification, the talents trained by higher education need not only complete professional skills and knowledge but also advanced cross-cultural communication awareness and cross-cultural communication ability to meet the needs of social and national progress and development. Cross-cultural communication should be two-way and equal communication. English teaching overemphasizes the teaching of English language knowledge. At present, the strong culture of English-speaking countries continues to penetrate. Some English learners have become the "language endorsement tool" of western culture. They do not give equal voice to their mother tongue and lack a

correct understanding of the status of their mother tongue (Figure 1). In addition, various western cultures are constantly infiltrating, and the inheritance of the "essence of mother tongue culture" is gradually emptied. Learners' cultural balance has been shaken, their values have been misunderstood, and they have lost their pride and self-confidence in their national culture and even lost the recognition of the cultural identity of the Chinese nation. For example, many students only know how to celebrate Christmas and Valentine's day in the west, but they know little about China's Dragon Boat Festival and Double Ninth Festival. English teaching ignores the cultural background of the other party as the subject of cross-cultural communication and violates the law of cross-cultural two-way communication. The teaching of Chinese culture does not run through all levels of English teaching, and English learners cannot well express, spread, and carry forward

▪ Intercultural Communication

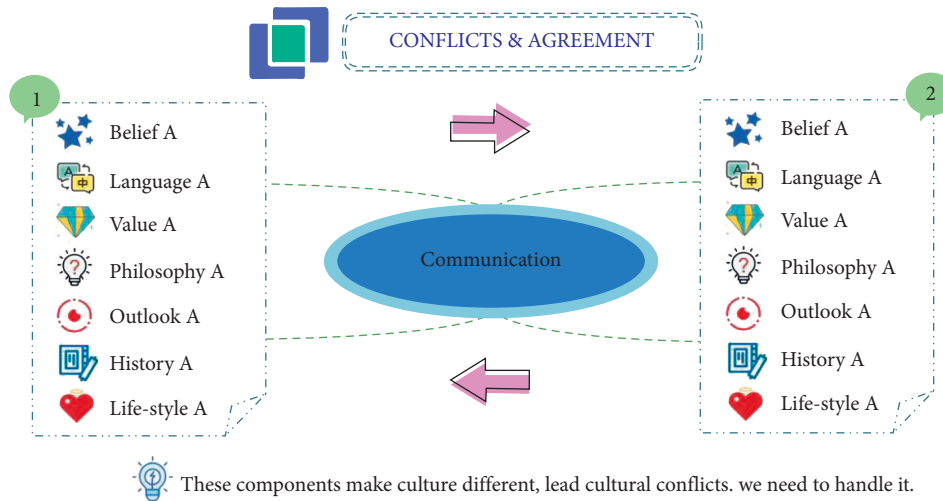


FIGURE 1: Mobile network teaching.

Chinese culture. Today, with the coexistence of economic globalization and cultural diversity, there is a greater need for foreign trade and foreign affairs compound talents with both professional English foundations and relevant professional knowledge and skills to meet the needs of society [1–3]. The core of Internet-assisted instruction includes two aspects: interactive teaching and personalized teaching. Complete learners’ personality development is based on interactive teaching. Network-assisted instruction is a teaching method and mode to share teaching resources by relying on network technology. It is also to use modern Multimodal media information technology to establish a multidimensional interactive environment of teaching and learning, so as to stimulate the innovative spirit of education and the autonomous learning spirit of learners. Mobile Internet-assisted instruction mode is an assisted instruction activity based on computer Internet under the guidance of modern education concepts [4]. It makes full use of information technology and mobile Internet technology to transmit course information and integrate it into modern teaching. It closely connects teachers and students for multidirectional and effective communication, always takes students as the center, pays attention to knowledge guidance and ability training, and meets the needs of the current innovative talent training mode, so as to form a practical process of teaching and learning in which teachers and students participate together [5].

2. Literature Review

Hatakeyama and others believe that language is the carrier of culture, and the ultimate goal of foreign language teaching is to cultivate cross-cultural communicative competence [6]. Lilholt and others remind foreign language learners from the perspective of pragmatics that when communicating with native speakers, violating the social and cultural norms of the target language will lead to cultural pragmatic failure and the interruption of communication [7]. For the definition and composition of intercultural communicative competence,

many scholars tend to analyze it from three levels: cognition, emotion, and behavior. Heath and others further refined these three levels: the cognitive level includes (1) mastering the linguistic and nonverbal rules of communication in the target language and (2) cultural understanding ability, that is, to understand the thinking mode of the target language, so as to have a deeper understanding of the politics, economy, history, religion, education, related values, ideology, and other aspects of the target language culture [8]. Herrero and others believe that the “transcendence” training model of cross-cultural communicative competence focuses on the attitude and emotion level, including the cognitive level, especially the critical reflection ability. In addition, it is not limited to the target language culture [9]. Bodnar and others believe that information-based teaching refers to the process in which students are the main body of teaching activities; teachers use modern information technology to improve the setting of the teaching system, enhance learners’ interest, promote teaching effect, and optimize the distribution and fair use of teaching resources [10]. Van and others believe that the advantage of information-based teaching lies in realizing sufficient teaching interaction, establishing a vivid, intuitive, and interesting learning environment, and completing three-dimensional teaching. Compared with traditional teaching, the characteristics of information-based teaching are as follows: (1) there should be high sharing and real-time teaching information resources; (2) it is saved in digital form, simple and convenient, and has a large amount of storage space [11]. Herrero and others believe that for a long time, in the whole teaching system and classroom teaching practice of English Teaching in China, the teaching of English cross-cultural communicative competence has always been on the edge (Figure 2). The focus of language teaching is mostly on the training of grammar, pronunciation, structural function and listening, speaking, reading, and writing ability, but the training of special cultural communicative competence is rarely involved [9]. Seo and others believe that communicative culture teaching focuses on analyzing the cultural connotation embodied in

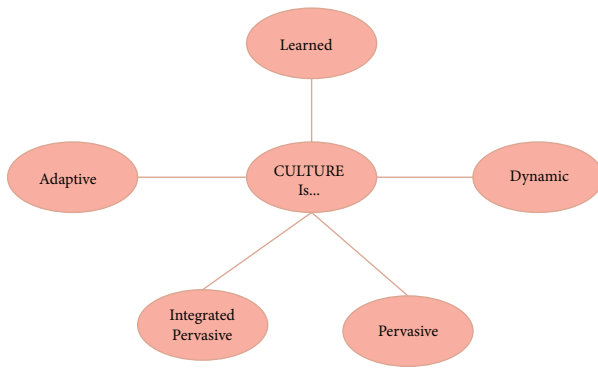


FIGURE 2: Characteristics of intercultural communication.

people's communicative discourse in audio-visual materials, especially the deep cultural contents embodied in people's discourse, such as values, mode of thinking, behavior habits, interpersonal relations, time orientation, and aesthetic interest [12]. Vaidya and others believe that we should give full play to the advantages of the network and strengthen the teaching of cross-cultural pragmatic knowledge. The richness of network resources provides students with a lot of cultural background knowledge, which helps students consider social and cultural factors when choosing a language and use appropriate language to achieve the success of cross-cultural communication.

3. English under Mobile Network

Instructional design, also known as instructional system design, plays an extremely important role in the process of teaching practice. The traditional instructional design model has been widely used in training and other industries, and its core includes the whole process from analysis, design, development, and implementation to evaluation, as shown in Figure 3.

The following principles should be followed in teaching design. (1) *Systematic Principle*. Instructional design is an organic whole. It is composed of subsystems such as teaching objectives, teaching objects, teaching contents, and teaching methods. Each subsystem is independent and interdependent [13]. Therefore, instructional design is to effectively coordinate each subsystem in order to optimize the teaching effect. (2) *Principle of Subjectivity*. Constructivism holds that learners are the main body of learning activities, so students' subjective initiative needs to be brought into play in the process of teaching. (3) *Feasibility Principle* [14]. Teaching design should meet the subjective and objective conditions and have certain operability. Therefore, teachers need to analyze the conditions such as learners and the learning environment. English teaching models are now classified into the following three categories:

- (1) The supplementary model: this model retains the basic structure of the traditional classroom and enhances the interaction between students and teaching content by simply complementing extracurricular online activities based on technology or providing supplementary online learning materials.

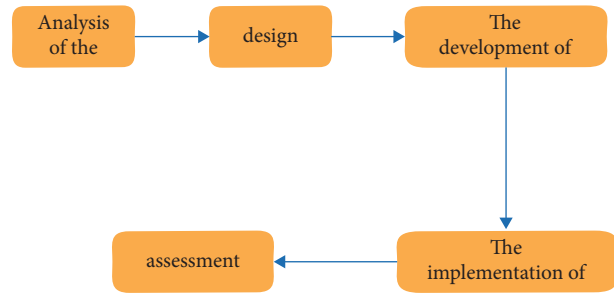


FIGURE 3: The basic process of instructional design.

- (2) The replacement model: this model reduces face-to-face teaching time and instead increases students' online learning time. This model assumes that the effect of online learning in individuals or groups is better than that in the classroom.
- (3) The emporium model: this model cancels all face-to-face teaching time, while learners use the online learning resources provided by the learning resource center to study at their own pace. During the learning process, the learning resource center provides teaching software, exercises, hypertext, online tests, and personalized help suitable for learners. The teaching idea of this model no longer depends on when teachers want to teach but on when students want to learn.

3.1. Mobile Network. In order to facilitate the analysis and application of mobile networks, such as network discovery, link prediction, and visualization, researchers abstractly represent the original data of mobile networks as a matrix or vector in a certain way [15]. At present, the representation method of community discovery problem mobile network is mainly an adjacency matrix. This method is introduced hereinafter.

Mobile networks can be represented in the form of graphs. The graph is usually represented by binary $G(V, E)$. For a network with N nodes, $V = \{v_1, v_2, \dots, v_N\}$ represents the set of network nodes, $E = \{e_1, e_2, \dots, e_M\}$ represents the set of edges in the network, $e = (v_i, v_j)$ represents the edge between node i and node j , and $M = |E(G)|$ is the number of edges connected to the network. General mobile networks can be represented by $N \times N$ adjacency matrix A . Its definition is as follows:

$$A_{ij} = \begin{cases} 1, & i \\ 0, & \text{otherwise} \end{cases}. \quad (1)$$

The adjacency matrix of an undirected graph is symmetric, but not necessarily a directed graph. This paper discusses the undirected weighted graph. Each row of the adjacency matrix can be regarded as a vector corresponding to a node. The representation method of the adjacency matrix is shown in Figure 4.

The adjacency matrix can maximize the characteristics of network structure and accurately represent the connection

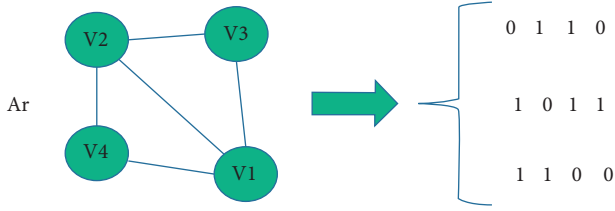


FIGURE 4: Network and its adjacency matrix.

relationship. This method is simple, direct, and convenient for statistics and connects the mobile network with the graph. Therefore, the development of graph theory also provides theoretical support for this method. The similarity algorithm based on common nearest neighbor mainly includes CN (common neighbor) algorithm, AA (Adamic ADAR) algorithm, and PA (preferred attachment) algorithm. Similarity algorithms based on node path length mainly include LP (local path) algorithm and RW (random walk) algorithm [16].

3.1.1. CN Algorithm. For any two nodes in the mobile network, the more the elements in their common neighbor set, the higher the probability of high correlation between them. The calculation formula is as follows:

$$\text{sim}(x, y) = T(x) \cap T(y). \quad (2)$$

In formula (2), $T(x)$ represents the neighbor node set of node x and $T(y)$ represents the neighbor node set of node y . $T(x) \cap T(y)$ force represents the intersection of two neighbor node sets, that is, their common neighbor nodes. The value of $\text{sim}(x, y)$ is equal to the number of common neighbor nodes and represents the similarity between nodes x, y .

3.1.2. AA Algorithm. AA (Adamic ADAR) algorithm was not applied in the field of network discovery at first. AA algorithm was first used in the field of information retrieval to analyze the similarity between web pages. It is found that the AA algorithm can be well applied in the field of network discovery. The calculation method is as follows:

$$\text{sim}(x, y) = \sum_z \frac{1}{\log|T(z)|} \quad (3)$$

$$z \in T(x) \cap T(y). \quad (4)$$

In formulas (3) and (4), $T(x) \cap T(y)$ represents the intersection of two neighbor node sets, that is, their common neighbor node, representing an element in the intersection. The algorithm first calculates the number of neighbor nodes of the z node, which is represented by $|T(z)|$, then calculates the reciprocal of the pair of $|T(z)|$ values, and then calculates all the qualified z according to the above steps and adds the results. The final result is the similarity between nodes x and y .

3.1.3. Jaccard Algorithm. Compared with the CN algorithm, the first two steps of the Jaccard algorithm are the same as

the CN algorithm. First, obtain the intersection of two neighbor node sets, then perform a union operation on the two neighbor node sets to obtain the union of the two neighbor node sets, and then calculate the ratio of the number of elements contained in the intersection and union, which represents the similarity between the two nodes. The calculation method is as follows:

$$\text{sim}(x, y) = \frac{|T(x) \cap T(y)|}{|T(x) \cup T(y)|}. \quad (5)$$

In formula (5), $T(x)$ represents the neighbor node set of node x , $T(y)$ represents the neighbor node set of node y , $T(x) \cap T(y)$ represents the intersection of two neighbor node sets, that is, their common neighbor node, and $T(x) \cup T(y)$ represents the union of two neighbor node sets, that is, all their neighbor nodes [17].

3.1.4. RA Algorithm. When the RA algorithm is applied to the field of community discovery, the goal of the algorithm changes and is no longer used to allocate resources. At this time, the algorithm takes the common neighbor node between nodes as the channel for allocating resources among nodes. The algorithm sets that any node initially carries a unit of resources, and the resources of the node can be evenly divided by its neighbor nodes. The number of resources obtained between the source node and the target node is the similarity between them. The similarity calculation method is as follows:

$$\text{sim}(x, y) = \sum_z \frac{1}{|T(z)|}, \quad (6)$$

$$\text{sim}(x, y) = \frac{|T(x) \cap T(y)|}{\sqrt{|T(x) \cup T(y)|}}. \quad (7)$$

It can be seen from formulas (6) and (7) that this formula is similar to formula (4). $T(x) \cap T(y)$ represents the intersection of two neighbor node sets, that is, their common neighbor node, and z represents an element in the intersection. The algorithm first calculates the number of neighbor nodes, represented by $|T(z)|$, then calculates the reciprocal of $|T(z)|$, then calculates each element in $T(x) \cap T(y)$ according to the above steps, and adds the results. The final result is the similarity between nodes x and y [18].

4. Experimental Analysis

4.1. Research Object. This research is carried out among 80 middle school students in a third middle school (Appendix (available here)). The research object is all the students in two classes of grade two in the high school. Each class has 40 people. The students participating in the study were divided into two groups, class A as the experimental group and class B as the control group. See Table 1.

4.2. Teaching Methods. In the teaching process of this study, the researchers provide learners with a variety of learning

TABLE 1: Basic information of students in class AB.

Group	Number of people	Average English test score
Experimental class	40	71.03 ± 2.31
Control board	40	70.03 ± 1.31

materials. These teaching materials are selected from a variety of computer-aided teaching software, such as person to person and U.S.A. The main reason for choosing the content of this kind of teaching software is its strong operability and whether it is vivid and interesting. At the same time, researchers also use a large number of satellite TV programs, DVD movies, network resources, and their own teaching courseware. The teaching courseware truthfully reflects the teaching ideas and teaching strategies used by professors in the teaching process, such as the use of constructivism theory and strategy. The use of these strategies is difficult to show through the traditional teaching classroom, but with the help of the mobile Internet, these strategies can effectively show the teaching content to learners comprehensively and truthfully. Another way is to use the network for autonomous learning. There are many network resources to choose from [19]. We believe that the most effective learning method in the teaching process is the combination of teachers' classroom-guided learning and network autonomous learning. Students can conduct online learning under the management and control of teachers and ask questions to teachers by sending e-mail or instant chat, or submit homework, or have student interaction.

4.3. Research Methods. The experimental teaching time starts in August and ends in January next year. The teaching involves two nature classes. The final examination of the first semester (September to August of the second year) of the two classes shows that the effective English scores of the students in the two classes are very close; that is to say, the mastery of the social and cultural background knowledge of the two classes is very similar. The students in class A of the experimental class were arranged to study in the online mobile Internet classroom with the help of mobile Internet devices and networks, while class B of the experimental class was assigned to study in the previous traditional classroom. For class A students, teachers use a variety of Internet technologies to motivate students to improve their learning motivation, encourage students to learn independently in the learning process, and persuade students to actively interact and cooperate with other learners in the learning process. At the same time, teachers focus on cultivating students' learning strategies and skills in the teaching process. With the help of the Internet, teachers try their best to provide students with a real situational environment and language environment, so that students can experience the real cultural environment. Internet mobile Internet devices can provide text formats, audio files, pictures, and video files, which makes students more truly integrate into the target language and cultural environment and more intuitively understand cultural phenomena. Through simulation and

other Internet technologies, abstract cultural concepts are displayed to students in specific and understandable forms.

After 14 weeks of mobile Internet-assisted cross-cultural communication teaching process, as an important part of the project conclusion, the researcher conducted a semester-end questionnaire survey on 40 students in class A (experimental class). The questionnaire includes three parts. The first part consists of five declarative sentence patterns (agree/disagree), which aims to investigate students' attitudes toward mobile Internet-assisted English intercultural communication teaching. The second part includes twenty-five declarative sentence patterns (agree/disagree), which aims to find out the role of mobile Internet-assisted English cross-cultural communication teaching in cross-cultural communication awareness, initiative, and interaction in the whole process of cross-cultural communication teaching. The third part includes two open-ended questions, asking students to put forward their own suggestions and opinions on teaching methods.

4.3.1. Interview. The researcher conducted informal face-to-face interviews with 40 students in the experimental class and recorded the interview content after winning the consent of the interviewees for analysis, induction, and summary. During the interview, the researcher conducted face-to-face communication with 40 students in turn. The purpose of the interview is to confirm whether the students have a comprehensive understanding of the contents of the questionnaire and give truthful feedback, trying to find out as much information as possible that cannot be displayed in the questionnaire [20].

4.3.2. Questionnaire. After 14 weeks of multimedia-assisted intercultural communication teaching, as an important part of the project, the researchers conducted a semester-end questionnaire to 3–5 students in class A (experimental class). The questionnaire consists of three parts. The first part consists of five declarative sentence patterns (agree/disagree), which aims to investigate students' attitudes toward multimedia-assisted English cross-cultural communication teaching. The second part includes twenty-five declarative sentence patterns (agree/disagree), which aims to find out the role of multimedia-assisted English cross-cultural communication in the whole process of cross-cultural communication awareness, initiative, and interaction to the effect. The third part includes two open-ended questions, asking students to put forward their own suggestions and opinions on teaching methods.

4.3.3. Data Collection. The data were collected from two tests, a questionnaire, an informal interview, and the researcher's observation. The purpose of data analysis is to detect any significant changes in all items. The researchers carefully analyzed the data from two tests and a questionnaire. The records of informal interviews with students and the observation notes of teachers on students' behavior during teaching are also used as the raw materials for data

analysis, from which researchers can obtain effective results [19].

4.4. Result Analysis. Figure 5 and Table 2 show the performance data of the pretest and posttest. We can clearly see many changes in the research data. Overall, the posttest shows that the average score of students studying in the mobile Internet classroom is much higher than that of students studying in the traditional classroom. The gap in students' average scores strongly supports this view. The mobile Internet-assisted English cross-cultural communication teaching method can improve academic performance more effectively than traditional teaching methods.

From Figure 6 and Table 2, we can clearly see that the average scores of preexperiment tests of class A and class B are very close, class A (72.4 points) and class B (71.1 points). However, after 17 weeks of comparative experimental teaching, the average scores of the two classes were significantly improved: class A increased from 72.4 in the pretest to 78.9 in the posttest; The average score of the control class (class B) increased from 71.1 in the pretest to 73.2% in the posttest. However, the scores of the two tests obviously show that the experimental class (class A) has a great improvement in performance. However, there was no significant change in the two test scores of the control class (class B) (improvement of 0.4). In terms of passing rate, class A has increased by 6.5%, while class B has only increased by 2.1% for the pretest [21]. Figure 6 more clearly shows the difference between pretest and posttest between the experimental class and control class.

The test results show that after the experimental study, the average score and passing rate of class B students have also improved to a certain extent—the average score has increased by 0.4 points and the passing rate has increased by 2.9%. However, researchers believe that the improvement of these two aspects is mainly due to the efforts of students in the learning process and the supervision of teachers. When teachers use mobile Internet-assisted teaching methods for class A students in the teaching process, class B students are also under pressure to study harder. The students of class B believe that although teachers adopt different teaching methods, they will be able to make progress in their academic performance through their efforts. Therefore, the progress of class B students' academic performance should be attributed to students' efforts rather than teaching methods.

The research results further confirm the theoretical analysis of the effectiveness of mobile Internet technology-assisted instruction explained in the previous chapters. Mobile Internet-assisted cross-cultural communication teaching solves the problems existing in cross-cultural communication teaching and promotes students' learning of cross-cultural communication theory. The results of the study provide strong practical support for the possibility of mobile Internet-assisted English cross-cultural communication teaching [22].

In Table 3, statement 1 shows that 96.3% of the students in the experimental class affirmed the effectiveness of audio

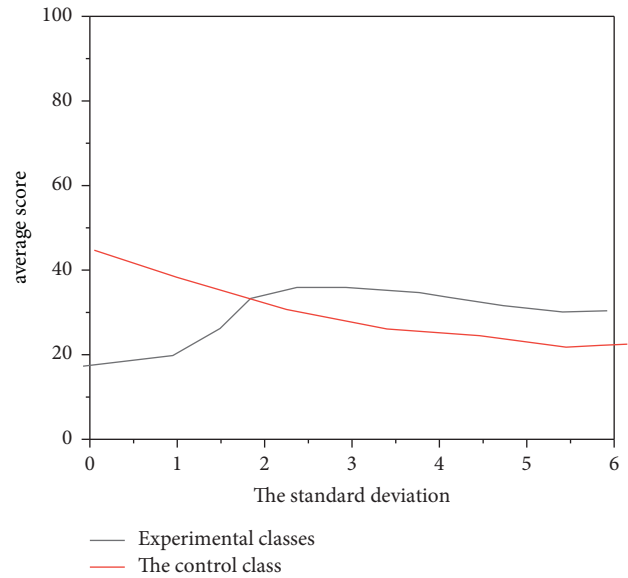


FIGURE 5: Results of experimental class and control class before and after the experiment.

TABLE 2: Comparison of two test results.

Class	Pretest		Posttest	
	Average	Passing rate (%)	Average (%)	Passing rate (%)
Experimental class	72.4	73.4	78.9	81.9
Control class	71.1	76.1	73.2	79

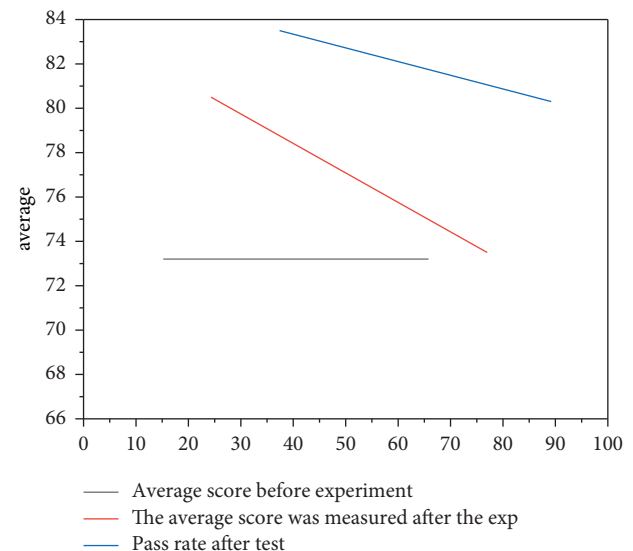


FIGURE 6: Comparison of pretest and posttest between the experimental class and control class.

and video materials of mobile Internet-assisted English intercultural communication teaching materials. The affirmative laws of statement 2 and statement 3 are 84% and 84.5%, respectively. Students agree that the display of intercultural communication teaching materials in the form

TABLE 3: Students' attitudes toward mobile Internet-assisted English intercultural communication awareness training.

Statement content	Agree or not (%)
(1) I think the learning method of listening and watching in mobile Internet-assisted teaching is very effective.	96.3
(2) Mobile Internet-assisted English cross-cultural communication teaching method makes cultural knowledge easier to understand.	84
(3) Mobile Internet culture video materials are real and vivid.	84.5
(4) Mobile Internet-assisted English intercultural communication teaching method is fresh and interesting.	93.7
(5) Compared with traditional teaching methods, I prefer the teaching model of cross-cultural communication assisted by mobile Internet	91.3

of mobile Internet is more authentic, reliable, vivid, and easier to understand than traditional textbooks. Statement 4 shows that 93.7% of the students in the experimental class believe that the mobile Internet-assisted foreign culture teaching method is more fresh and interesting than the traditional English culture teaching method. Statement 5 shows that 91.3% of students prefer the model of mobile Internet-assisted English cross-cultural communication teaching.

In a word, the data in Figure 7 shows that the method of mobile Internet-assisted English cross-cultural communication teaching cultivates and enhances students' awareness of cross-cultural communication in the learning process.

In Table 4, statement 11 shows that 91.4% of the students in the experimental class think that they can easily adapt to the mobile Internet-assisted intercultural communication teaching environment. Statement 12 shows that 87.9% of the students believe that the mobile Internet-assisted English cross-cultural communication teaching method has strengthened their attention and memory of cross-cultural communication knowledge. Statement 13 shows that 78.9% of the students believe that the mobile Internet-assisted English intercultural communication teaching method enhances the efficiency of their cultural knowledge learning. For statement 14, 84.2% of the students were satisfied with their performance in the process of mobile Internet-assisted English intercultural communication teaching. 87.6% of the students agreed with statement 15 "I think the mobile Internet assisted English intercultural communication teaching model can better improve my cultural learning."

In short, Figures 7 and 8 show many advantages of the mobile Internet-assisted English intercultural communication teaching model in cultivating students' autonomous learning of intercultural communication knowledge. The results of qualitative rating (qualitative evaluation) correspond to the theories mentioned in the previous chapter. The mobile Internet learning environment was originally designed for learners' independent learning. Mobile Internet provides learners with real knowledge input, meaningful language learning tasks, and timely feedback, and learners can reasonably arrange learning time according to learners' learning plan [22].

Figures 9–11 show that after the mobile Internet-assisted English cross-cultural communication teaching, most of the students in the experimental class think that they are more willing to communicate with teachers, interact more actively with classmates, and have a dialogue with foreigners more confidently than before. The mobile Internet helps to

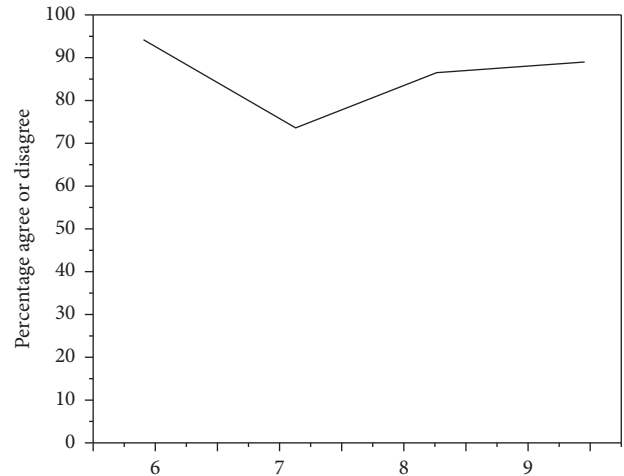


FIGURE 7: The impact of mobile Internet on students' awareness of cross-cultural communication.

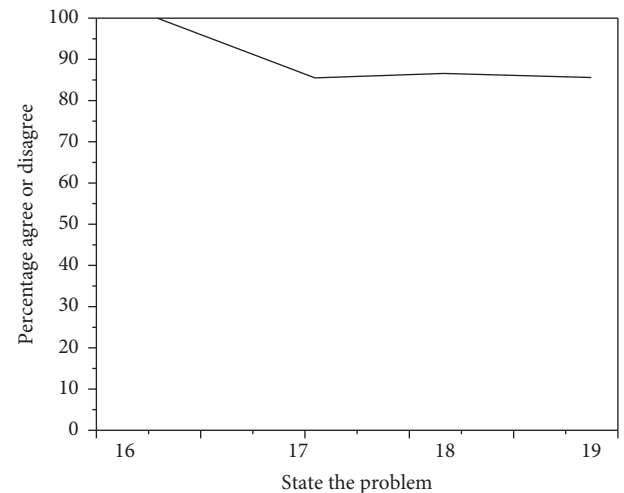


FIGURE 8: The influence of multimedia-assisted English intercultural communication teaching on students' cultural learning independence.

cultivate students' awareness of cross-cultural communication in cross-cultural communication teaching and encourages them to communicate actively [23].

"For connecting with the same age students in English-speaking countries through the Internet," 75% of teachers think it is necessary, 15% of teachers think it is absolutely

TABLE 4: Effect of mobile Internet-assisted English intercultural communication teaching on students' self-confidence in the learning process.

Statement content	Agree or not (%)
(11) I think I can easily adapt to the mobile Internet-assisted cross-cultural communication teaching environment.	91.4
(12) I think the mobile Internet assisted English cross-cultural communication teaching method has strengthened my understanding of cross-cultural communication	87.9
(13) Attention and memory of communicative knowledge.	78.9
(14) I think the mobile Internet-assisted English intercultural communication teaching method enhances the efficiency of my cultural knowledge learning.	84.2
(15) I am very satisfied with my performance in the process of mobile Internet assisted English cross-cultural communication teaching	87.6

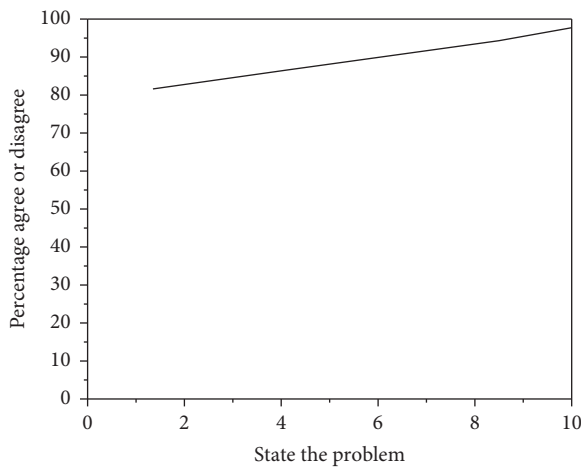


FIGURE 9: The influence of multimedia-assisted English intercultural communication teaching on students' interaction.

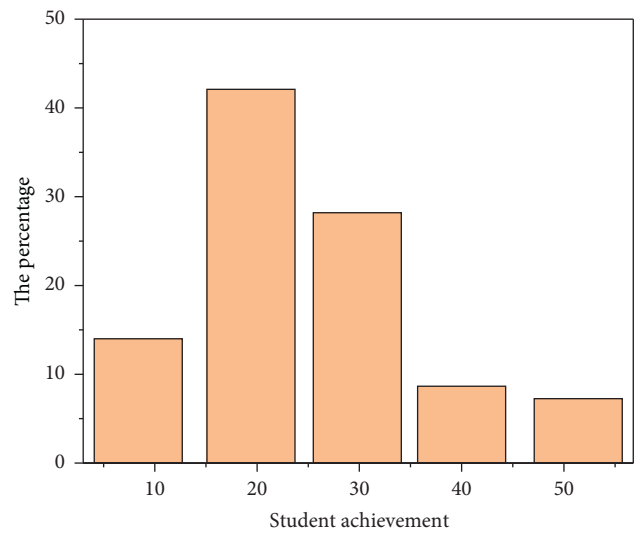


FIGURE 11: A map of the grades of the students.

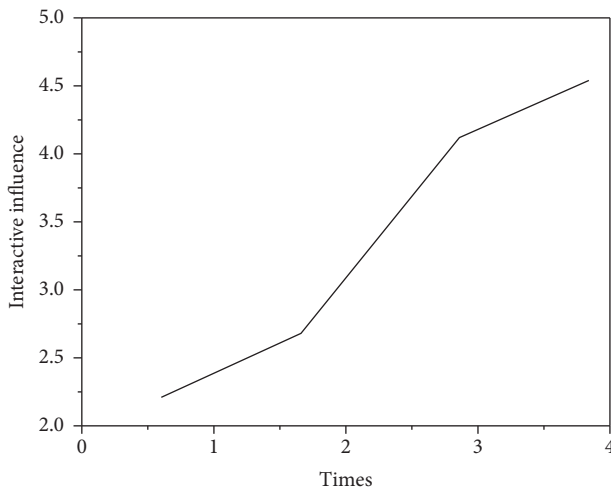


FIGURE 10: The impact of mobile Internet-assisted English intercultural communication teaching on students' interactivity.

necessary, and 10% of teachers say it is not necessary. For question 14 “The effect of reading English extracurricular books on students’ acquisition of English cross-cultural communication knowledge,” 50% of teachers think it has a great effect, 30% of teachers think it has a little effect, and 20% of teachers think it has a basic effect. For question 16 “In

addition to the classroom, through which channels can students acquire knowledge of cross-cultural communication,” the 30 teachers who participated in the survey agreed that reading English extracurricular books and watching English film and television works are helpful, and the selection rate of these two items reached 100% and 93.3% “taking the initiative to meet foreign friends” to obtain knowledge of cross-cultural communication. To sum up, most teachers believe that the differences in the way of thinking and values between the East and the West are an important reason for the obstacles to cross-cultural communication with English speakers. Therefore, they are concerned about the knowledge of cross-cultural communication in the teaching process, and they will teach in the classroom related to the text [24]. They also believe that Chinese culture and English culture have a good auxiliary role in learning English. At the same time, they also believe that the Internet and English extracurricular reading materials are good ways to cultivate students’ cross-cultural communication skills.

5. Conclusion

To sum up, there are many factors affecting the development of cross-cultural communicative competence of English majors, and their solutions are also diversified. First of all, we

need to change the teaching concept and set up cultural courses scientifically. Schools need to provide conditions and build platforms to create simulated or real cross-cultural communication scenes for students. While doing a good job in English language training, professional teachers should pay attention to the transmission of customs and culture, ideological culture, and value culture in different countries and gradually cultivate students' ability to communicate across cultural levels through curriculum teaching and practical training, so as to lay a foundation for them to grow into qualified cross-border business talents. The cultivation of English majors' cross-cultural communicative competence meets the requirements of our times, and the task is arduous and very important. At the same time, the application of information network-assisted technology to cross-cultural communication teaching is an effective teaching attempt. On the one hand, it ensures innovation, practicability, popularity, and times of teaching; On the other hand, it meets the demand of the talent market for global cross-cultural communication talents. However, culture is two-way communication. Teachers should also cultivate English majors into excellent communicators of Chinese culture and make Chinese traditional culture go to the world in cross-cultural communication.

There are still some limitations to this study. First of all, in this study, the education of English culture is limited by the teaching itself, which only focuses on the basic theories and skills of English intercultural communication. Second, this multimedia-assisted English intercultural communication study lasted only 17 weeks from August to the end of January of the following year. The time frame is so short that the findings may not represent the full picture of what has changed for students in multimedia classrooms.

Further research is needed to understand this issue thoroughly and to produce more detailed and conclusive results. First of all, apart from social culture, culture covers a wide range. Future researchers can work in other cultures. For example, English and American literature courses or audio and visual courses for English learners. In this way, it will be enough convincing evidence to prove the feasibility and effectiveness of multimedia technology in assisting English intercultural communication teaching.

Appendix

Investigation on the Effect of Online and Offline Mixed Teaching of College English Intercultural Communication

Dear students, Hello! (College English Intercultural Communication) The course is coming to an end, and now we conduct a questionnaire survey on the online and offline mixed teaching methods for this course. The main purpose is to understand the mixed teaching effect. Through the evaluation and reflection of real data, timely feedback of teaching, in order to provide reference experience for mixed teaching methods. This questionnaire is made anonymous, and all the data are used for statistical

analysis only. There are no right or wrong questions, please read carefully and complete the questionnaire according to your own personal experience, so that we can improve the mixed teaching. Thank you for your cooperation!

- (1) Which college do you come from? (Single choice choice * required answer)
- (2) Your gender? (Single choice choice * required answer)
- (3) Your grade? (Single choice choice * required answer)
- (4) Where is your source? (Single choice choice * required answer)
- (5) What grades are you in the starting points of college English students? (Single choice choice * required answer)
- (6) Your current English level? (Single choice choice * required answer)
- (7) Have you ever been exposed to the online and offline hybrid teaching courses before? (Single choice choice * required answer)
- (8) Cross-cultural ability: Skills: Please read the following statement carefully, judge the degree of agreement according to your actual feelings, and light up the corresponding stars that fit your personal views. (1 = Very disagree 2 = Not agree 3 = uncertain 4 = compare agree 5 = Very agree) (please fill in 1-5 numbers score * must answer)
 - (1) I can complete unknown tasks through independent learning
 - (2) I can locate learning resources (such as people, books, and network resources)
 - (3) When others need help, I can express sympathy and give help
 - (4) I can listen carefully to different opinions and interpret the meaning and intentions of others
 - (5) I can observe the speaker's nonverbal message folder to help me understand the meaning of the fairy words
- (9) Cross-cultural ability: Knowledge Please read the following statement carefully, judge the degree of agreement according to your actual feelings, and light up the corresponding stars that match your personal views. (1 = Very disagree 2 = disagree 3 = uncertain 4 = compare agree 5 = Very agree) (please fill in 1-5 number score * must answer)
 - (6) I can describe the basic cultural practices of destination language culture (such as eating habits, greeting, greeting and polite behavior)
 - (7) I understand the influence of culture on communication in business, education, medical care and other aspects
 - (8) I can exchange cultural knowledge in the humanities, science, system, society, economy and other fields

- (9) I understand the similarities and differences between the specific ways of thinking and behavior in different cultures
- (10) I can explain how business, financial and economic processes affect the functioning of society
- (11) I understand the similarities and differences of different cultural ideology, social system, lifestyle and other aspects
- (10) Cross-cultural ability: Attitude Please read the following statement carefully, judge the degree of agreement according to your actual feelings, and light up the corresponding stars that match your personal views. (1 = Very disagree 2 = Not agree 3 = uncertain 4 = compare agree 5 = Very agree) (please fill in 1–5 numbers score * must answer)
- (11) I am open-minded and interested in others' beliefs, values, traditions, and world outlook
- (12) I can actively understand and appreciate the cultural diversity
- (13) I am able to face the difficulties in cross-cultural communication strongly
- (14) I can tolerate, understand and respect the values of other cultures
- (15) I am able to tolerate, understand, and appreciate the different beliefs held by others
- (16) I can respect people with different cultural backgrounds, social identities and religious beliefs
- (11) Which kind of teaching mode do you prefer? (Single choice choice * required answer)
- Offline face-to-face classroom teaching mode
- Simple online network teaching mode
- Mixed online and offline teaching mode
- (12) Do you think it is necessary to combine the traditional classroom and the information-based classroom? (Single choice choice * required answer)
- oblige
- unnecessary
- cannot be designated as
- (13) Mixed online and offline teaching needs self-study before class through the platform. Are you willing to study independently? (Single choice choice * required answer)
- be willing
- under protest
- as appropriate
- (14) How about the teachers in your class using mixed online and offline teaching? (Single choice choice * required answer)
- is more frequent
- occasionally used
- never use
- (15) Do you reject mixed online and offline teaching? (Single choice choice * required answer)
- Repel
- More like
- (16) Has online and offline hybrid learning brought you a great help? (Single choice choice * required answer)
- Help is very big
- Help some help

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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