



# Dynamic Evaluation Method of College English Cross-Cultural Teaching Based on Mobile Terminal Technology

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**Abstract.** The existing studies on intercultural communicative competence have explored the constituent elements, theoretical models, training models and evaluation methods of intercultural communicative competence, but the basic intercultural communicative competence is the main research object, which is not entirely applicable to the practice and research of the cultivation of intercultural communicative competence of English majors. In order to improve the practical applicability of dynamic evaluation of College English cross-cultural teaching, a dynamic evaluation method of College English cross-cultural teaching based on mobile terminal technology is proposed. Combined with mobile terminal technology, this paper constructs the evaluation system of College English cross-cultural teaching, standardizes the evaluation indicators of College English cross-cultural teaching, and optimizes the evaluation algorithm of College English cross-cultural teaching. Finally, the experiment proves that the dynamic evaluation method of College English cross-cultural teaching based on mobile terminal technology has high practicability in the process of practical application and fully meets the research requirements.

**Keywords:** Lack of culture · Mobile terminal technology · College English · Cross cultural teaching

## 1 Introduction

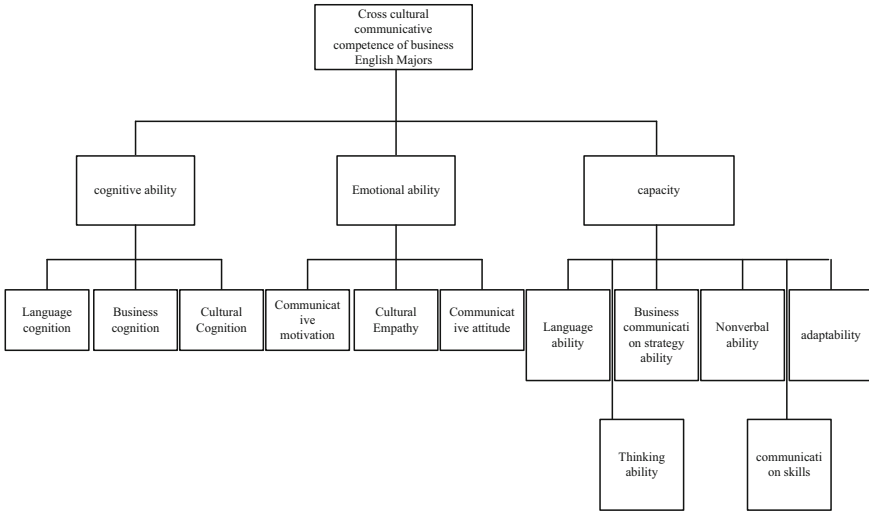
In view of the lack of bilingual education culture in recent years, the Ministry of Education recently promulgated the national standard for the teaching quality of English Majors in Colleges and universities, which is a programmatic document for the admission, construction and evaluation of English Majors in Colleges and universities in China, The training objectives are pointed out “English majors aim to cultivate compound and Applied English with solid basic language skills, international vision and

humanistic quality, master the basic theories and knowledge of foreign language and literature, applied economics, business administration, law and other related disciplines, have English application ability, cross-cultural communication ability, practical ability, speculation and innovation ability, autonomous learning ability, and be able to engage in international work Talent “. For the first time, the English national standard clearly puts forward the quality, knowledge and ability that English majors should have, and establishes a complete construction system for English majors [1]. Among the necessary abilities, language application ability and cross-cultural communication ability are the core abilities, which should become the main observation point to test whether the teaching of English majors meets the national standard of teaching quality, and also an important means to solve the lack of culture. The cross-cultural communicative competence of English majors includes two parts: basic cross-cultural communicative competence and cross-cultural communicative competence. The existing researches on intercultural communicative competence have explored the constituent elements, theoretical models, training schemes and evaluation methods of intercultural communicative competence, but taking basic intercultural communicative competence as the main research object, it is not fully applicable to the practice and research of intercultural communicative competence training of English majors [2]. On the basis of summarizing the relevant studies on intercultural communicative competence and combining with the requirements of English national standards for intercultural communicative competence, this paper constructs a framework for English Majors’ intercultural communicative competence, and puts forward corresponding training approaches from five aspects: curriculum setting, teaching concepts, teaching methods, teacher allocation and evaluation mechanism. So as to promote the practice and research development of English Majors’ cross-cultural communicative competence.

## **2 Dynamic Evaluation of College English Cross-Cultural Teaching**

### **2.1 Evaluation System of College English Cross-Cultural Teaching**

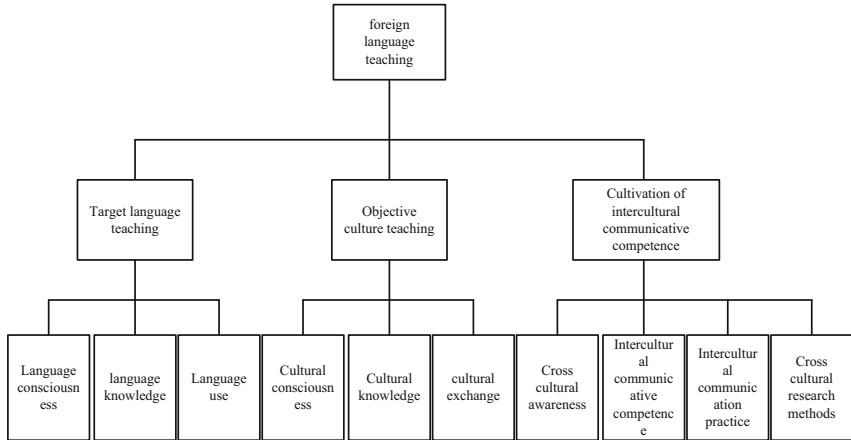
Although the current academic circles have different views on the elements of intercultural communicative competence, its core part can be summarized into three levels: cognition, emotion and behavior. Therefore, based on the target quality, knowledge and ability of English Majors in the English national standard, and combined with the relevant research results of cross-cultural communicative competence at home and abroad, we put forward the framework of cross-cultural communicative competence of English majors [3]. In terms of theoretical framework, cognition, emotion and behavior constitute three basic elements of cross-cultural communicative competence in the international context. Each element can be subdivided into different sub elements to build a college English cross-cultural teaching evaluation system, as shown in Fig. 1.



**Fig. 1.** Framework of College English cross-cultural teaching evaluation system

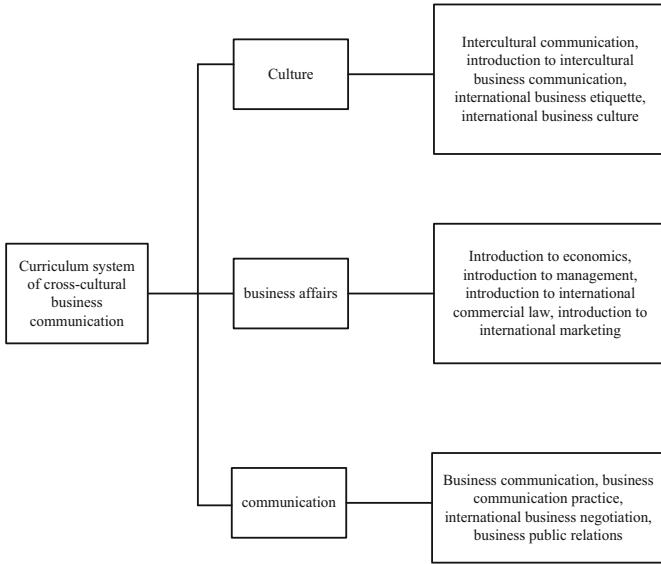
In the evaluation system of College English cross-cultural teaching, language teaching is the noumenon and culture teaching is the auxiliary. Scholars who hold this view believe that language teaching is the starting point and purpose of foreign language teaching and has an unshakable dominant position. Culture teaching is an auxiliary, which can help learners better understand the values and customs of the target language countries, so as to better carry out cross-cultural communication. If there is only language teaching but no culture teaching, then language teaching will be “malnutrition”. Language teaching is the first and culture teaching is the second [4]. Scholars who hold this view believe that students must first understand a language before they can really understand the culture behind the language, rather than understanding a culture before they can understand the language expressed by the culture. Language teaching and culture teaching are you with me and I with you. There is neither language teaching without language teaching nor culture teaching without language teaching. To some extent, language teaching is culture teaching [5]. Culture teaching is a part of language teaching. Most scholars who hold this view, based on the narrow definition of culture, believe that grammar and vocabulary are not the whole content of language teaching. The teaching of cultural knowledge is also an important part of English language teaching. Culture teaching plays a complementary and promoting role in language teaching. Language teaching is a part of culture teaching. Most scholars who hold this view support the broad definition of culture. They believe that because the content of culture is almost all inclusive and culture includes everything a person wants to understand, learners can fully communicate with other language users in a way they can accept [6]. In this sense,

the language of a society is an aspect of its culture, so language teaching is also a part of culture teaching. In addition, from the perspective of teaching content, language teaching and culture teaching in English teaching are distinguished, which can be shown in Fig. 2:



**Fig. 2.** College English cross-cultural teaching structure and Curriculum

The curriculum should first deal with the four pairs of relations between cultural education and professional education, language skill training and professional knowledge teaching, elective courses and compulsory courses, practical (experimental) teaching and theoretical teaching. Secondly, the curriculum system must cover teaching contents at all levels of cross-cultural communication, and communication, and teachers should actively guide students to understand the dynamic relationship of various influencing factors of cross-cultural communication through theoretical teaching and practical teaching, so as to promote them to understand and deal with international communication problems from a more dialectical and sensitive cross-cultural perspective [7]. There are three levels of courses, namely, cross-cultural communication, communication economics and cross-cultural communication system, as shown in the following Fig. 3:



**Fig. 3.** Curriculum system of English intercultural communication

Intercultural communicative competence is one of the most important competence elements of English majors, and it is also one of the core objectives of English Majors' training. Constructing a complete, systematic and operable evaluation system of cross-cultural communicative competence has important practical guiding significance for evaluating the effect of English teaching and perfecting the evaluation system of English teaching. Many domestic scholars have built an evaluation system for college students' cross-cultural communicative competence. These evaluation studies have explored the constituent models and evaluation methods of cross-cultural communicative competence from different perspectives, and consolidated the basis of theoretical and practical research on cross-cultural communicative competence, but did not involve relevant indicators and quantitative standards of cross-cultural communicative competence [8]. Moreover, using the evaluation scales of other professional talents training for reference to measure the cultivation of cross-cultural communicative competence of English majors will affect the accuracy of the comprehensive evaluation index and is not conducive to the realization of the training objectives of English majors. At present, there is no evaluation system and scale of cross-cultural communicative competence at home and abroad, However, the research results related to the evaluation of cross-cultural communicative competence can provide some enlightenment and reference for the evaluation of cross-cultural communicative competence: cross-cultural communicative competence can be evaluated; The assessment of intercultural communicative competence must adopt a combination of quantitative and qualitative methods from different angles; The evaluation of cross-cultural communicative competence must consider many factors, such as evaluators, evaluation objects, evaluation objectives, evaluation use, specific situations,

even social conditions, historical background and so on. We call on the academic circles to speed up the research on the evaluation system of cross-cultural communicative competence and improve the evaluation system of English teaching as soon as possible.

## 2.2 Evaluation Index of English Cross-Cultural Teaching

The evaluation index system is an organic whole formed by different levels of evaluation indicators according to the logical structure of the evaluation object itself. It is a set of indicators or a set of specific indicators. The evaluation index system of College English classroom culture teaching is a collection of a series of indicators to judge the value of middle school English teachers' classroom culture teaching according to the characteristics of middle school English culture teaching. It is the embodiment of the concept of middle school English culture teaching [9]. According to the characteristics of English classroom culture teaching, the evaluation index system of College English classroom culture teaching is a detailed, clear and operable organic whole. It is an evaluation system that can effectively measure the development of middle school English culture teaching. The evaluation index system of College English classroom culture teaching takes culture as the main axis, Through a number of interrelated, complementary and organic whole with a certain structural level connected by teachers' cultural teaching activities, these indicators can not only reflect the characteristics of cultural teaching, but also take into account the relationship between various elements in the teaching system. This study adopts the methods of literature analysis, theoretical analysis and expert consultation, Select indicators to meet the scientificity and integrity of the evaluation index system of culture teaching in English classroom teaching. The process of constructing the evaluation index system of culture teaching in English classroom is shown in Fig. 4:

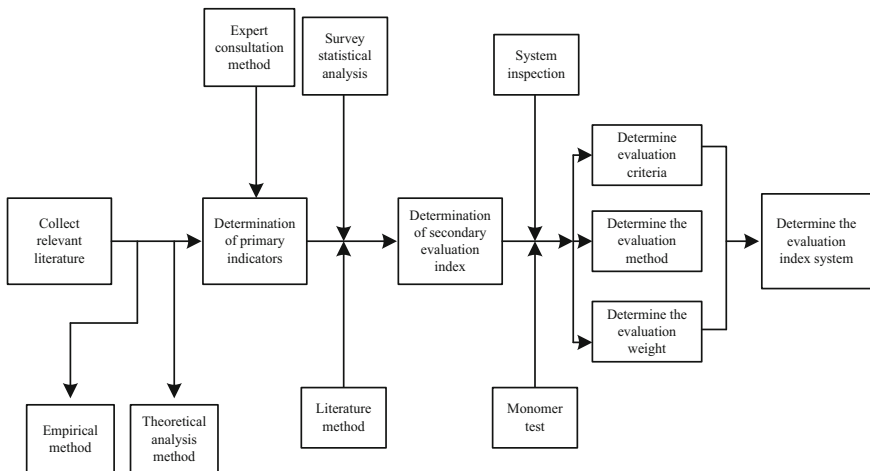


Fig. 4. Evaluation process of English classroom culture teaching

The Enlightenment of the sociological analysis of cultural differences is to promote social unity and enable students to obtain cultural capital through cross-cultural

education, and cultivate students' cultural skills. The teaching and evaluation of cross-cultural education must also be closely related to daily life experience. The significance of psychology's interpretation of cultural differences to cross-cultural education is to let students master the framework of understanding cultural differences and take cultivating students' psychological adjustment ability as an important goal. The author also believes that the curriculum of cultivating cross-cultural ability in school education can be divided into two ways: integrating discipline curriculum and developing comprehensive curriculum [10–12]. The subject curriculum needs to reorganize the existing subject curriculum content or add the content of cross-cultural ability training, while the comprehensive curriculum is specially designed to cultivate cross-cultural ability. In terms of teaching, cross-cultural education takes group discussion and activity teaching as the main teaching strategy; in terms of evaluation, performance evaluation is adopted. At the same time, the practical implication of cross-cultural education is based on the dynamic and non essentialist view of cultural differences and identity, and takes cultivating learners' cross-cultural ability as the basic goal. It is a new interpretation of the thought of "learning to coexist". The enlightenment to China's cultural diversity education is to treat cultural differences and identity from a non essentialist and dynamic standpoint: build an educational process to promote cross-cultural communication; pay attention to the cultivation of learners' common values in the educational process; incorporate the cultivation goal of cross-cultural ability in general education; gradually implement the cultivation of Teachers' cross-cultural ability. Distribute the weight allocation  $W$  to the evaluation experts, and invite the experts to independently assign the weight  $N_{ij}$  of each index in the first round, and fully explain the reasons. To recover the consultation form, it is necessary to make statistics on the data  $n$  and calculate the average value and deviation of each index.

$$\bar{W} = \frac{1}{n} \sum W_j N_{ij} \quad (1)$$

Feed back the statistical results and the two eigenvalues calculated through the above publicity to experts, and ask them to modify or adhere to their own suggestions according to their own ideas, and give weight in the second round. After collection, it is sorted and counted. Finally, after weighing, the person who makes the judgment represents the evaluation expectation of experts and reflects the importance of the index. It is generally believed that the expectation should reach more than 60%. Otherwise, the indicator will not be retained. Through inspection, the above indexes meet the requirements of monomer inspection and system inspection. Whether the analytic hierarchy process is reliable for the analysis result of weight can be measured by the following evaluation consistency ratio (C.R.). The calculation method is as follows:

$$C.R. = \bar{W} - \frac{\lambda_{\max}}{n-1} (R.I.)_n \quad (2)$$

where:  $(R.I.)_n$  is the evaluation consistency index of  $n$ -order matrix; The average consistency index of  $\lambda_{\max}$  matrix.

### 2.3 Realization of Dynamic Evaluation of English Cross-Cultural Teaching

According to the measurement standard, the correlation below 0.5 is very weak, which is not suitable to be used as a secondary evaluation index. It can be seen from the statistical results that the correlation test of evaluation factors such as cultural teaching background, cultural teaching process, cultural teaching style, cultural teaching style, cultural teaching management, cultural teaching attitude and teaching reflection has not been passed. Therefore, the above evaluation factors will not be included in the evaluation system of English classroom cultural teaching. Therefore, this study finally determines that there are 9 secondary evaluation indicators for English classroom culture teaching evaluation. The evaluation indicators are as follows:

**Table 1.** Evaluation index system of College English cross-cultural teaching

Teaching stage	Primary index	Secondary index
Teaching preparation stage	Cultural teaching preparation	Cultural teaching concept, goal and design
Teaching process stage	Cultural teaching process	Cultural teaching contents, methods and atmosphere
Teaching effect stage	Cultural teaching effect	Teaching feedback, classroom response and compliance

The evaluation object in the preparation stage of teachers' cultural teaching is mainly the preparation of teachers for the upcoming cultural teaching. The second level evaluation indicators include teachers' cultural teaching ideas. Cultural teaching objectives and cultural teaching design. Cultural teaching ideas are important factors affecting the implementation of cultural teaching. Cultural teaching ideas mainly refer to two aspects: one is whether teachers fully understand the necessity of cultural teaching, and the other is whether teachers correctly understand the internal relationship between language teaching and cultural teaching. The goal of cultural teaching refers to the expected results of students' cultural learning through teachers' cultural teaching activities. Cultural teaching goal is not a unilateral goal of teachers or students. It includes both teachers' cultural teaching goal and students' cultural learning goal. From the perspective of cultural teaching, the evaluation of cultural teaching objectives should mainly consider the following two points: first, the description of cultural teaching objectives should be clear and specific, reflecting the integration of three-dimensional objectives; Second, whether the cultural teaching goal pays attention to the cultivation of students' cultural awareness and cultural understanding, and the cultural teaching design is the arrangement of cultural teaching activities under the guidance of the teaching goal. Specifically, it includes teachers' treatment of cultural teaching content, whether the introduction method of cultural teaching is appropriate, and the process arrangement of cultural teaching. The evaluation points of this index mainly include: first, we should teach students relevant cultural content based on teaching materials; Second, whether the design of cultural teaching scheme is reasonable, whether the content is appropriate and easy for students

to understand; Third; Whether the cultural teaching scheme has strong practicability. The evaluation indexes of College English classroom culture teaching methods mainly include three aspects: first, the creation of culture teaching environment; The key points of this evaluation mainly depend on whether teachers choose specific cultural teaching situations in cultural teaching, whether it is in line with teachers' teaching style and students' psychology of cultural cognition. Second, the choice of cultural methods; If teachers use appropriate teaching methods according to different teaching contents and teaching situations, such as guidance method and cultural comparison method, they can promote students' cross-cultural understanding, enhance students' cultural experience and enhance the effect of cultural teaching. Third, the use of cultural teaching resources; It mainly depends on whether teachers make full and effective use of various cultural teaching resources in the process of cultural teaching, because all kinds of teaching resources are silent culture. Of course, there is no best method for cultural teaching, only the method suitable for specific cultural teaching activities. English classroom cultural atmosphere affects the cultural interaction between teachers and students and students' perception of culture. The research shows that a good classroom culture teaching atmosphere is conducive to the cultivation of students' cultural learning ability. For the evaluation of this index, we need to investigate the key points: first, whether teachers and students often have cultural interaction in culture teaching; The second is to investigate whether the culture teaching classroom has a democratic, open and classroom cultural atmosphere conducive to students' cultural perception.

### 3 Analysis of Experimental Results

According to the survey data of personal information in the first part of the survey of College English cross-cultural teaching, this paper analyzes the specific situation of the respondents' gender distribution, age distribution and educational background distribution. The purpose is to analyze whether the samples involved in the survey are representative and can represent the basic situation of this kind of personnel, so as to ensure the scientificity of the research results. See Table 2 for the specific distribution of the samples involved in the survey (Table 1).

**Table 2.** Statistical table of survey sample distribution

Project	Category	Number of samples	Percentage
Gender	Male	1	2.98
	Female	36	98.20
Age	30–35	23	62.35
	36–40	9	23.65
	41–45	3	5.68
	46–50	3	5.68

(continued)

**Table 2.** (continued)

Project	Category	Number of samples	Percentage
	50-55	3	5.68
Education	Undergraduate	12	28.65
	Graduate student	28	73.68
	Doctor	0	0

According to the cross-cultural teaching situation of English teachers, this paper mainly investigates three questions. Teachers' understanding and influence on cross-cultural teaching includes the following aspects: the reserve of teachers' own cultural quality; Teachers' understanding and understanding of cross-cultural communication knowledge learning; Teachers' understanding of cross-cultural teaching content; Teachers' choice of culture teaching mode; Ways of students' cultural learning; Students' interest and attitude towards cultural learning; the way teachers deal with the relationship between language skill training and cultural knowledge learning; The occupation of teachers' culture teaching time. The content of cultural content in teaching materials. It is the problems existing in cross-cultural teaching in the eyes of teachers and the suggestions for cross-cultural teaching. With the help of spss17 0 software package for data statistical processing of the first two problems. The survey scores of the above aspects are shown in Table 3 (Table 4).

**Table 3.** Scores of teachers and teaching materials on the impact of cross-cultural teaching

		Teachers' own knowledge level	Teachers' attitude towards cross-cultural learning	Teachers' understanding of cross-cultural teaching	Ways of students' cross-cultural learning	Students' interest in cultural learning	How teachers deal with language skills	Occupation of culture teaching time
N	Effective	38	38	38	38	38	38	38
	Defect	0	0	0	0	0	0	0
	Mean value	1.65	26.33	9.15	6.24	1.77	5.65	3.65
	Standard error of mean	.102	.415	.218	.095	.129	.128	.181
	Median	2.00	25.00	11.00	18.00	2.00	6.00	3.00
	Mode	3	28	11	26	7	3	5
	Standard deviation	.608	2.652	1.625	5.683	.771	.765	1.086

(continued)

**Table 3.** (continued)

	Teachers' own knowledge level	Teachers' attitude towards cross-cultural learning	Teachers' understanding of cross-cultural teaching	Ways of students' cross-cultural learning	Students' interest in cultural learning	How teachers deal with language skills	Occupation of culture teaching time
Variance	.398	6.268	1.826	.365	.596	1.165	1.152
Minimum	0	18	7	8	5	2	1
Maximum value	4	28	12	27	4	5	5

**Table 4.** Evaluation results of English cross-cultural teaching

Teaching stage	Primary index	weight	Secondary index	weight	Comprehensive evaluation results (Miss Sun)	Comprehensive evaluation results (Mr. Wang)
Teaching preparation stage	Cultural teaching preparation	0.3	Teaching concept	0.3	A	B
			Teaching objectives	0.4	B	A
			instructional design	0.4	C	B
Teaching process stage	Cultural teaching process	0.5	content of courses	0.3	B	A
			teaching method	0.4	C	B
			Teaching atmosphere	0.3	B	A
Teaching effectiveness	Cultural teaching effect	0.3	Classroom effect	0.4	A	A
			Teaching feedback	0.3	B	A
			Compliance status	0.4	B	A

According to the relationship between statistical Cronbach a coefficient and reliability, Cronbach a coefficient greater than or equal to 0.9 means that the evaluation result is very reliable. It can be seen from the above results that the evaluation results have high reliability. This is because the method in this paper combines mobile terminal technology, constructs a college English cross-cultural teaching evaluation system, standardizes the College English cross-cultural teaching evaluation indicators, and optimizes the College English cross-cultural teaching evaluation algorithm. Through the above evaluation

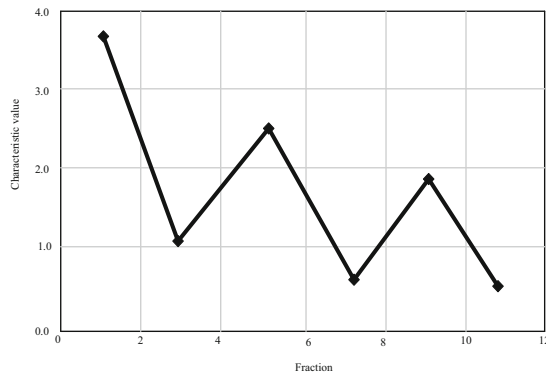
analysis, combined with the opinions of five evaluation experts and the comprehensive calculation of the evaluation data, the final evaluation results of English cross-cultural teaching are as follows:

Using spss17 0 kmo and bartlette ball test for factor analysis to judge whether this study can do factor analysis. This paper uses the statistical method of factor analysis to extract multiple factors affecting cross-cultural teaching through principal component analysis, and then determine the main factors affecting cross-cultural teaching. First, test them. The test results are shown in Table 5.

**Table 5.** Results of kmo and Bartlett's test and spherical test in English

	Kaiser Meyer Olkin measure of sampling adequacy	.625
Bartlett's sphericity test	Approximate chi square	79.652
	df	38
	Sig	.000

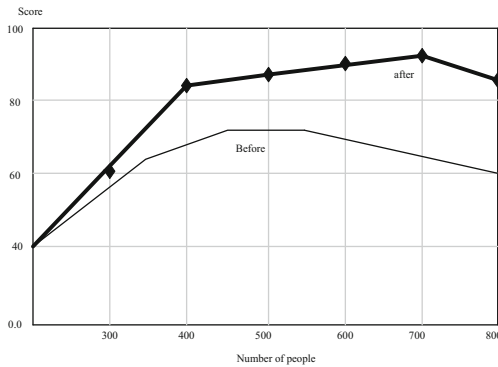
By calculating the characteristic roots and arranging them according to their size, the main scattered point diagram (scattered point diagram) is output. In the diagram, the ordinate is the characteristic root and the abscissa is the number of factors. The output results are shown in Fig. 5.



**Fig. 5.** Statistical data

It can be seen from the figure that except the first four principal components, the characteristic roots of other principal components are lower than 1, so the number of factors is determined to be 4. With the help of spss17 0 software package to process statistical data. This is because according to the target quality, knowledge level and ability level of English majors, combined with the relevant research results of cross-cultural communication ability at home and abroad, this paper puts forward the framework of cross-cultural communication ability of English majors. The histogram of student

achievement distribution is shown in Fig. 6, and the test diagram of normal distribution is shown in Fig. 6.



**Fig. 6.** Changes in school rules of English cross-cultural school

The chart shows that under the traditional method, students with scores below 60 account for the majority, that is, most students fail. The reason is that there are problems in cross-cultural teaching, resulting in poor students' scores. After using a certain terminal technology for teaching, students' teaching performance is significantly improved. Cross cultural education is an educational activity about personal world outlook, values, identity and cross-cultural awareness and ability carried out by the school through the determination of training objectives, the setting of courses, the selection of teaching contents and materials, the renewal of teaching ideas, the design of teaching methods and teaching activities, and the organic combination of school education and social practice. It is necessary to integrate cross-cultural education into foreign language teaching. Firstly, it can meet the needs of the interdependence between language and culture and reflect the process of natural language learning. Secondly, adding cultural taper to foreign language teaching will make language learning more meaningful and fun; Furthermore, it is recognized that the development of cross-cultural communication is the ultimate goal of foreign language teaching.

## 4 Conclusion

On the basis of summarizing the representative research results of cross-cultural communicative competence at home and abroad, combined with the ability requirements of English national standards, this paper constructs the framework of cross-cultural communicative competence of English majors, and puts forward the corresponding training ways from five aspects: curriculum, teaching ideas, teaching methods, teacher allocation and evaluation mechanism. The in-depth research on the cross-cultural communicative competence system of English majors is in line with the fundamental needs of China for the cultivation of cross-cultural English talents under the background of economic globalization. It can also provide theoretical and practical guidance for the teaching

reform of cross-cultural courses and the construction of English Majors in Colleges and universities, and effectively promote the realization of the cultivation goal of English majors. In the future development, advanced science and technology and information technology will be introduced and combined with the evaluation system to effectively improve the accuracy and practicality of evaluation.

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