

The Attitudes of Chinese College Students Towards Utilizing Blended Learning to Enhance Their English Speaking Skills

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Abstract—This study aimed to investigate the attitudes of Chinese college students toward using a blended learning approach to enhance their English speaking skills. Participants include 105 non-English major students from a regular university in western China. A quantitative analysis was conducted based on the data from a designed questionnaire. The findings identify the majority of students were satisfied with using the blended learning approach during the courses to improve their English-speaking skills. Furthermore, most students showed a preference for using blended learning in future English-speaking learning because of its user-friendliness, flexibility in terms of time and location, access to self-directed learning, and diverse teaching resources. The study further demonstrated the successful and effective implementation of blended learning in English-speaking instruction as part of an educational reform process in a regular university in Western China. The researcher attempted to provide some tips to enhance blended English-speaking learning including diversified instructional designs, increased teacher-student interaction, the active use of spoken English in the classroom, practice opportunities outside of class, and the dissemination of rich oral language learning resources.

Index Terms—blended learning, attitude, English speaking skills, quantitative

I. INTRODUCTION

A. Background of the Study

As an international language, English plays a vital role in the contemporary world, serving as the primary medium of communication in various domains. Notably, it is a compulsory subject at all educational levels in China where it is taught as a foreign language. Despite its perceived difficulty, English continues to attract learners. Among the four key language skills of reading, writing, listening and speaking, it is speaking that is widely regarded as the most crucial in mastering a new language. Criollo-C (2022) emphasizes the significance of speaking skills as being vital to holding a successful conversation (p. 9320). Patel and Jain (2008) assert that language serves essential functions in communication, self-expression, and thinking. Consequently, mastering speaking skills is indicative of language proficiency (p. 158).

However, mastering spoken English poses challenges for learners, especially among college students in China. Research indicates a concerning low proficiency in English oral skills that can be attributed to factors such as lack of motivation, minimal dedication, and a scarcity of language-rich environments outside the classroom (Lü, 2017; Lu, 2022). Driven by fear or shyness, learners often prefer independent practice over collaborative activities (Hu et al., 2021). In response to these challenges, current research focuses on reforming English oral teaching methods in universities and employing effective methods to enhance students' speaking skills. In the era of Industry 4.0, there is an increased use of devices like smartphones and laptops among students to access learning platforms and apps, and these devices are beneficial to paving the way for promoting the application of mobile-assisted language learning and facilitating English-speaking activities (Arvanitis, 2016).

With the use of blended learning models for instruction, the role of English teachers in encouraging students to participate in speaking activities becomes more and more important (Sharma, 2010; Zilka et al., 2019). Blended learning, combining traditional and online methods, has gained popularity in English language education with proven improvements in students' speaking proficiency (Ginaya, 2018), and online activities such as WebQuest contribute to enhanced English learning motivation and interest, maximizing language skills (Limbong, 2017).

While mobile-assisted blended learning is increasingly applied to English teaching, its adoption in oral instruction remains limited. Students' attitudes toward blended learning are crucial as they will influence the effectiveness of the method in the learning of English speaking skills. Using a questionnaire survey, this study aims to explore Chinese college students' attitudes toward using blended learning to enhance their English speaking skills.

B. *Statement of the Problem*

Though it is most often used in the developed countries of Britain and America, English has become the world's lingua franca in recent decades. Still, by improving their English skills, Chinese students will be able to better understand and learn from advanced research results in developed countries, helping the new generation of Chinese students broaden their horizons and enrich their knowledge. More specifically, it is the younger generation that needs to familiarize themselves with the knowledge available to them through English (Mohamed, 2021).

At present, there have been some foreign research results on students' attitudes toward learning English as a Foreign Language (EFL). For example, someone found that students had negative attitudes toward English learning. Moreover, research on attitudes toward English learning is quite abundant; however, most of that research regarded the attitudes of learners as one of the influencing factors of second language learning (Mohamed, 2021). Nevertheless, the emphasis on this issue has been relatively limited. Furthermore, those studies seldom focused solely on the attitudes toward English speaking; rather, they focused on English learning as a whole. Today, however, blended learning has become more widely used in English classes, thus the attitudes toward its use in English-speaking learning have also become significant.

With all of this in mind, the focus of this study is to examine and identify the factors that influence college students' attitudes toward blended learning in English as a Foreign Language learning. Because researchers believe that studying these factors can prepare students for different situations when learning English, this, in turn, will help them achieve higher levels in various areas of study. However, to achieve this goal, English language students should have a positive attitude toward learning.

It is generally accepted that students' attitudes toward foreign languages are an important indicator of success in foreign languages. In the context of English as a Foreign Language, students who view learning English as a positive and rewarding experience are less likely to suffer from foreign language anxiety. According to Gardner, Lambert, and Burstal (Stern, 1987), there is a positive relationship between learning outcomes and attitudes toward learning a second or foreign language. Moreover, attitudes arise from the values we place on objects or ideas. As Wright said, "Values are the basis of our attitudes" (Terenzini, 1987); that is, our negative or positive attitudes depend on our values. In his opinion, if a student believes in the importance of mastering a second or foreign language and behaves accordingly, it shows that he/she values learning the language and has a positive attitude toward it.

On the other hand, if a student does not believe in the importance of mastering a second or foreign language and behaves accordingly, it indicates that he/she does not value learning the language and has a negative attitude toward it. An example of this is a study conducted to investigate the factors that influence 10th-grade students' attitudes toward learning English as a Foreign Language at Debre Marcos Government Comprehensive High School, East Gojam District, Amhara Region, Ethiopia. The researcher believed pupils at the school seemed to have attitude problems and were less successful at learning English as a Foreign Language. Since the researcher had also studied at this school for seven years (grades 4-10), the students' haphazard approach to continuous assessment tasks and their excuses for not completing assignments seemed to be a problem that needed researching. Furthermore, most students did not seem to value the opportunity to practice English in school. Instead, they seemed to prefer their native language (Amharic), even in English classes. Given the steady decline in their Year 10 final results both nationally and regionally in the years leading up to the research, issues with learners' attitudes toward the English language may have been to blame.

In short, the lack of willingness or apparent attitudinal problems among 10th-grade Debre Marcos Comprehensive High School students to learn English may be responsible for the lack of critical English skills and achievement. Therefore, the researchers aimed to find out the factors that influence students' attitudes toward learning English as a Foreign Language and tried to propose some effective and practical solutions to the problem of students' negative attitudes toward learning English.

C. *Research Question*

The study was proposed to answer the following research question:

1. What are Chinese college students' attitudes toward using blended learning to enhance English speaking skills?
2. Is there a relationship between students' attitudes towards blended learning and their English speaking skills?

II. LITERATURE REVIEW

A. *Attitude*

Attitude is derived from social psychology; it is a subjective or mental preparation for action. The word originated in the 1660s from the Italian word "attitudine," meaning disposition, posture, aptness, and promptitude, and is derived from the late Latin "aptitudinem" and "aptitude" and the French "attitude" (Gelisli, 2007). According to philosophers Herbert Spencer and Alexander Bain, attitude refers to the inner stage of readiness for action (Aiken, 2002). What is more, attitude is a term widely used in academia. Positive attitudes toward language, culture, and the absorption of a foreign language contribute significantly to success in foreign language learning. A positive attitude can motivate students to interact with native speakers, thereby increasing the amount of language input learners receive. It is also

prone to encourage students to actively adopt different learning strategies to facilitate the development of their language learning skills. Positive attitudes encourage learners to make greater overall effort and often lead to greater achievements in both overall language proficiency and proficiency in specific language skills (such as listening, speaking, reading, and writing). It also helps students maintain their language skills after the regular courses and may even help motivate them to participate in various English-related activities in their free time. Conversely, negative language attitudes such as being shy to speak in the target language or being lazy when practicing can hinder a student's success in learning English. Therefore, as can be seen, both positive and negative attitudes can have a significant impact on language learning success.

Attitude is considered to be one of the factors affecting language acquisition, and researchers have confirmed the impact of attitudes on English learning through scientific research. There are some important aspects of learning about attitudes, and investigating students' attitudes is an effective way for language teachers, educational planners, curriculum designers, and researchers to better understand language teaching and learning (Noursi, 2013).

A review of the literature found that some studies only examined speaking attitudes worldwide (Üzüm, 2007; Babayigit, 2019). Furthermore, there have also been studies that jointly examined speaking postures, anxieties, and skills associated with EFL (Karagöl & Başbay, 2018; Gursoy et al., 2019) which have verified the relationship among them. Similarly, as another psychological factor, the fact that attitude influences English speaking skills, has not been emphasized as much as other factors have. Additionally, there has been little research on students' speaking attitudes and how they were measured. Furthermore, though the emerging approach of blended learning has been applied in actual English teaching, research on the attitudes toward blended learning has not been widely conducted. Thus, there is a gap which invites further study. As a result, the current study aims to fill in this research gap through the investigation of the attitudes toward the use of blended learning in English-speaking learning. It also attempts to shed some light on understanding college students' attitudes toward speaking English. Attitude is an individual's evaluation and behavioral tendency toward something or a specific situation (Omokhua, 2022). Attitude is the tendency to form a relatively stable psychological response to a specific situation (Chen, 2021). Based on the above definitions, the researcher concluded that foreign researchers define attitudes from the perspective of psychology while domestic researchers define attitudes from the perspective of human behavior tendencies.

To the best of the researcher's knowledge, there have not been any studies conducted to observe the attitudes of Chinese college students toward the use of blended learning to improve their English speaking skills. The present study was motivated by academic curiosity and a desire to understand the responses and reactions of Chinese college students towards the use of blended learning to improve English speaking skills.

B. Blended Learning

Strictly speaking, blended learning is not a new concept, and the idea has been discussed for many years. Thus, various definitions of blended learning have come about. Blended learning encompasses four distinct concepts: 1.) achieving educational goals by combining multiple online technologies; 2.) combining multiple instructional theories; 3.) integrating any form of instructional technology with individual teacher instruction; and 4.) combining instructional technology with practical work tasks (Driscoll, 2002). Blended learning is also used to describe learning that combines various event-based activities, including face-to-face courses, real-time e-learning, and self-paced learning (Bonk & Graham, 2006). Currently, academia generally considers blended learning as a combination of face-to-face learning and online learning (Singh, 2021).

In China, the concept of blended learning was introduced in 2003 and was first formally proposed by He Kekang at the 7th Global Chinese Computer Education Application Conference. He pointed out that blended learning was the combination of traditional face-to-face teaching and modern online learning.

In teaching practice, it is necessary to fully mobilize the initiative of students and emphasize the role of students in the learning process. At the same time, teachers should be the leaders, organizers, and observers of their classes (He, 2004). Since 2003, there have been profound changes in the ideology of the domestic educational technology field, and many educational researchers have seized this opportunity to reform their teaching practices.

In higher education, Guo (2018) integrated the "mobile phone live broadcast" classroom into university classrooms and adopted a hybrid teaching model to build a mobile learning community (p. 53). This model is also widely used in China's educational system, and some scholars have focused on the application of micro-classes and offline classes. Sahni (2019) surveyed more than 600 college students through a questionnaire on blended learning and the behavior of teachers while teaching and explored the influence of the blended teaching model on student involvement (p. 12).

Based on previous studies, it can be found that many blended learning researchers in China have focused on various topics in different fields to develop students' professional skills. Many related studies have been conducted by drawing lessons from foreign theories and combining them with the specific academic conditions of China.

In the end, it can be said that blended learning offers numerous advantages to teachers and learners, and overcomes time and space constraints. Learning activities can take place whenever and wherever learners need and want to learn. However, few studies have applied blended learning to college English learning, especially for college students in Western China. Therefore, this study intends to focus on exploring Chinese college students' attitudes toward using blended learning to enhance their English speaking skills.

In this study, to facilitate teachers gaining easy access and use of mobile apps, Rain Classroom was developed based

on Microsoft PowerPoint and WeChat, two apps most widely used by Chinese teachers on computers and mobile phones, respectively. Rain Classroom consists of three basic elements: a computer terminal, a mobile terminal, and a central server. On the computer side, teachers can download the Rain Classroom plug-in and install it in their PowerPoint for lesson preparation. On the mobile side, teachers and students can subscribe to the Rain Classroom service account through WeChat to interact freely. Central servers are used to store, process, and manipulate data for better analysis and decision-making. In this study, the researcher used the Rain Classroom platform to support English-speaking learning.

C. *English Speaking Skills*

Speaking is the ability to express opinions, thoughts, facts, and emotions verbally, enabling communication with others, animals, and even oneself. According to Nunan (2003), speaking is a productive oral skill involving the construction of systematic verbal expressions to convey meaning (p. 591). In a slightly different perspective, Bygate (2009) noted that “speaking is an interactive process involving the production, reception, and processing of information to construct meaning (p. 415).” In speaking, students learn how to organize ideas, structure sentences, and express language orally with clear pronunciation and comprehensible language, considering the context in which they are communicating.

Speaking ability has played a crucial role in the history of English language training. As stated by Bygate (2001), “Only in the past two decades has it started to develop as an area of education, learning, and assessment in its own right, seldom focused on the creation of spoken discourse (p. 34).” Today, English is widely used in many countries as an official language or the primary means of international communication more than any other language. Furthermore, English speaking has become a gateway in the contemporary world, facilitating better communication, trade, and academic development.

Access to spoken English or English-speaking skills helps learners convey their opinions, ideas, feelings and thoughts to others, receive information, and solve problems. The expansion of institutions offering spoken English courses reflects the increasing demand for English-speaking abilities in the nation. In countries where English is recognized as a second language, individuals are considered highly educated if they can speak English correctly as it is essential to master English speaking skills for further studies and technical research. Such individuals are offered various professional opportunities and can choose to pursue a career in their own country or elsewhere. Undoubtedly, opportunities are limitless for those who can speak English fluently.

In recent years, the education sectors in China have placed significant emphasis on training and improving college students’ oral abilities. In 2007, the Ministry of Education formulated the “College English Curriculum Requirements,” stating that the goal of college English teaching is to cultivate students’ comprehensive English abilities, especially in listening and speaking. It enables them to use English appropriately and effectively in learning, working, and social interaction, enhancing their autonomous learning ability and improving overall cultural competence to meet the needs of China’s social development and international exchanges. Universities have taken measures to strengthen oral English teaching, including the introduction of foreign teacher resources and the establishment of oral courses and have achieved positive results. Theoretical and empirical research in this area has also made significant progress.

However, the aim of learning English for many students is to pass various written tests which mostly focus on reading, listening, and writing. Thus, most of them seldom take the initiative to learn English, and their attitudes toward learning English are more negative. In this way, the skill of speaking has been ignored while learning English and effective communication in the language has been a challenge for most students. Moreover, English plays vital roles not only in academia but also in every aspect of life where it can be a useful skill. As a result, it is necessary to learn to speak English in real-life situations rather than merely knowing how to apply it on paper and classroom examinations. Therefore, teachers and students should prioritize the teaching and learning of spoken English.

Despite significant progress in college English teaching in China in recent years, teaching English speaking has consistently been identified as the weakest link to the mastery of English. College students’ English speaking and communication skills remain unsatisfactory. Often characterized by jokes about “dumb English” or “Chinglish”, the current English teaching situation is bleak. Issues, such as hesitancy to speak and difficulty in expressing oneself still bother most English learners. Moreover, oral communication ability continues to limit students’ overall English proficiency. In this study, the researcher will conduct a survey to investigate Chinese students’ attitudes toward using blended learning to enhance their English-speaking skills.

III. RESEARCH METHODOLOGY

This study will use quantitative descriptive methods which are similar to other quantitative research methods but are the least theoretical of all quantitative methods because they do not generate any theories (Lambert & Lambert, 2012). Quantitative descriptive methods are relatively new, and researchers are divided on their use due to some controversies. However, this approach is considered important in certain fields of study such as the social sciences where the goal is to describe phenomena rather than study them. Overall, this approach does not violate the general ideas of quantitative research, so it should be adapted to its unique research context and treated like other quantitative research methods (Lambert & Lambert, 2012).

Questionnaire surveys are one of the most common methods of collecting data on the attitudes and opinions of large numbers of participants. They have been used to investigate various issues in second language studies. Questionnaires allow researchers to gather information from participants that is not usually available from production data alone. One of the main advantages of using a questionnaire is that they are not only economical and practical, but in many cases, they can provide longitudinal information on learners in a short period of time. Questionnaires can also gather comparable information from multiple respondents. Additionally, they can be administered in a variety of formats, such as email, phone calls, mailed forms, and in person, allowing researchers greater flexibility in data collection.

This research used a questionnaire to collect data on Chinese college students' attitudes toward using a blended learning model to improve their English language skills. The questionnaire method is preferred because: 1.) the method is suitable for empirical research; 2.) the data collected by this method are easily quantified; 3.) the method allows sufficient time for the participants to provide accurate and correct answers; 4.), and this approach is cost-effective and time-saving.

The research questionnaire was created based on a previous study by Hiep (2022) and modified for this study. It comprises 17 items, with each item having 5 options (5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree). When designing the questionnaire, special attention was paid to the standard and quality of the questions, as well as the reliability, clarity, practicality, and manageability of the instrument (Al Mamun et al., 2012).

This research is based on descriptive case studies that provide a comprehensive and contextualized understanding of a particular phenomenon. Descriptive case studies describe real phenomena and the context in which they occur. This research strategy is chosen for this study because it can depict and reflect the actual attitudes toward blended learning in the context of English as a Foreign Language (ESL) which is beneficial for the researcher to analyze the data.

IV. PARTICIPANTS

Convenience sampling (also known as Haphazard Sampling or Accidental Sampling) is a type of nonprobability or nonrandom sampling where members of the target population meet certain practical criteria such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study (Dörnyei Z., 2007). Convenience sampling is affordable and easy, and the subjects are readily available. Therefore, the researcher will use convenience sampling to choose student participants.

The researcher, a teacher at the China Yinchuan University of Energy, is responsible for teaching English to non-English majors. Therefore, it's convenient to recruit the students in this university as the research sample. A total of 105 students from four non-English major classes were enrolled at China Yinchuan University of Energy in September 2022, and they voluntarily participated in this experiment through registration. All of them were of similar age which ranged from 18 to 20 years at the time of the study. In addition, they were homogeneous regarding age, sex, ethnicity, mother tongue, exposure to English, and educational and cultural background.

V. RESEARCH INSTRUMENTS

The research is concerned with investigating students' attitudes toward utilizing blended learning to enhance English speaking skills. Therefore, all 105 students were asked to agree or disagree with certain statements on the questionnaire. The questionnaire used in this study was designed based on the questionnaire related to student attitudes developed by Nguyen (2022) with a Likert scale of 5 where the scores ranged from 0 to 5: strongly disagree (1), disagree (2), neutral (3), and agree (4), Couldn't agree more (5).

Furthermore, the questionnaire contained four parts: Part 1 displayed the demographic profile of the respondents, including gender, age, and profession. Part 2 contained six items covering mobile technology competencies and skills related to blended learning and activities. Part 3 contained ten items covering general attitudes toward improving English proficiency using blended learning with integrated mobile applications. Finally, Part 4 contained one item which was one sample test of oral English to detect the current English-speaking proficiency of the students. In order to ensure relative authority and authenticity, the oral questions from the College English Test-Four (CET-SET 4) were selected for testing including self-introduction, read-aloud, question-and-answer, and individual presentation. When answering the questions, students have to press the record button to record the whole answer. Students' proficiency in spoken English is graded by the researchers based on the students' answers, in line with the official standard for the assessment of CET-SET 4. Additionally, the total score for speaking was 20 points.

VI. DATA ANALYSIS

A Chinese version of the questionnaire was created on Questionnaire Star (a Chinese online questionnaire creation platform) and then distributed to the students by the researcher. Participants were requested to complete the questionnaire carefully. In April 2023, the quantitative data from the questionnaire was collected and analyzed. Fuzzy classification was adopted to recognize the attitudes of Chinese college students toward using blended learning to improve their English-speaking skills. Fuzzy methods use a series of values (optimistic, medium, and pessimistic) known as "fuzzy numbers" which also represent the highest, middle, and lowest values of the range (Phani, 2020).

A. Determine the Weighting Value per Questions

Due to the indicator explanatory ability perhaps being different, this paper determined its impacting grade initially by the entropy method. When the discrepancy between assessing objectives on the value of an indicator is high, the entropy of the indicator is small (Sinniah, 2021; Shen et al., 2018).

(a). Normalization of All Indicators

$$r_{ij} = \frac{x_{ij} - \text{Min}(x_{ij})}{\text{Max}(x_{ij}) - \text{Min}(x_{ij})} \quad (1)$$

This equation is used to normalize positive indicators where a larger value of indicator represents better performance. The variable is the original value of the indicator i for sample j and is the normalized value of the variable. The expressions respectively denote the maximum and minimum original values of indicator j .

(b). Entropy Value per Indicator

$$H_i = -k \sum_{j=1}^m f_{ij} \ln f_{ij} \quad (2)$$

Where: is the entropy value of the indicator, is number of road, and is calculated from the equation below:

$$f_{ij} = \frac{r_{ij}}{\sum_{j=1}^m r_{ij}}$$

$$K = \frac{1}{\ln m} \quad (3)$$

(c). Weighting Value per Indicator

$$w_{ij} = \frac{1 - H_{ij}}{n - \sum_{i=1}^n H_{ij}} \quad (4)$$

Where: w_{ij} is the weighting value per indicator

As shown in the results below, using the entropy method, this study computed sixteen questions to obtain the weighting value:

TABLE 1
THE WEIGHTING VALUE PER QUESTION

Question	Weighting Value	Question	Weighting Value
A1	0.0716	A9	0.0511
A2	0.0679	A10	0.0558
A3	0.064	A11	0.0705
A4	0.0683	A12	0.055
A5	0.0567	A13	0.0512
A6	0.0717	A14	0.0583
A7	0.0553	A15	0.0535
A8	0.0691	A16	0.08

B. Fuzzy Classification

C. Build Factors Set

$$U = \{U_1, U_2, \dots, U_m\} \quad (6)$$

Where: U is per questions

D. Build the Matrix

E. Build Factors Set

Build the matrix depending on the factors and comments set.

$$R = \begin{bmatrix} r_{11} & \dots & r_{1n} \\ r_{21} & \dots & r_{2n} \\ \vdots & \vdots & \vdots \\ r_{m1} & \dots & r_{mn} \end{bmatrix} = (r_{ij})_{m \times n}, \sum_{j=1}^n r_{ij} = 1 \quad (8)$$

Where: r_{ij} is factor U_i is rated as V_j degree of affiliation

The matrix of this survey as Table 2 shows.

TABLE 2
THE RESULT OF MATRIX

Question	Likert scale					Question	Likert scale				
	1	2	3	4	5		1	2	3	4	5
A1	0.1386	0.4257	0.396	0.0396	0	A9	0.0891	0.4455	0.4455	0.0198	0
A2	0.1287	0.4752	0.3663	0.0297	0	A10	0.099	0.4158	0.4455	0.0396	0
A3	0.1287	0.4455	0.4257	0	0	A11	0.1386	0.4653	0.3762	0.0198	0
A4	0.1089	0.396	0.3663	0.1089	0.0198	A12	0.0891	0.5347	0.3366	0.0396	0
A5	0.0891	0.3168	0.4257	0.1584	0.0099	A13	0.0891	0.4158	0.4653	0.0297	0
A6	0.1287	0.4356	0.3564	0.0792	0	A14	0.1089	0.4356	0.4356	0.0198	0
A7	0.099	0.3267	0.495	0.0792	0	A15	0.0891	0.5149	0.3663	0.0297	0
A8	0.1287	0.4158	0.4158	0.0297	0.0099	A16	0.1683	0.4851	0.3465	0	0

(d) Fuzzy evaluation

According to Fuzzy evaluation, the algorithm is Zadeh, as follow:

$\forall a, b \in [0,1]$, Zadeh algorithm is (\vee) and (\wedge) , $a \vee b \Rightarrow \max(a, b)$, $a \wedge b \Rightarrow \min(a, b)$

The holistic level evaluation algorithm as follow:

$$B = \bar{A} \circ R \quad (9)$$

Where: **A** is the weighting value

According to equation (9), this study got the result of B as below shows:

$$B = (0.0679, 0.0716, 0.0691, 0.0576, 0.0198)$$

Then, normalization the B to obtained the final result, as below shows:

$$B = (0.238, 0.2511, 0.2424, 0.1989, 0.0694)$$

Therefore, we could deduce that the blended learning is positively to English study due to the 0.2511 is the highest value and it means high.

VII. RESULTS

This study collected 105 electronic questionnaires in total. During the filtering, the researchers deleted the questionnaires with a non-Ningxia IP address. Because this research chose college students from the Ningxia Hui Autonomous Region as the research sample, only questionnaires with a Ningxia IP address were regarded as valid. Thus, 101 valid questionnaires were collected as valid.

The gender of this questionnaire is set as Male (1), Female (2), Age: 18 (1), 19 (2), 20 (3), 21 (4), 22 (5), Major: preschool education major (1), big data (2), financial management (3), others (4), Evaluation level: very consistent (1), compliant (2), average (3), not compliant (4), very non-compliant (5).

A. Questionnaire Description Analysis

The majority of respondents (40.46%) were 21 years old. This was followed by 20-year-olds at 15.61% and 19-year-olds at 36.99% (Figure 1). Furthermore, 29 respondents were males between 20 and 21 years of age at 16.76% (Figure 2).

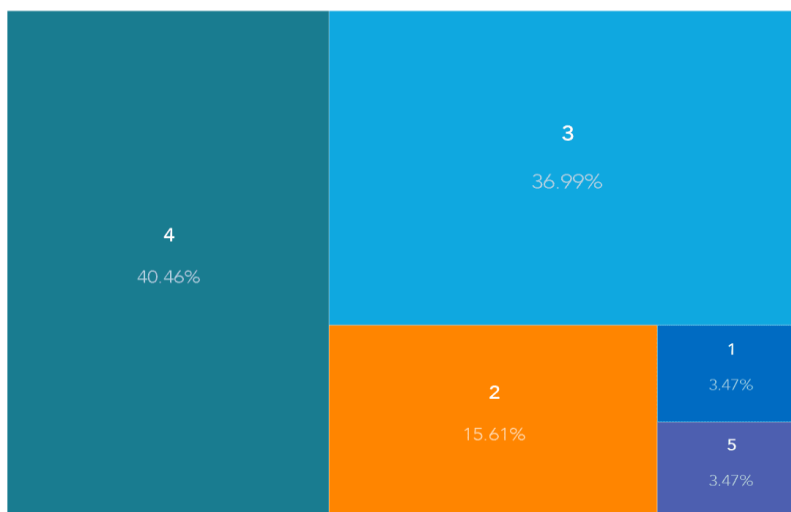


Figure 1. The Distribution of Respondent's Age

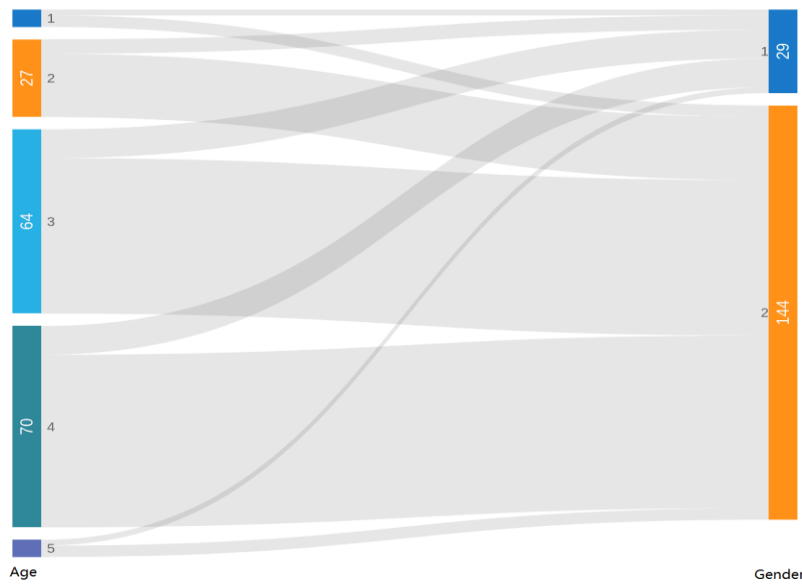


Figure 2. The Characteristics of Respondents' Age and Gender

The statistics of the questionnaire found that the majority of people consider feedback as “Acceptable” (with an evaluation level of 2) and “Normal” (with an evaluation level of 3). Moreover, very few questions obtained “Extremely agree” such as questions A4, A5 and A8 as Table 3 shows below.

TABLE 3
THE RESULT CALCULATION OF QUESTIONNAIRES

Question	Likert scale					Question	Likert scale				
	1	2	3	4	5		1	2	3	4	5
A1	14	43	40	4		A9	9	45	45	2	
A2	13	48	37	3		A10	10	42	45	4	
A3	13	45	43			A11	14	47	38	2	
A4	11	40	37	11	2	A12	9	54	34	4	
A5	9	32	43	16	1	A13	9	42	47	3	
A6	13	44	36	8		A14	11	44	44	2	
A7	10	33	50	8		A15	9	52	37	3	
A8	13	42	42	3	1	A16	17	49	35		

B. Impact Factor Identification

This study first examined the weighting value per question to calculate the feedback. As shown in Table 2, the weighting value was computed with sixteen questions based on the Entropy method. The most significant questions were A6 and A1 due to them being in the top two weighting values. A1 reflects students' strong willingness to use blended learning to enhance their English speaking skills. A6 indicates that the blended learning method has helped students improve their English speaking skills.

C. Attitude Toward Using Blended Learning to Improve English Speaking Skills

This study found that respondents showed a positive attitude toward using blended learning to improve their English speaking skills with the majority choosing “Acceptable” at 0.2511. As a result, it is clear that there is a significant relationship between the attitudes toward blended learning and English speaking proficiency.

TABLE 4
THE CORRELATION BETWEEN THE ATTITUDES AND ENGLISH SPEAKING PROFICIENCY

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Q1	0.529**	1														
Q2	0.506**	0.614**	1													
Q3	0.344**	0.599**	0.587**	1												
Q4	0.421**	0.448**	0.540**	0.472**	1											
Q5	0.336**	0.277**	0.346**	0.487**	0.333**	1										
Q6	0.304**	0.490**	0.537**	0.673**	0.409**	0.534**	1									
Q7	0.336**	0.496**	0.616**	0.581**	0.410**	0.532**	0.784**	1								
Q8	0.412**	0.580**	0.573**	0.524**	0.418**	0.581**	0.662**	0.773**	1							
Q9	0.368**	0.582**	0.558**	0.647**	0.422**	0.542**	0.730**	0.790**	0.775**	1						
Q10	0.485**	0.513**	0.680**	0.564**	0.537**	0.450**	0.622**	0.710**	0.688**	0.647**	1					
Q11	0.464**	0.493**	0.604**	0.461**	0.325**	0.530**	0.591**	0.643**	0.582**	0.643**	0.791**	1				
Q12	0.412**	0.559**	0.674**	0.585**	0.507**	0.487**	0.658**	0.725**	0.714**	0.779**	0.762**	0.720**	1			
Q13	0.434**	0.616**	0.713**	0.671**	0.500**	0.445**	0.688**	0.714**	0.685**	0.755**	0.759**	0.683**	0.756**	1		
Q14	0.447**	0.496**	0.670**	0.461**	0.434**	0.409**	0.555**	0.647**	0.731**	0.645**	0.700**	0.642**	0.704**	0.707**	1	
Q15	0.550**	0.596**	0.712**	0.489**	0.453**	0.455**	0.503**	0.598**	0.721**	0.646**	0.678**	0.613**	0.667**	0.610**	0.741**	1
Q16	0.503**	0.615**	0.616**	0.555**	0.462**	0.543**	0.646**	0.643**	0.713**	0.730**	0.711**	0.688**	0.737**	0.709**	0.700**	0.719**

**At the 0.01 level (two-tailed), the correlation is significant.

According to Table 4, it can be noticed that there is a significant positive correlation between students' attitudes toward the use of blended learning in learning English-speaking and oral English proficiency. This indicates that the more positive the attitude of non-English majors toward blended learning, the higher their oral English proficiency. This also suggests that English teachers should pay attention to guiding students' positive attitude toward using blended learning for learning English, helping them correctly understand the application of blended learning in oral English learning and improving their oral English level more effectively.

VIII. CONCLUSION

The purpose of this research is to understand the attitudes of Chinese college students toward utilizing blended learning for English-speaking learning and enhancing their English-speaking skills. The study reveals the statistically significant influences on students' attitudes toward blended learning. Moreover, students' attitudes toward the use of blended learning directly impact their English speaking skills. Students with positive attitudes invest more time and effort in learning to speak in English resulting in a noticeable improvement in their speaking skills. Conversely, students with negative attitudes resist oral learning and are unwilling to invest additional time and effort into it which leads to a lack of significant improvement in their speaking proficiency.

The researcher can confidently infer that Chinese college students are enthusiastic about using blended learning methods for English speaking skills given their generally positive attitudes toward blended learning. According to the survey results, blended learning holds significant promise for Chinese higher education and educational institutions with a large number of students being eager to improve their English speaking skills. Professors must devise strategies to transfer students' negative perceptions of blended learning by increasing the availability of mobile platforms or applications, encouraging students to interact with teachers and peers, and utilizing the internet or mobile learning platforms.

IX. LIMITATIONS AND FUTURE STUDIES

Based on the findings of this study, the researchers propose the following recommendations. Firstly, the sample size of this study is relatively small (105 participants). The study would be more reliable if a larger and more diverse population were included. Secondly, this study only explored learners' attitudes toward blended learning for improving English speaking skills. The results would be more persuasive and objective if the study also investigated teachers' perspectives on enhancing English speaking skills through blended learning. Therefore, research in this field should be

conducted to further explore teachers' views on blended learning. Lastly, this study only examined students' attitudes toward using blended learning, and further research should investigate factors such as gender, class level, learning styles, and motivation, to identify which elements may influence students' attitudes toward using blended learning.

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