



Implementing Content Based Instruction in University English Classrooms in Mainland China

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Abstract: CBI (Content Based Instruction) teaching is to transform a single language skill teaching method into a teaching method that integrates content and language as a whole. The main aim of this research is to know the actual implementation of the CBI model in university English classrooms in mainland China through scientific research methods. It will look at the perceived effectiveness of the CBI model and the challenges of implementing the CBI model. Based on the research purpose, this research explores the following research questions: how much students and teachers understand the basic concepts of CBI; the benefits and challenges of implementing CBI teaching methods in university English classrooms in mainland China. A review of selected literature briefly examines Input Hypothesis and Zone of Proximal Development. The data comes from questionnaires and in-depth interviews. The results seem to show that CBI can effectively improve students' English level, but there are many problems in the specific implementation process. The evaluation of CBI pedagogy needs to start from the perspective of teachers and students. It also emphasized the importance of the basic concepts of CBI. This research will help those students and teachers in the Chinese universities who would like to adopt CBI model and also the people who want to know the real situation of CBI model in the English classroom in China universities.

Keywords: CBI, university English classroom, evaluation, China

1. Introduction

1.1 Background Information

Basing language teaching on content is not a new idea. However, the approach that has come to be known as CBI first appeared in the mid-1980s with the publication of Bernard Mohan's work, *Language and Content* (Mohan, 1986). The CBI model has been widely used in language teaching since its origin in Europe and America. It exists in language teaching at all stages. Mohan emphasized in his work that language teaching is also impossible to be independent of content, so this model has been tested a lot in Europe and the United States (Cai, 2012). As an emerging foreign language teaching model, CBI has received widespread attention in the academic world since its birth, and in China the CBI model has also become a key content of China's higher English education reform. The English education in Chinese universities started relatively late. In recent decades, the teaching methods are relatively simple and boring. Even today, some areas still adopt traditional teaching methods where teachers speak and students take notes and the teaching goal is focused on the four core projects of language teaching: listening, speaking, reading and writing. But in this process, a single teaching method cannot meet the ambitious teaching goals, which has caused many Chinese students to get bored and excluded from English learning. For them, English courses are synonymous with boredom. This phenomenon has attracted the attention of a large number of Chinese scholars, and relevant government departments have also begun to seek countermeasures to solve this situation. It is in this situation that the CBI teaching model is gradually being discovered and paid attention to by more and more people in China, and more and more colleges and universities are also beginning to try this teaching method that has never been touched, for example, at Dalian University of Foreign Languages, the National Philosophy and Social Sciences Project Group systematically carried out CBI teaching reform experiments and achieved outstanding teaching results (Wuhan University Of Technology, 2012). However, in the course of practice, this teaching method has been subject to many doubts, and of course many people have expressed support, but it is undeniable that the practice of this new method in China is not smooth. What is more, there are not many special studies on CBI in China, and their research is not deep enough nowadays. The results of the current study would provide resources for a large number of English teachers and researchers in English education; moreover, young students can also refer to the results of this study to complete their own research or improve their foreign language learning plan.

1.2 Research Aims

The main aim of this research is to explore the implementation of the CBI in university English classrooms in mainland China through a mixed research methods. It will look at the perceived effectiveness of the CBI and the challenges of implementing it. One of the most important objectives is to assess teachers' and students' understanding of basic CBI concepts and theories. The second important objective is to analyze the data collected and better understand what these students and teachers really know about CBI. The study will also try to determine the participants' level of acceptance of the CBI teaching model. This study is based on two notions: the principles and basic concepts of Content Based Instruction (Mohan, 1986) and two fundamental questions in Chinese college English majors and college English teaching reform: 1. What is taught, what courses are offered; 2. How to teach, which method is used (Sun and Li, 2011). The CBI teaching method is of great significance to the reform of English education in Chinese colleges and universities, and the education community has always questioned the true validity of this model. This research will apply a mixed methods approach (see Methodology chapter). The quantitative component will involve a questionnaire and the qualitative component will involve interviews that will be analysed using thematic analysis. In addition, narrative inquiry methods will be applied in the data analysis. All these methods will be adopted to answer two research questions:

(1) Do teachers in China universities effectively conceptualize Content based instruction ?

(2) What are the perceptions of teachers on the benefits and challenges of implementing CBI in university English classrooms.

2. Literature Review

2.1 Content Based Instruction

A variety of reasons of implementing content based instruction have been provided in the literature. In the field of second language acquisition research, some scholars have proposed language learning goals and successful language acquisition examples. Among them, Krashen' view has had a profound impact on the foreign language teaching model. Krashen claims that a L2 can be most successfully acquired when the learning conditions are similar to those for L1 acquisition (1982). Then Crandall (1994) gave the theoretical basis of comprehensive teaching on this basis. He believed that the focus of teaching should be meaning rather than form, and the focus of the second language classroom should be on meaningful things, such as academic content. Integrated language and content could offer a method by which English as a second language (ESL) students can continue their academic development while they are also acquiring target language proficiency. It also offers methods for the foreign language students to develop fuller proficiency in the foreign language which they are studying. After the CBI was formally proposed Brinton, Snow, and Wesche (1989) fully demonstrated the CBI's teaching advantages: in the content-based approach, language activities are specific to the subject of teaching and are designed to be used by target language stimulates students' thinking and learning. This method is naturally suitable for teaching that integrates four traditional language skills. This point of view has been widely cited in subsequent studies and has become one of the authoritative reasons for implementing CBI. Based on these research results, Grabe and Fredricka (1997) further developed the rationale for the implementation of CBI, and described seven specific reasons in detail: "1. In content-based classrooms, students are exposed to a considerable amount of language while learning content." In other words, this accompanying content language is understandable, linked to their language learning, and related to their needs. This meets all important criteria for successful language learning. "2. CBI supports contextualized learning" Languages taught to students are embedded in relevant textual contexts and not taught in isolation. In the CBI classroom, students have many opportunities to use the language and naturally negotiate the content discourse context through the language. "3. The use of coherently developed content resources allows students to call on their own prior knowledge to learn additional language and content material." Fourth, the CBI classroom makes students more motivated, because they can feel their own improvement. Next, CBI supports multiple learning models in a natural way, such as approaches as -cooperative learning, project-based learning, experiential learning, and apprenticeship learning. Finally, "CBI allows greater flexibility and adaptability to be built into the curriculum and activity sequences." Finally, "CBI lends itself to student-centered classroom activities." It means CBI gives students more room for self-selection. In summary, the conclusions of these scholars have provided a theoretical rationale for CBI.

2.2 Implementing CBI in the EFL classrooms

Around the world, a great number of scholars and teachers have conducted research and teaching practice based on the CBI model, and provided a variety of views which includes the positive effects that CBI brings to classroom teaching, as well as the problems and challenges found in specific practice. In a CBI practice study conducted in Ho Chi Minh City, Vietnam,

the researchers surveyed the teachers and students of three local universities and educational institutions and collected their views on the implementation of CBI. The authors believe that CBI is difficult to implement in underdeveloped English education countries like Vietnam. This is reflected in the fact that on the one hand, the teachers interviewed said that the students' English foundation was very poor and, therefore, they could not successfully complete the classroom activities or reach the expected course goals. The students who accept the CBI course think that there is a huge problem with the teachers' English level. They cannot use English fluently to teach subjects. The research report pointed out that the reason why the CBI model failed to play a role in Vietnamese universities is that the English proficiency of students and teachers cannot meet the needs of the classroom, and related personnel policies and the government failed to play a role. At the same time, the report also specifically pointed out that in the classroom where, content and language are combined, the lack of content has caused difficulties for English subject teachers using CBI. When English teachers use English to teach other subject knowledge, it is often difficult to find suitable materials and literature in the language (Bui Phu Hung and Tran Thi Hai, 2016). Similarly, Morton believes that a major challenge of CBI practice is teachers' perceived lack of pedagogical content knowledge necessary for high quality content and language integration in all types of content-based instruction. But unlike previous research, Morton believes that CBI is still a potential teaching method and idea, especially for foreign language teaching. The idea of resolving the challenges has been explicated in different perspectives by him. He is also one of the supporters who apply sociology to CBI, combining the conceptual, heuristic framework with grounded, situated analysis to provide deeper understanding and useful tools for CBI teaching. And he refuted the question about the source of the literature in the CBI model based on his own research. He argues that this should be attributed to the teachers' lack of preparation (2016). In a study looking at how to improve student participation through CBI, researchers suggested giving students more involvement in selecting content in order to meet the challenges encountered in CBI practice because researchers found that students always have a strong desire to learn about the content they are interested in. They pointed out that language teachers might not have sufficient knowledge for the content part of the CBI program, but through students' content responsibility, the language teachers may moderate their inhibitions as for "content" part of CBI to promote active participation in the FL classroom (rfan Sari, Bülent Alçı, Hakan Karataş and Ali Ejder, 2015).

In general, most supporters of CBI believe that CBI is advanced and effective, but some scholars still deny the possibility of implementing CBI in all contexts. In a study of Mexican English teachers (Hererra, 2016), the data showed that although some participants learned English through CBI, it was not recommended because of what was seen as an inappropriate context. At the end of the research, the author suggests further studying the practice of CBI. This study's findings contradict much of the previous literature. The data shows that even if the participants already understand the theoretical benefits of CBI, their views on CBI are still basically negative.

2.3 Implementing CBI in the ESL classrooms of China

Shen's statement of the drawbacks on CBI English teaching in Chinese universities is fully justified and endorsed by experience. In the report, she mentioned that CBI is facing severe challenges in colleges, the most of the English textbooks in colleges and universities emphasize English as a tool of language, and the cultural attributes are quite weak; CBI has high requirements for teachers' personal qualities; CBI teaching methods put students' English level forward higher requirements (2016). But the results of some studies focus more on the effectiveness of CBI in practice. For example, CBI can effectively help students improve their English writing skills (including the ability to use vocabulary and construct text structures rationally, and improve students Learning interest (Liu and Wang, 2017).

However, these studies only stayed at the conceptual level, and most of their opinions are from summarizing previous literature. Lei (2006) contextualized and systematically described the practice of CBI in the context of Chinese university educational reform. He mentioned in the report that the directives issued by the Chinese government are aimed at training compound language talents, and professional skills are the foundation of English majors, which means that English students should pay more attention to English subject expertise. However, he argued that the key to training compound English talents is how to deal with relevant professional knowledge courses which means English learners cannot ignore the professional knowledge of other disciplines, so as to help improve the competitiveness of talents, and it also indicates the problem of inappropriate teaching methods and policy guidance. This factor has also been noticed by other scholars when examining the effectiveness of non-English majors using CBI. Many researchers in China found that the policy had a great impact on the specific teaching. Several educational institutions are eager to achieve success even if they have used CBI without a comprehensive analysis of the approach. Most institutions do not have qualified teachers for CBI teaching.

2.4 Critical Comments on the Previous Literature & Research Gap

In research methodology, a certain number of current literature has applied more scientific investigation and research

methods including quantitative and qualitative research. The investigation process is more detailed and rigorous. Meanwhile, including quantitative data analysis tools, such as SPSS and quantitative analysis, which to a large extent guarantee the credibility of data processing, are also been adopted. In addition, in terms of content, the relevant literature provides relatively diverse topics, such as the development of CBI from the perspective of personnel policy; conceptualizing and investigating teachers' knowledge for integrating content and language; and the challenges and effectiveness of CBI. Nonetheless, there are still tremendous of problems in the previous studies. Only a few studies provide detailed accounts of the research process, but most of these studies focus on the effectiveness of CBI. Shen (2016) stated that many of the CBI researches in China are superficial, most of them lacks dialectics, there is not enough examination on the drawbacks of CBI, and overall there is a lack of in-depth discussion on CBI. Moreover, the number of recent studies on CBI is small. Most researchers seem to prefer to focus on emerging online education or other new teaching models. In China, due to the small spread of the CBI concept, most of the research is still at the introduction stage, and there are few educational institutions that actually implement CBI, which also leads to the lack of relevant literature. Lastly, no existing literature examining teachers' conceptualization of CBI is found, undoubtedly, this topic urgently needs to be explored and discussed in depth.

3. Methodology

3.1 Participants in the Research

3.1.1 Teachers

There are four teachers to interview, including 2 CBI experts. These teachers are willing to accept the author's invitation to participate in this research, and they have all been or are engaged in CBI teaching. The two experts are professors of Chinese higher education institution while the other three are Chinese bilingual teachers. Their basic information is as follows:

Table 1. Teachers Involved in the Interviews

Name	Age	Years of Teaching	Merit/Ability	Education experience
Teacher A	25	2	English conversation lecturer	Master of TESOL
Teacher C	38	10	CBI Teaching Leader	Ph D of Education
Professor A	45	20	English Literature professor	Ph D of English
Professor B	50	23	Dean of Teaching	Ed.D

3.1.2 Students

The study included five CBI- educated students as participants. These students came from a range of universities of different level in mainland China. There are students from '985' colleges and universities, 'Project 985' is a project that was first announced by CPC General secretary and Chinese President Jiang at the 100th anniversary of Peking University on May 4, 1998, to promote the development and reputation of the Chinese higher education system by founding world-class universities in the 21st century, the 985 institutions represent the highest level of Chinese higher education (The University of Edinburgh, 2020). And there are also students from ordinary Chinese colleges and universities, as well as junior college students. Their English proficiency is different, and their learning ability and motivation are also different.

3.2 Questionnaire Used in the Research

A questionnaire was adopted in the data collection step of this research as an anonymous method to collect reliable data from students and teachers. The questionnaire in this study undertakes two main tasks. One is to collect participant information to facilitate the screening of participants who would participate in in-depth interviews; The second is to investigate the participants' understanding of CBI. The method is to set the question and finally calculate the score, digitize the participants' understanding of the CBI, and graph to obtain preliminary data. In this way, the data can be analyzed most intuitively and scientifically, and the participant's score is the subject of quantitative research. In this case, the questionnaire is regarded as a more appropriate method. The purpose is to eliminate unqualified participants and ensure the quality and credibility of the data. Due to the current pandemic and geographical issues (the author is in the UK, and the participants are mostly in China), a paper-based questionnaire is difficult to distribute to the participants. As Wright (2017) noted that "Advantages include access to individuals in distant locations, the ability to reach difficult to contact participants, and the convenience of having automated data collection, which reduces researcher time and effort." This also proves that the online questionnaire can largely solve the challenges encountered in the data collection process of this study. And one of the advantages of online research is that it uses the ability of the Internet to provide access to groups and individuals who are difficult or impossible to

reach through other channels (Garton, Haythornthwaite & Wellman, 1999; Wellman, 1997). The questionnaire contains two versions, version A for teachers and version B for students, version A focuses on theory and teaching practice, and version B focuses on application and personal experience.

(1) Teachers: The questionnaire was divided into two parts, the first part is the basic information, and the second part is the understanding level survey. Part 1 was used to find out about the background situation (age, how long they have been teaching, teaching institution, etc). Based on the survey results, several teachers were selected for interviews. Part 2 was designed based on the Content based instruction theory in order to measure the teachers' level of understanding and acceptance of CBI.

(2) Students: Questionnaires will be used to know their basic background and perceptions on learning by CBI. The questionnaires will include demographic information including age, learning status, English level, grades, in addition to their impressions of CBI. Information obtained will be used to inform the in-depth interviews that follow.

After the questionnaire design was completed, 20 students and 10 teachers were recruited to participate in prior testing, the reliability (Cronbach's α) of the scale in this study is 0.93. In addition, due to the strong professionalism of this field, two senior professors were invited to jointly review the scale in this study. After confirmation by the two professors, the scale fit a good validity.

3.3 Interviews

King and Horrocks (2016) made a clear statement on qualitative research, face-to-face communication takes place in our daily life every day, which may be the reason why researchers see interviews as a suitable research tool. It is undeniable that qualitative research has become the mainstream of survey research methods in the social sciences. To a certain extent, the hybrid research method that combines the precise measurement of quantitative research and the humanistic investigation of qualitative research is more suitable for most academic research, such as this research. Therefore, this research uses both questionnaires in quantitative research and in-depth interviews in qualitative research as data collection methods.

(1) Teachers: In-depth interviews will be conducted with professors to get more reliable views.

(2) Students: Interviews will be conducted with students who have received or are currently receiving CBI English teaching in order to understand their attitudes towards CBI and their Perception of CBI as a concept.

3.4 Ethics: Informed Consent & GDPR

The written consent form was given in the when recruiting participants. Participants were informed that all data would be kept confidential and protected. After obtaining the data, it will not be shared during the research process, all data will be deleted immediately after the research is completed.

4. Results and Discussion

4.1 Quantitative Results and Analysis

4.1.1 Questionnaire For Students

Duration of receiving CBI education

For a learner of a CBI course, the length of receiving CBI education will often affect their understanding and feelings of the CBI course, and personal enthusiasm will change with the change of learning duration. Depending on the questionnaire data, out of a total of 39 questionnaires, 27 questionnaires gave valid answers and 12 were missed. In the available data, the number of people who chose "six months to one year" was the least, with 7 people in total, accounting for 25.93% of the total. The number of people who choose "longer than one year" is the largest, with 12 people, accounting for 44.44% of the total. There are 8 people who choose "less than half a year", accounting for 29.63% of the total. It can be observed that most of the participants have been educated in CBI for more than half a year, and a small number of participants have not been for more than half a year.

Subjects on Which CBI is Based

In the item of "Subjects on which CBI is based", the answers of the participants showed great diversity. In a total of 39 questionnaires, all participants responded to this question, and the effective rate was 100%. Data shows that these disciplines include accounting, geography, history and culture, e-commerce, translation, mechanical engineering, computer, education, history, fine arts, bridge engineering, visual arts, mathematics, civil engineering, British and American history and culture, management, etc and a total of 18 disciplines. After sorting out the data, these subjects can be roughly structured in several directions. Among them, history is the most numerous, including European history, American history, American history, ANZ history, British history, accounting for about 23.4% of the total. Secondly, about 5.2% of the participants' answers is

translation. Generally speaking, the subjects studied by the participants are widely distributed, but most of them are focused on the field of social sciences. Only a few participants have accepted English teaching based on engineering and science. At the same time, the data also show that financial disciplines also have an advantage in the total, of which accounting accounts for about 2.6%, and e-commerce accounts for about 2.6%. Art subjects made up the smallest proportion, only 2.6%.

Perceptions on CBI teaching

Of the 39 questionnaires, 25 answered the question and 14 were missing. Among the answers collected, the number of people who chose "yes" was the largest, with 17, accounting for 68% of the total. The number of people who chose "no" is the least, with 2 people, accounting for 8% of the total. There are 6 people who choose "maybe", accounting for 24%. This shows that most of the participants are clearly aware when they receive CBI education.

Regarding the relationship between the content of the CBI course and language, up to 82.62% of the participants believed that the CBI course was a balanced mix of subject knowledge and language. In addition, 76% of the participants disagree that CBI is purely language teaching, and 66.67% disagree that CBI is purely subject knowledge teaching.

For this question, 79.17% of the participants believed that the materials used in the CBI model were more authentic and real than other teaching methods, and 20.83% opposed it.

4.1.2 Questionnaire For Teachers

Considering that this study needs to use questionnaires and interviews to collect data, and most participants do not wish to spend too much time participating in a research, the teacher questionnaire is also set to about 10 questions. Divided into three parts, the information page (consent form related content); the personal information part, this part contains the participant's personal information, age, teaching experience, etc., and does not involve any identifiable information; the third part is main body, This part mainly includes three topics. 1. The familiarity of the participants with the basic concepts and theories of CBI; 2. The benefits of the CBI course; 3. The difficulty encountered by the CBI course that teachers find in daily teaching.

Conceptualization of CBI

33.33% of the participants stated that they clearly knew the exact model of the course they were teaching, 46.67% said they might know but were not sure, and 20% said they did not know. Participants also have various definitions of CBI, such as simply "teach this professional knowledge in English"; teaching accounting in English and make students master the basic vocabulary and proper nouns involved in accounting, so as to improve their English proficiency. "The CBI teaching philosophy has changed the single language skills course model in traditional teaching, combining content course with language course, and improving English proficiency while learning content." At the same time, it was also proposed that "CBI teaching philosophy has changed the single language skills curriculum model in traditional teaching, combining content courses with language courses, and placing the improvement of language skills and the development of subject knowledge in an equally important position." Someone also explained CBI from the perspective of second language acquisition. "The essential connotation of CBI believes that any second language acquisition needs to be based on content, and its goal is most conducive to language learning". In general, most participants can accurately describe the essence of CBI theory from the perspective of the subject they teach, but there are still a small number of participants that cannot accurately define CBI theory.

In terms of the relationship between the content and language in the CBI course, 40% of people think the subject content is important, 60% think it is very important, and no one chooses the extremely important option. On the other hand, 26.67% of the participants consider language skills are important, 53.33% think language is very important, and 20% think language is extremely important. 46.67% of the people thought that the materials used in the CBI course were more authentic than other teaching methods, and 53.33% chose "maybe", expressing their uncertain attitude, and no one chose the "no" option. When performing data analysis, the "yes" option is coded as 1, and the "no" option is coded as 2, and imported the data into SPSS, the mean of this group of data is 1.53, and the standard deviation is 0.5. This shows that people are more inclined to "maybe", which implies that most participants cannot give a clear opinion on the authenticity of CBI materials, and a small standard deviation means that the degree of data dispersion is not high, indicating people's thinking is relatively close, and there is no polarization.

In CBI theory, the relationship between subject knowledge and language skills is one of the foundations of supporting theory. How to deal with the relationship between the two can directly reflect whether users are familiar with the basic concepts of the theory. Most people disagree that CBI is purely teaching grammar vocabulary or subject knowledge. It is relatively obvious that a large number of people agree with the statement of "balanced distribution of subjects and languages."

In terms of the application of CBI, 46.63% of the participants believed that CBI was most suitable for college English classes, and 25% thought that college mathematics classes were most suitable. At the same time, 10.71% of people think

that CBI teaching can also be used in elementary school English classes, and 14.29% of people think that elementary school mathematics classes are suitable for CBI mode.

4.2 Qualitative Results and Analysis

In this research, the qualitative analysis uses the thematic analysis method, which is divided into six steps to complete the analysis of the interview records of the four teachers. The six steps are 1. Familiarisation with the data; 2. Initial coding generation; 3. Searching for themes based on the initial coding; 4. Review of the themes; 5. Theme definition and labelling; 6. Report writing (Howitt & Cramer, 2007).

4.2.1 Familiarisation & Initial coding

After finishing the interview with the teacher, the author transcribes all the interview content into text and makes a table, this is to familiarize with the data and obtain the initial code from the data.

4.2.2 Searching Themes

After the initial coding, the author got a long list of different codes. The code at this stage focus on a wider range of themes, and then the author classifies the code as potential themes. In order to better observe, the author used visual renderings (mind maps) to order the code. At this point, some codes from the main theme or sub-theme, while other codes are discarded or kept as outliers. Since the author adopted a question-and-answer format when conducting interviews, the topics in this interview material were clearer and the structure was more rigorous. After the initial coding, there were mainly 7 themes: 1 Context, 2 Why CBI, 3 Reaction, 4 Teachers, 5 Students, 6 Materials and 7 advantages.

4.2.3 Reviewing themes

This stage concerns the refinement of the subject. The author decomposes some themes into other themes, and some themes are decomposed into smaller components. This is a redistribution of themes and a re-examination of the hierarchical relationship between themes. In this process, the author found that some themes cannot cover all the codes that have appeared, and at the same time some themes can be merged to form a more reasonable theme. In addition, the hierarchical relationship between the themes needs to be adjusted, so after the author's adjustment, the following results are obtained, as showed in Figure 1 below.

A finding is that the context is not very relevant to this research, but the English proficiency and the student item overlapped, so the author made a merger and adjustment. The original "student reaction" appeared as a first level theme, but it is obvious that many related codes cannot be fully included, but the "student" theme can fully include the student reaction, so the author turns the "student reaction" into "student" as a second level theme. In addition, after reviewing themes, the connection and mutual influence between themes was also found. For instance, first level theme "Why CBI" shares similar factors with second level theme "Professional CBI training", which means they are closely connected and influence each other. This kind of complicated relationship is inevitable in theme analysis, and it is also very crucial, so it is represented by a two-way red arrow in the graph.

4.2.4 Defining and naming themes & Final Report

In the analysis and graphs in the previous article, the relationship between the themes has been very clear, and the codes are also in line with the requirements of the theme to which they belong, which means that the logic is smooth. In this part, the author named the important themes and finally formed a comprehensive framework. After careful sorting of the interview materials and thematic analysis, this research has obtained the qualitative data analysis results. It can be seen from the data, which mainly divided into two major themes, one is difficulties, and the second is advantages, which is the benefits mentioned in the research question. There are two aspects in the difficulties, one is students and the other is teachers.

Difficulties

In Chinese college English classes, the CBI model has encountered many difficulties. From the perspective of students, most of the students' interests are not compatible with the teaching content, that is to say, students are not interested in the teaching content. In the interview, a teacher even told the researcher straightforwardly that this has little to do with the teaching method, but the students themselves are not interested in the content, and no matter which teaching method is used, it may not be changed. The second is English proficiency. For Chinese college students, Mandarin-speaking students make up the majority while there are almost no native English speakers. English learning at school is very limited, so most students do not good at English, especially for Test-oriented education influences, many students only learn reading and writing and ignore speaking and listening. Because speaking and listening are not the test content in many places in China. It is particularly important that there are a large number of technical terms and concepts in CBI course, which is a great challenge for students with poor English proficiency. After students have become accustomed to such an English teaching model since childhood, their acceptance and learning abilities are greatly affected. It can be imagined that a student who has practiced English for the exercises on books since childhood and rarely listens and speaks suddenly enters the CBI classroom, what



Figure 1. Reviewing Themes

a terrible thing. This is a chain reaction. When students cannot adapt to this new teaching method, it is difficult for them to participate in classroom activities, which mean that the classroom is not active enough. This is equally a difficulty in the implementation of CBI in Chinese university English classrooms.

From the perspective of teachers, pre-class preparation is undoubtedly a huge difficulty. Data show that teachers generally complain that CBI course requires lots of preparation work, including language knowledge and subject content, which consumes a lot of energy and time while puts them under great pressure. And CBI teaching materials have been one of the distressing things for teachers. It is necessary to ensure the professionalism of the content and the academic nature of the language. The reference books and textbooks should be suitable and authoritative. The problem is the source of materials requires reliable and authoritative, collecting such teaching materials is time-consuming and energy-consuming. In addition, high-quality teachers are also a necessary prerequisite for the CBI teaching method. There are two main types of CBI teachers in Chinese universities: 1 professional language lecturer, 2 professional subject lecturer. The professional language instructors here which means English teachers, generally majoring in English language and literature. The professional lecturers are often not graduates of English majors, and their majors are very diverse, such as finance, engineering, business and etc. In this case, for professional language teachers, the subject content is a big challenge for them, such as the CBI business course. They need to know business knowledge before they can teach students, and other subjects share the same situation. For professional subject teachers, language has grown up to be an obstacle for them.

Advantages (Benefits)

Even though CBI has encountered many difficulties in Chinese universities and students and teachers have complained about it, CBI still has its unique advantages. According to the survey data, people think that CBI is undoubtedly a good way to improve English proficiency, and they also learn other subject knowledge while learning language, and give students a language atmosphere through immersion teaching methods. Such an environment is more effective for improving English

proficiency. Even if students' interests are largely unaffected by teaching methods and are not closely related to content, compared to traditional language teaching, the content of CBI is indeed more interesting and easier to attract students. Of course, this still depends to the students' own interests.

5. Discussion

In the existing academic research, many scholars have made similar findings to this research but there are still many differences between our research findings.

In research of Wang (2016), there are five main findings: 1. Understanding the key concepts 2. Lack of relevant reference materials 3. Inconsistent levels of students 4. Unfamiliar content, language barriers 5. Lack of high-quality teachers (p. 24). Obviously, both of our researches found that the importance of materials and teachers. In the findings of this study, the author mentioned that teachers need to prepare for a long time before class, and relevant teaching materials are very hard to obtain, including reference books and textbooks. In words of Wang (2016), "which makes it hard for them to access the reference materials that they need through reading more books in the library or searching online" and "In brief, the lack of access to reference materials prevents students from gaining a wider perspective on the science topics covered in the course" (p. 25). Similarly, the lack of high-quality teachers has been mentioned in our research, which has become one of the principal difficulties for the implementation of the CBI model in China. Wang (2016) explained that "many native English-speaking teachers do not have the necessary training and experience to be effective instructors. Some of the teachers focus too much on mastery of the material whereas others focus on training students in their English language skills instead of combining both" (p. 26). It can be observed that even if Wang's research objects are high school students, there still the same predicament in CBI teaching. Moreover, there are more differences in our research. In the research of Wang (2016), the inability to understand the concepts in the content has become one of the main difficulties of CBI, but this research found that the teaching effect is not closely related to the content but more importantly students' interests. In terms of students' English proficiency, as Wang (2016) have noted, "top students are usually dissatisfied with the breadth and depth of the material covered in each lesson, while intermediate students often find themselves incapable of grasping it all" (p. 25). He believes that does not enable teachers to adjust the course schedule accurately because teachers need to ensure that most students can digest what they have learned. But in this study, through the analysis of the data, it is found that even university students, because they have hardly received CBI training, the listening and speaking skills of these students are generally poor. It can say that these factors hardly affect the teaching efficiency of teachers.

In the work of Lei (2006), an authoritative scholar in the field of CBI research in China, he mentioned that difficulties of CBI in China are mainly concentrated in five areas. The first is the lack of high quality teachers. "qualified teachers should have both language and professional content and this requirement is a great challenge for teachers engaged in teaching" (2006, p. 36). This view is in agreement with the findings of this study, and both emphasize the importance of teacher quality. This study found that as a CBI teacher, you need to be proficient in the language and also good as the subject content in order to be able to take advantage of CBI. Similarly, the issue of teaching materials was also mentioned. As Lei (2006) revealed that there are few teaching materials that can combine content and language. However, this study found that the difficulty of obtaining teaching materials is an important obstacle to the implementation of CBI, because CBI teaching requires a combination of language and content modules which means the materials should have high-quality. The similarity also exists in terms of "content", which subject should be based on CBI course is a vital issue. Lei (2006) explained that teachers or students should combine their individual characteristics and specialize in the choice of which subject to combine. The author would like to have welcome any examples or further explanation, but there is not much more. However, the conclusion drawn from this research is that the content of the course is important but more important is the student's interest and acceptance ability. In other words, even if the content and language are perfectly combined, the student is not interested or unable to digest the knowledge learned and these are all in vain. Lei's research also mentioned the influence of the mother tongue. He revealed that courses taught in Chinese would undermine the effect of CBI course which means the efficiency of CBI will be deduced (2006). The author has reservations about this view, because although there are data in this study that show the impact of English proficiency on the implementation of CBI, there is no direct evidence that Chinese courses will have a negative impact on CBI, which is essentially different. What's more, there is no explicit explanation and investigation process in Lei's study.

The "interesting materials" in the CBI course has also been raised in other studies, as Liu and Wang (2017) have noted that, "Students can choose materials they are interested in for supplementary reading (this makes their interest in learning more intense"[my translation]. However, unlike this research, almost no relevant research mentions the decisive role of student interest. In general, most researchers start from a macro perspective rather than from the perspective of the teaching

subject (students, teachers) as in this research. Diverse research angles directly lead to differences in conclusions. Other studies often draw general conclusions and are not targeted. The findings of this research focus on Chinese college English classes and Chinese higher English education. Secondly, the conclusions of other studies are often too optimistic about CBI, while ignoring its applicable environment and strict conditions but this study found more difficulties in the implementation of the CBI model.

Immersion in the English environment can not only help students to improve their language ability, but also enrich the model to learn. This kind of course contains a variety of knowledge in specific fields, which can broaden students' horizons and provide them with more opportunities to use English in different disciplines, rather than just learning the language rules. However, implementation of the CBI model in a specific environment requires specific analysis and selection of different strategies, and the decisive factors are the level of students and the ability of teachers. For students with poor foundations, simpler methods such as topic-based teaching can be used, while for students with better English proficiency, immersion teaching may be more appropriate. In general, after the decision has been made to use the CBI model for teaching, it is necessary to make a good assessment of the teacher's teaching ability and the student's ability to accept it, so that the CBI model can exert its due effect.

For teaching institutions or individuals who are considering using CBI for teaching, they should seriously consider whether existing conditions can meet the requirements of CBI teaching, and ask the following questions: whether students are capable of accepting CBI; whether the quality of teachers can meet the requirements of CBI teaching; Can the institution provide sufficient support to teachers and students? If the above conditions are difficult to meet, CBI teaching may not be a good choice. Once the course is started, due to the above objective conditions, the classroom effect is not good, and the students' interest and enthusiasm in learning will be greatly affected.

CBI teaching focuses on content and is based on language, which is essential for the study of CBI theory and basic concepts. In this case, it is very important to strengthen the professional training of teachers and effective guidance to students. In terms of the selection of content, the embedding of language modules, the combination of language and content, and the application of emerging teaching technologies, it is necessary to conduct a certain degree of research on CBI theory and make a prudent decision to implement it. The choice of content need to be flexible, and it is required to be oriented by the students' interest and be equipped with corresponding teachers. In the specific implementation process, teachers can set classroom tasks and require students to complete them in groups to strengthen students' communication and collaboration skills; after-class tasks can be arranged to require students to select topics and materials they are interested in and conduct group work; Investigate students' interests in advance to select the best topics and content.

In addition, the understanding of culture of some English-speaking countries is very helpful for students to learn languages. Teachers are advised to share valuable information about English learning with students, and provide cultures that are useful to students in daily teaching. Practical information about culture can help students absorb what they have learned in English class. Perhaps the best way to understand the culture of English-speaking countries is tantamount to communicate with people from English-speaking countries. Teaching institutions should provide students with such support, such as equipping foreign teachers. If the objective conditions can be achieved, try to choose Chinese teachers with overseas backgrounds to carry out these tasks, but the premise is to ensure the English atmosphere of the CBI classroom.

6. Conclusion

This research aims to explore the implementation of CBI in Chinese university English classrooms. The main research question is the degree of understanding of the basic concepts of CBI by teachers and students, and the difficulties and advantages of CBI implementation. In this study, a mixed research method was used to analyze quantitative data and finalized data separately and finally draw conclusions. This chapter will be divided into three parts to describe the contribution, limitations and of this research and recommendations for future research. Although this study discusses the feasibility and effectiveness of teaching CBI in Chinese universities, including what benefits can be learned from CBI for students, it also concludes on the level of understanding of CBI concepts by teachers and students , But there are still many limitations and various subjective opinions. Firstly, due to the impact of the pandemic, the data collection process is very difficult which means that more data cannot be collected, and interviews with teachers are also restricted, and face-to-face interviews cannot be conducted. Secondly, research objects are relatively limited. Although the participants in this study included teachers and students from all levels of universities in China, due to the huge number of universities in China, the method of sampling survey will affect the validity of the experimental results. Finally, despite the fact that the author gave the research conclusions to provide reference for relevant practitioners, they still need to judge and solve the problem based on objective conditions. In the field of CBI research, there are a lot of studies on the effectiveness and feasibility of CBI, but the number

of studies on CBI theory itself and basic concepts is very small. The author suggests that relevant researchers can start from the perspective of CBI theory and conduct "how the degree of understanding CBI affects CBI practice".

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Conflicts

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