Abstract: Project-based learning (PBL) originated in the 1950s and has been widely applied to the education field. After reviewing previous research, this paper found that in input classes: 1) The ability to retrieve and read academic papers, critical thinking, analytical abilities, team organization and coordinated ability of students have been shown to improve. 2) There are still existing weaknesses such as task building and requirements on basic English level. In output classes, the paper found that: 1) The reading skills of undergraduates enhanced and the ability to use vocabulary and grammar correctly gained great progress. 2) Learners’ lack of motivation is still a problem. Moreover, this paper also provided some possible research directions for future PBL studies, and they could address some solutions or could develop comparative studies of PBL application in different countries. In this paper, college English classes in China will be divided into input classes and output classes. The ability to retrieve and read academic papers, critical thinking, analytical abilities, team organization and coordinated ability of students have been shown to improve, but there are also existing weaknesses such as task building and requirements on basic English level in the PBL applied input English courses in Chinese colleges. Likewise, the application of PBL in output classes has shown that not only have the reading skills of undergraduates enhanced, but the ability to use vocabulary and grammar correctly has also gained great progress. However, learners’ lack of motivation is still a problem, according to which there are also solutions at the end of this paper trying to solve the existing problems found in the application of the PBL model in Chinese English courses.

Keywords: Project-based Learning, Chinese College English Education, Strength, Weakness.

1. Introduction

The PBL approach has been reported to have numerous benefits in second language acquisition. In particular, with the development of technology, in this era of rapid technological advance, the society’s demand for the learning of college English requires students to have interdisciplinary talents.
The teaching of English at university should help students develop a different skill, including the ability of listening, speaking, reading, and writing [1]. This review paper aims to investigate two questions: what the process of PBL in Chinese college English education is? What are the strengths and weaknesses in the application of PBL in Chinese college English education? This paper mainly analyzes four types of English college classes: listening, speaking, reading, and writing, which is the main classification of current English college education in China.

2. The Development of PBL

2.1. The Overview of PBL

Problem-based learning is a teaching method that has attracted extensive attention in recent decades, it advocates setting learning in complex but meaningful problem situations. Also, it encourages learners to cooperate not only to solve authentic problems but also to acquire implicit knowledge. PBL has a close inheritance relationship with previous educational theories due to problem-oriented teaching ideas [2]. Meanwhile, it is also related to the current constructivist learning theory and reflects it to a greater extent.

As a generalized method, PBL originated in American Medical Education in the 1950s. In 1969, McMaster University in Canada officially launched the PBL mode within the college and this mode was first adopted by medical colleges [3]. PBL is a problem-oriented teaching method, which is based on a student-centered mode. Teachers put forward problems in line with the teaching content based on the teaching objectives, and then conduct group discussions. In this process, learners need to collect relevant information or data independently. Then they find and solve the problems. To be specific, PBL requires teachers to describe certain phenomenon or events observably and ask learners to explain or give solutions. Then students need to discuss and elaborate all the problems in detail. However, during the period of group discussion, a difficulty would appear. To solve the required task, learners ought to study separately. Different from the traditional subject-based on the teaching method, PBL emphasizes learners’ independence and autonomy instead of teachers’ teaching. There is an example that in 2009, 61 undergraduates from Hunan University were asked to investigate the trendy types of English films among the whole school and to find out the reasons within eight weeks. Learners collected relevant information by sending questionnaires in groups and watched an English film every week from the third to the sixth week and completed a learning dairy in order to better understand the film and form their own views. Finally, all the researchers analyzed the reasons for the popularity of a certain type of English film through group discussion. The result has shown that through English Learning under PBL mode, not only undergraduates’ English level has been improved, but their independence of finishing a task and autonomy has also enhanced [4].

Nowadays, it is a trend that PBL teaching mode is increasingly adopted by various fields in education, such as business education, architectural education, engineering education, legal education, and social work education. Moreover, it is consistent with the current trend of education in China [5]. Therefore, it is also meaningful for Chinese teaching ideas to reform.

2.2. Current Educational Background in China

Examination-oriented education has existed for quite a long period of educational history in China, leading most Chinese educators to deviate from the cognitive idea that the goal of education is to pass exams. In previous college English education in China, teachers have focused on dealing with the understanding of articles, vocabulary, grammar, etc. They did not give students opportunities to carry out cooperatives and did not let them learn autonomously. Instead, they imparted abstract knowledge in a limited time, which broke away from the real-life situation of English. This kind of teaching style
has greatly reduced the students' ability to obtain and process information and ignored the training of students' ability to analyze and solve problems [6].

In recent decades, most of the English classes in China were conducted and carried out by teachers who always integrate the contents of textbooks and fragment the knowledge before teaching. Therefore, most students have regarded the textbooks and teachers as the only standard, lacking the ability to critical thinking. Therefore, students are better at examinations under the same standard mode, but the actual effect of teaching is different to be qualified [7].

Under the background of the New Curriculum Reform [New Curriculum Reform is called "New Round of Basic Education Curriculum Reform". At the end of the last century, the Central Committee of the CPC and the State Council proposed to "deepen the educational reform and promote quality education in an all-round way". The purpose of the new curriculum reform is to build a basic education curriculum system that meets the requirements of quality education in the 21st century.], the development of students' quality has become the focus of teachers' teaching. How to bring students' initiative into play in teaching and improve the efficiency of learning has become a major concern for teachers. The application of PBL teaching mode in Chinese education can better exercise students' thinking and stimulate their interest to improve students' learning efficiency, thereby promoting the improvement of English teaching quality.

Nowadays, when the new curriculum reform concept is integrated into English teaching, it always emphasizes the cultivation of comprehensive literacy, especially the cultivation of students' self-learning ability and the development of cooperative learning ability as the teaching focus. Students can judge various ideas and express their own views rationally. They can obtain learning resources by themselves through information channels and plan their own learning time reasonably after class. It must be said that the current situation of English teaching has been adjusted and improved in recent years. Most front-line teaching practitioners can realize the student-centered learning position.

However, in general, some teachers fail to use advanced teaching methods to design effective classroom activities, the atmosphere of English classroom teaching cannot be fully mobilized, enough output of practice cannot be achieved, and students' motivation to learn needs to be improved. The biggest problem is that after teaching, teachers do not train students to use what they have learned to solve practical problems. Traditional English teaching models need to be improved and sublimated.

3. The Process of Project-based Learning in Chinese College English Course

Studies on the application of PBL approach in Chinese College English courses have shown that the process of a comprehensive PBL approach should be divided into 3 steps in Chinese college English courses.

3.1. Task Building

The first step in the process of PBL is task building, during which the teachers are required to choose a topic for students to finish and to create a real-life situation that boosts the students' interest on the learning process. According to Zhao, a well-organized task building can make students willing to explore the task by themselves [8]. Although the PBL mode is student-based, it does not mean that students should take the lead in the whole process. In this process, teachers should scrutinize all the possible topics and choose an appropriate one for students, since a proper topic can make the learning process more efficient and more appealing to students.

In Chinese college English courses, teachers may choose the topic according to different teaching goals and different subjects. For instance, in an English-Speaking course, teachers can let the students to discuss over social problems or natural phenomenon that is closely connected with real life so that students may find it easy to follow according to Zhu [9].
3.2. **Groupworks**

Besides choosing an appropriate task for students, PBL mode also advocates group working, which is the most highlighted part in the whole PBL process. After determining the task, students should be divided into several groups to solve the task independently or collaboratively, during which students should play an important role to prepare the project. They may use various methods such as searching online or brainstorming to solve the problems they meet, while teachers are observers on students’ performance and assistants who can offer certain help when students find it hard to solve problems on their own according to Zhao [10].

3.3. **Discussion & Feedback**

The last step of PBL mode is discussion and feedback. Since one of the most outstanding characteristics of PBL mode is product orientation, each group should bring out a product after groupwork [11]. The product of groupwork should also be presented to the class in a form of a group presentation, debate, or examination. For instance, in some English listening courses in Chinese colleges, the students are asked to take a listening quiz besides giving a group presentation and they will receive a general feedback based on their quiz marks and their behavior during the group work according to Li [12].

In addition, the teacher should also form an estimate of the result and give feedback on the presentation or the product that are shown to the class. In this process, teachers need to give academic advice on the results. For example, in English writing courses, teachers can evaluate the essay based on academical elements such as grammar, vocabulary, sustained details and should also form feedback on the group performance based on previous observations from the second step of PBL process [13].

4. **Strength and weakness in the application of PBL in Chinese college English course**

English education in Chinese colleges is divided into reading, listening, writing, and speaking, in which the reading and listening part both require students acquire the ability of inputting and analyze information, while the writing and speaking part need students to organize and output the information after inputting. Therefore, the application of PBL in different parts of English education will accordingly lead to different results.

4.1. **Input**

4.1.1. **Strength**

4.1.1.1. **Ability of retrieving and reading academic papers**

The process of PBL teaching mode in reading classes requires undergraduates to search for a large number of relative documents, which will benefit their ability to retrieve professional English papers. Zhang argued that after forming their own groups, undergraduates must find, read, and organize materials from the vast amount of information available to them to illustrate their points [14].

4.1.1.2. **Critical thinking and analytical abilities**

PBL teaching model applied in reading classes can help to cultivate critical thinking and analytical abilities. According to Zhang, after finding related information, undergraduates have to conclude and present their own points to classmates and teachers. For instance, if the undergraduates choose the topic “domestic violence”, with a large number of papers, they will consider further questions like
“whether males are more privileged in the family under the existing legal system”. There is also effective feedback in listening class. Li considered that PBL model can stimulate the ability of undergraduates of active research. Thereby, their analytical ability can be promoted [15].

4.1.1.3. Team organization and coordinated abilities

When using the PBL model, it is helpful for improving the team organization and coordinated abilities in the listening class. Li holds the view that when making works, each group shall determine the way to display the learning results, such as dubbing, drama performance and microfilm. Compared with the traditional exercises, the new form of homework will undoubtedly stimulate the interest of undergraduates.

4.1.2. Weakness

4.1.2.1. Task Building

How to choose the task for the whole PBL process is the most difficult and important thing in designing a class. It is the key to the success or failure of the whole process. Without a proper topic, the teaching process cannot go ahead. Qiao refers that teachers should choose topics that are challenging for undergraduates but not too difficult for them to deal with [16]. Li argues that in the process of project selection, the team leader shall organize the team members to select the topics of interest from NEW HORIZON and design the outline [17]. Nevertheless, in this course design, not all the texts are suitable PBL teaching mode. New Horizon is mainly used in “teacher-center” classrooms. Teachers should be playing a guiding role. After delimiting the text scope with professional knowledge, undergraduates can select the task which they are interested in and begin to learn.

4.1.2.2. Requirements on Basic English Level

The application of PBL in English reading courses asks undergraduates to do plenty of professional reading, which requires a basic English vocabulary. During this step, a sudden increase in specialist vocabulary allows undergraduates with an advanced English level to adapt to the new format quickly. However, undergraduates with lower levels must struggle to keep up with the course. Zhang has given the solution that undergraduates should be divided according to their language foundation. Teachers should choose different topics for each group [18].

4.2. Output

4.2.1. Strength

4.2.1.1. Mastery of Reading Skills

The application of PBL in Chinese college English writing courses has been proved to be helpful in forming the ability to input skills [19]. As a writing project requires students to search enough materials such as reading passages or documentaries before writing, the ability to input and analyzing English information is also required. In an empirical study, Zhu conducted PBL teaching mode in an English writing course in Dalian University of Foreign Studies and analyzed the influences based on questionnaires from the students after a session's teaching. She found that students would read myriads of related academic papers before they started their own's, during which their ability of reading has been improved [20].
4.2.1.2. Mastery of Vocabulary and Grammar

Apart from enhancing of reading skills, PBL mode also has a positive effect on improving the ability to use vocabulary and grammar correctly. According to an empirical study by Zheng, after receiving PBL mode education in an English writing course for a session, the number of students who can use words, collocations, and grammar correctly to write an essay has increased, while the other group of students who didn't take courses in PBL mode hasn't shown great change in the usage of vocabulary and grammar [21].

4.2.2. Weakness

4.2.2.1. Learners with Less Motivation

Writing and speaking have long been two difficult parts for EFL students in China. In the context of using PBL in writing and speaking courses, the learner's autonomy is most highlighted. For students who are not good at English, they may find it hard to do all the searching and producing in writing and speaking courses and thus will be less motivated according to Yue [22]. To cope with the situation, teachers should take into consideration the ability of learners at the beginning, adjusting requirements according to the situation of different students.

5. Conclusion

To sum up, the purpose of this review focused on reviewing the current situation of the application of PBL teaching mode in English education among Chinese colleges. This review has covered the necessity of PBL application in the context of Chinese college English education and the general process of PBL application in Chinese college English courses. Also, it reviews the strengths and the weaknesses of the PBL teaching mode in the current situation of English courses in Chinese colleges from the aspects of input (i.e., reading and listening) and output (i.e., writing and speaking). This review has also unfolded some possible research directions for future studies. Since this literature review has only addressed a few problems of the PBL application in the context of Chinese college English education, future studies could further address some solutions or could develop comparative studies of PBL application in different countries based on this review.

References