An Exploration on PBL Teaching Model in College English Writing

-- An Integration of Internet Platforms and Classroom Teaching

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Abstract

PBL (Problem-based Learning) is a learning approach that focuses on problem-solving, emphasizing learners' initiative, active cooperation and participation, the system and application of knowledge, and the flexibility and diversity of learning process. Considering the new requirements of foreign language teaching and the advancement of educational technology in the context of new liberal arts, internet platforms are integrated comprehensively with classroom teaching in college English writing in this paper. Therefore, under the theoretical framework of PBL, this paper tries to make an exploration on a trinity cooperation teaching model consisting of students, teachers, and internet platforms with a goal to promote College English Writing teaching and, as a result, the cultivation of comprehensive abilities for college students.

Keywords

PBL; College English Writing Teaching; Internet Platforms; Teaching Model.

1. Introduction

PBL (Problem-based Learning) is a learning approach that focuses on problems, which originated in the mid-to-late 1960s at McMaster University Medical School in Canada and gained rapid development and promotion in North America during the 1980s[1]. Research on PBL abroad mainly covers four parts: exploration of PBL-based curriculum development models, especially in medical school courses; empirical studies on the systematic elaboration of PBL teaching curriculum development, implementation procedures, teaching strategies, and outcome evaluation from philosophical, psychological, and sociological perspectives; application of the PBL model in more disciplines and levels of education; and development and improvement of PBL in new stages and periods[2].

Introduced to China in the mid-1990s, research on PBL started relatively late in China and initially flourished in the field of medical education. Currently, research mainly focuses on two aspects: firstly, application of the PBL teaching method in various disciplines. In the medical field, Li Liangman[3], Hao Jiqing [4], Zhang Zhijun et al.[5], Hou Jie[6], Li Xiaohua et al.[7], Wu Hui et al.[8], Dong Yan et al.[9] explored the application of the PBL teaching method in orthopedics, clinical medicine teaching, cardiovascular system anatomy, digestive medicine, medical microbiology, general medicine introduction, and oncology specialization respectively. Meanwhile, in other disciplines, Xu Shengzhen[10], Zhi Yongbi[11], Zhang Yiqiang[12], Liu Yingwen[13], Qu Guanglei et al.[14] studied the application of PBL in organic chemistry, foreign language teaching, management, food microbiology inspection, advanced engineering thermodynamics, and civil engineering materials respectively. The second aspect is the construction and practice of PBL teaching models. Jiang Ping [15], Wang Qing et al.[16], Xu Jiang et al.[17], Song Tushun et al.[18], Chen Tao[19] constructed different PBL teaching models from multiple fields and disciplines such as medicine, aesthetics, engineering, and humanities.

All the researches and results on PBL have supported that it has several advantages: first of all, there is the emphasis on learners' initiative, active cooperation and participation. Learners change from passive knowledge recipients to active knowledge explorers and builders, with teachers' role of guidance and support. Moreover, a reflection of the the system and application of knowledge is stressed. Based on core concepts, basic knowledge, and basic skills of disciplines, PBL requires students to solve practical problems through systematic exploratory learning to transform knowledge into skills. The last but not the least is a highlight of the flexibility and diversity of learning process. In the PBL learning process, learners can utilize multiple approaches (online and offline), resources (classroom and modern information technology), and methods (independent learning and collaborative learning) for multi-level and multi-angle learning.

2. Review and Limitations

The traditional teaching and assessment of College English writing, which revolves around various exams such as CET-4/6 and TEM-4/8, is decoupled from professional disciplines. On one hand, it fails to improve college students' English writing ability or level, let alone meeting the demands of social development for their English proficiency. On the other hand, students' enthusiasm and interest in this kind of College English Writing teaching gradually decrease, leading to a lack of motivation for writing. Therefore, finding the integration point between professional disciplines and English writing and incorporating professional knowledge into English writing will be the breakthrough of this project.

Also, in traditional College English Writing teaching which adopts the model of "lecture - writing - feedback and revision", the third part - teacher's feedback, a crucial part of English Writing can never be fully fulfilled. It is inevitable that students' enthusiasm will be frustrated and the effect of improving their writing will not be satisfactory due to delayed feedback from teachers within a large class and time-consuming revision. Liang Maocheng and Wen Qiufang[20] also mentioned that writing is a necessary question type in large-scale language exams, and the marking confronts two major difficulties: one is the consumption of a large amount of human resources, material resources, etc.; the other is the so-called subjectivity, that is, the reliability and validity of essay evaluation is not solid.

According to Deloitte's[21] report, in 2012, Berkeley University in California developed GradeScope to simplify the correction process, so that teachers have more energy to carry out teaching feedback activities to improve classroom efficiency. At present, more than 150 well-known schools (OSU, MIT, etc.) use this product. Domestic artificial intelligence technology application started late, but it has developed rapidly in recent years, and there is an increasing number of studies on applying modern technology to English writing. Yang Yonglin et al. [22], Wang Na[23], Zheng Yongyan[24], Luo Qinqin[25] all mentioned using Internet resources and technology to promote the effectiveness of English writing teaching. However, from the perspective of college English writing research, firstly, there is not much combination of English writing and professional subjects. English Writing needs to be paid attention to the development of disciplines and connected with the needs of disciplines to cultivate the characteristics of English Writing. Secondly, the role of modern technology in English writing cannot be ignored, and English Writing teaching can take advantage of the convenience and effectiveness of modern technology.

To sum up, by drawing lessons from the researches and experiences of PBL abroad we can effectively promote the development of English teaching and learning in China. Therefore, College English Writing teaching, under the background of new liberal arts, should take a new step confronting new challenges in the new era. Therefore, this study tries to integrate traditional language teaching and learning, English writing and modern technology into College

English writing teaching under the theoretical background of PBL, and construct a College English Writing teaching model and apply it.

3. Application of PBL Teaching to College English Writing

3.1. Connotations of PBL Teaching

Since the concept of interdisciplinary integration in new liberal arts education and new requirements of College English teaching demand a reform and innovation in the process of teaching and learning, PBL teaching will be helpful in this transformation.
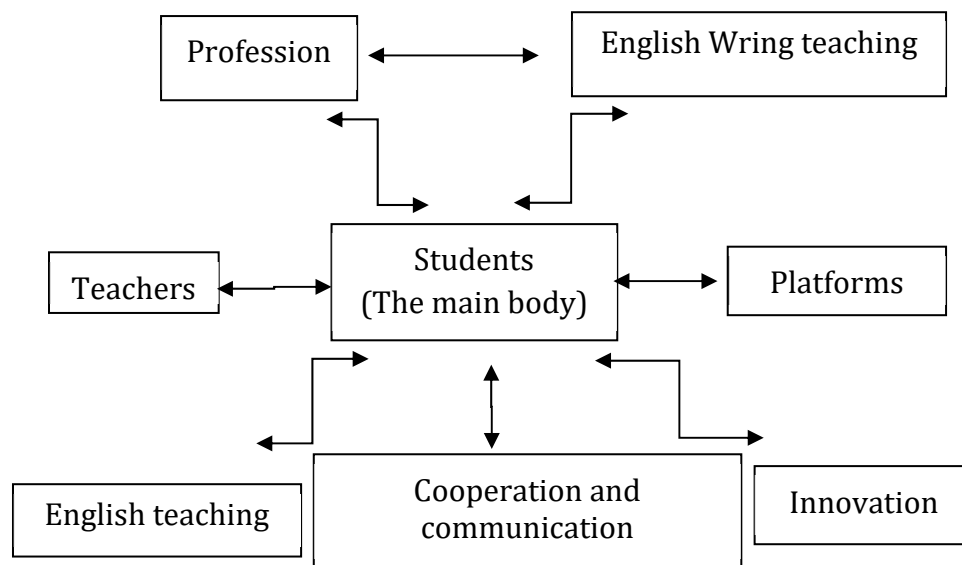

Figure 1. Framework of a PBL Teaching Model in College English Writing

First of all, in this study College English Writing teaching will focus more on the development of students' core disciplinary literacy and abilities. In the context of interdisciplinary integration, PBL teaching can be used to cultivate students' all-round development, rather than just their English writing skills. This approach promotes students to think, search information, cooperate and solve the problems, thus, understand the value of knowledge in problem-solving through independent learning, exploration and cooperation during the process of interdisciplinary integration, thereby strengthen the integration of professional disciplines and English writing courses and achieve a win-win situation for both.

Secondly, students who play the main role in the whole process are encouraged to solve problems through their enthusiasm, initiative, and collaboration. PBL teaching requires students to understand basic theoretical methods and apply them in response to the questions raised by the teacher. At the same time, they should learn, understand and identify the problems independently and work together to find solutions through discussion and collaboration.

Thirdly, modern technology can be found to effectively improve college students' English writing through a wide range of online resources and diversified and efficient teaching assessment and feedback. PBL teaching can stimulate students to effectively utilize online literature resources, writing teaching platforms, and English writing assessment systems in enriching and expanding their classroom learning.

3.2. PBL Teaching Model for College English Writing

In this PBL teaching model the teacher, as the director and spectator rather than the lecturer, and students, the explorer instead of the information receiver, will vary their duties a lot from

the traditional teaching, from the preparation, classroom teaching, and after-class assignments with the involvement of online platforms.

3.2.1. Problems preparation

At the very beginning, teachers should integrate students' profession and College English Writing to jointly develop a detailed and comprehensive College English Writing teaching plan, which is of vital importance. As we know, College English Writing would be more interesting and effective when it is used as a tool to deal with the familiar profession than something abstract and impractical. Then teachers should read, search extensive relevant teaching resources to schedule for each topic and design course-specific problems for each writing based on professional discipline knowledge and English writing skills. What follows is to upload the teaching resources to Superstar (learning platforms), which is for students to learn and think in advance, and these problems for writing are then uploaded to iWrite (English writing platform) for students to finish independently.

What can be found is the preparation originates from teachers' deep insight and comprehension of the course and frontier research in related domains, which demonstrates a high demand on teachers' professional development and the leading role of teachers in the whole process.

3.2.2. Learning on platforms and problem exploration

Before the classes, students can independently prepare for class by learning online resources on Superstar, conducting literature researches, exploring answers, and creating initial writing drafts on iWrite for the problems assigned. At the same time, they can also form teams based on their academic interests and determine the direction of their writing. Within these teams, students collaborate to search for English literature resources, read English literature materials, and work together to better their initial writing drafts on iWrite.

During this process, students' subjectivity can be fully stimulated and observed. What can be developed is, firstly, students' initiative since they are learning themselves with the aid of teachers plan and resources rather than to receive information passively in the classroom. Secondly, students' critical thinking can be formed from the self learning. They will try to judge whether they agree on the ideas and conclusions from these resources and researches, to prove or refute them, and form their own stands. Moreover, their cooperation will be strengthened when they collaborate with others since one can not solve the problems with limited knowledge and recognition.

3.2.3. Classroom discussion

During class, free communication and discussion between students and teachers plays the most important role. The teacher, serving as a leading role, will ask volunteers to show their answers to the problems left for each topic and share their the initial draft in solving these problems. Through different answers and understandings, the teacher demonstrates how English writing theories are introduced. Next, the teacher exemplifies some students' initial drafts and encourages teams to engage in brainstorming sessions based on different parts in English writing, such as structure, content, logic and language. Additionally, the teacher conducts in-class assessments based on writing theory and prompts them to evaluate learning outcomes, thus aiding students achieve the basic knowledge and techniques of English writing and develop a systematic understanding of English writing.

Obviously, this process stimulates students to utilize their professional knowledge and engage in discussions from different perspectives and levels. On one hand, it enhances students' interest by engaging students in expressing themselves and involves them in the whole teaching and learning process. On the other hand, through peer evaluation and brainstorming, it helps them achieve effective learning outcomes and deepens students' understanding and application of the theoretical points.

3.2.4. Revision

After class, the main focus is the application of the learning outcome, which can be conducted through students' repetitive revision of the answers of questions on Superstar and writing drafts on iWrite. The teacher follows up on students' or team's English writing progress through the learning platform, Superstar, providing guidance and theoretical support. Meanwhile, the teacher uses iWrite to provide timely feedback on students' English writing.

Revision is a process which mainly depends on students' performance. But on the other hand, the teacher will pay close attention to it and monitor the teaching effectiveness by analyzing students' English writing scores on iWrite and making necessary adjustments to teaching process accordingly.

3.2.5. Evaluation and summary

The last step, the evaluation and summary comes after the learning, discussion and revision as well as the online feedback. In this part teachers can use some quizzes on Superstar to check the learning outcomes. Then teachers will review the whole process of learning and teaching, comment on the performance of off-class and in-class learning, discussion and revision of individuals and teams, and then make a brief summary, which is a vital impetus for the further study. Finally teachers point out the shortcomings and disadvantages of the whole process, thus encourage students to explore a better way of solving problems and find the right direction in the learning process.
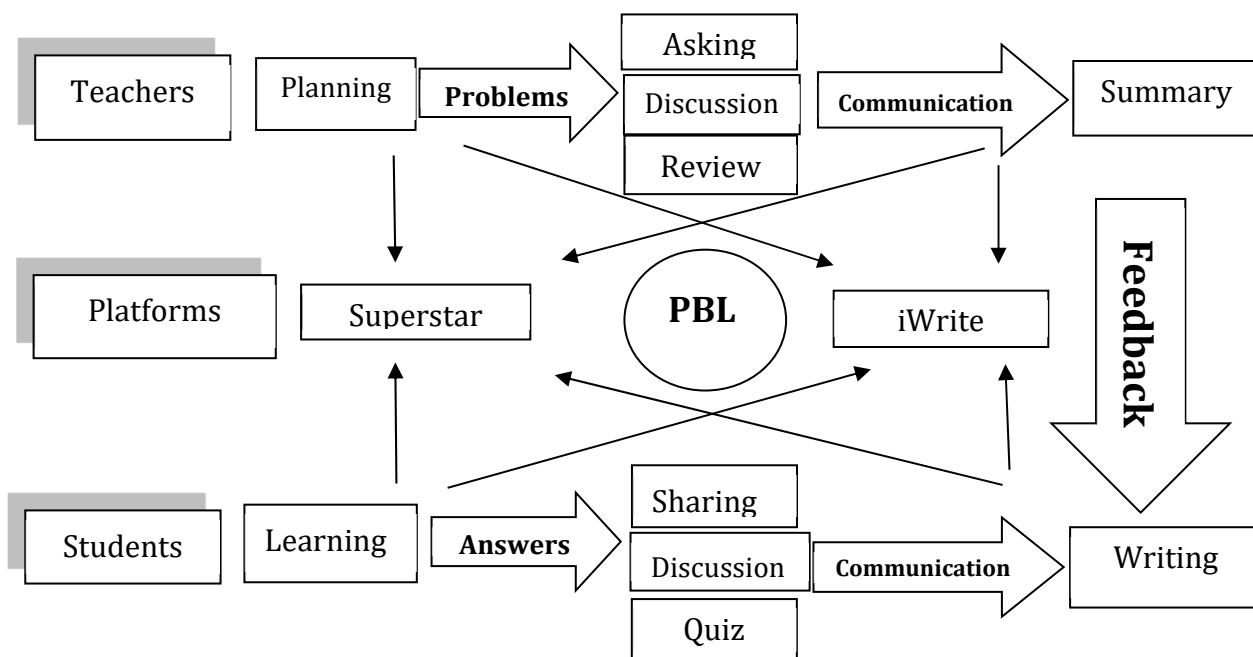

Figure 2. A PBL Teaching Model Integrated with Internet Platforms

The final step with the previous ones constructs a cycle of the PBL teaching model. In this cycle, teachers try to lead student to think and learn independently, to cooperate and discuss, and to explore, apply and revise, while students, as the main body of the whole process, try to think about the problems, acquire related knowledge from learning and searching, collaborate and communicate to solve the problems and even to perfect the answers. Thus, students will better understand the process of learning and comprehend the answers and applications, forming the ability of learning, cooperation, communication and problem-solving.

4. Conclusion

Under the theoretical framework of PBL, the teaching model of College English Writing in the context of new liberal arts will be better to further new cultivation modes through curriculum development. The construction of new liberal arts, College English Writing, and modern technology are organically combined with PBL, enriching and expanding the concept of interdisciplinary integration in new liberal arts education and deepening the development of the PBL educational philosophy.

In the entire teaching process, this model integrates internet platforms and classroom teaching, emphasizing students as the main body in teaching, stimulating students to effectively utilize online literature resources, writing teaching platforms, and English Writing assessment systems, and strengthening their ability to learn and think independently, collaborate, and innovate. On the other hand, through teaching reform and innovation, it effectively improves college students' English writing, professional competence, and innovative ability, thereby promoting the coordinated development of college students in terms of knowledge, abilities, and innovation and making them true successors in the new era.

Acknowledgments

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