



Exploration and Practice of Blended Teaching in Western Economics based on PBL Theory

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ABSTRACT

This paper aims to explore the blended teaching practice of Western economics based on Problem-Based Learning (PBL) theory. Firstly, it introduces the core features of PBL theory and its current applications in the field of education. Secondly, it analyzes the problems and challenges existing in traditional Western economics teaching. Then, it proposes the integration of PBL theory with Western economics teaching, designs a blended teaching model based on PBL theory, and validates its effectiveness through case analysis and practical verification. Finally, it summarizes the main points and findings of the research and looks forward to the future development trends of Western economics teaching based on PBL theory.

KEYWORDS

Problem-Based Learning (PBL); Western Economics Teaching; Blended Teaching.

1. INTRODUCTION

In today's era of knowledge explosion and rapid development of information technology, the education field is constantly exploring innovative teaching models and methods to better adapt to students' learning needs and cope with future challenges. Problem-Based Learning (PBL), as a teaching method based on problem-solving and cooperative learning, is increasingly attracting attention and attention in the education community. The PBL theory emphasizes that students acquire knowledge and skills through exploring and solving real-world problems, emphasizing the activeness, cooperativeness, and practicality of learning, and is considered an effective way to cultivate students' innovative thinking and problem-solving abilities. At the same time, Western economics, as an important branch of economics, is of great significance for people to understand and respond to economic phenomena and problems in today's context of globalization and marketization. However, the traditional Western economics teaching model often revolves around teachers, focusing on the transmission of theoretical knowledge, neglecting the cultivation of students' active participation and practical abilities, and it is difficult to meet the learning needs of students and the development needs of society. Therefore, integrating PBL theory with Western economics teaching, exploring a blended teaching model, can fully leverage the advantages of PBL theory while effectively imparting theoretical knowledge and practical skills of Western economics, which is of great theoretical and practical significance. This paper aims to provide theoretical support and practical experience for promoting the innovative development of Western economics education by analyzing the current situation of PBL theory and Western economics teaching, proposing a blended teaching model of

Western economics based on PBL theory, and verifying its feasibility and effectiveness through practice.

2. PBL THEORY OVERVIEW

2.1. PBL Theory and its Core Features

Problem-Based Learning (PBL) theory is a teaching method centered around problems, aiming to facilitate learning and development by guiding students to solve real-world problems. The core features of PBL include problem orientation, student-centeredness, teamwork, interdisciplinary integration, and self-directed learning. Firstly, PBL emphasizes starting with problems, stimulating students' interest and motivation by designing challenging and meaningful problems, enabling them to acquire knowledge and skills through problem-solving. Secondly, PBL highlights the active participation of students in the learning process, shifting the role of teachers from primary knowledge transmitters to guides and facilitators, providing necessary support and guidance to encourage students to explore and learn independently. Thirdly, PBL emphasizes collaboration and communication among students, often conducted in group settings, fostering mutual discussion and cooperative problem-solving to promote each other's learning and growth. Fourthly, PBL encourages interdisciplinary integration and comprehensive application, requiring students not only to master professional knowledge but also to possess interdisciplinary thinking and abilities, integrating knowledge and skills from different disciplines to solve problems. Lastly, PBL underscores students' self-directed learning and self-control abilities, requiring them to autonomously choose learning paths and methods, self-manage the learning process, and cultivate habits and abilities for self-directed learning. Through these core features, PBL theory aims to cultivate students' critical thinking, problem-solving abilities, teamwork spirit, and self-directed learning abilities, laying a solid foundation for their future learning and career development. In educational practice, PBL has been widely applied in various disciplines and has achieved significant educational outcomes[1].

2.2. Exploration of the Origins and Development of PBL Theory

The origins of Problem-Based Learning (PBL) theory can be traced back to the 1960s, when a medical education research group at McMaster University in Canada initiated an educational practice known as the "McMaster Model." This model, for the first time, placed problems as the starting point of learning, encouraging medical students to acquire knowledge and skills by solving clinical cases from the real world. This practice is considered the precursor of PBL theory, laying the foundation for the PBL education model. Subsequently, in the 1970s, PBL theory gradually developed and spread. Educators Dolrick Wiersma and Albert S. Woerkom at Maastricht University in the Netherlands improved and refined the McMaster Model, introducing it to the Netherlands and promoting its application domestically. Additionally, educators such as Howard Barrows and S. William Swartz in the United States conducted research and practice of PBL theory in medical education, enriching the connotation and methods of PBL education models. With the successful application of PBL theory in medical education, its exploration and expansion into other disciplinary fields' educational practices began. Since the 1980s, PBL theory has gradually expanded to engineering education, business management, legal education, and other fields, forming diverse PBL education models and practical experiences. Particularly in countries such as the Netherlands, Canada, and the United States, the PBL education model has been widely applied and recognized, becoming one of the important practices in contemporary educational reform. In summary, the development of PBL theory is a process of expansion from medical education to interdisciplinary fields, resulting from continuous exploration, innovation, and practice by educators worldwide. By exploring and solving real-world problems, PBL theory provides students with a learning approach that is more practical, challenging, and creative, which is of great significance for cultivating students' comprehensive literacy and problem-solving abilities[2].

2.3. Exploration of the Origins and Development of PBL Theory

The origins of Problem-Based Learning (PBL) theory can be traced back to the 1960s when McMaster University in Canada initiated a new teaching model called the "McMaster Model" in medical education. The key of this model is to shift the focus of learning from traditional knowledge transmission by teachers to real problems faced by students, encouraging students to acquire knowledge and skills through inquiry and problem-solving. This problem-centered learning approach laid the foundation for the later development of PBL theory. In the 1970s, educators Dolrick Wiersma and Albert S. Woerkom at Maastricht University in the Netherlands introduced the "McMaster Model" and made improvements to it. Subsequently, PBL theory began to be widely applied in medical schools and colleges of education in the Netherlands. Meanwhile, educators such as Howard Barrows and S. William Swartz in the United States explored the application of PBL theory in medical education, further enriching the theoretical basis and practical experience of PBL education models. Over time, PBL theory gradually expanded to other disciplinary fields. Since the 1980s, various fields such as engineering education, business management, and legal education have attempted to incorporate PBL theory into their teaching practices[3]. In this process, educators from different countries and regions continuously explored and innovated PBL education models, forming a diverse range of PBL practice models and teaching methods. In conclusion, the development of PBL theory is a process of expansion from medical education to interdisciplinary fields, resulting from educators' continuous exploration, practice, and innovation worldwide. By placing the learning process in the context of real-world problems, PBL theory provides students with a learning approach that is more practical, challenging, and creative, which is of great significance for cultivating students' comprehensive literacy and problem-solving abilities.

3. WESTERN ECONOMICS TEACHING CURRENT SITUATION ANALYSIS

3.1. Review of Traditional Western Economics Teaching Models

Traditional Western economics teaching models often revolve around the teacher and emphasize the transmission of theoretical knowledge, leading to student passivity. In this model, teachers typically impart basic concepts, theoretical models, and analytical frameworks of economics to students through methods such as classroom lectures, textbook readings, and note-taking. In class, students mostly passively receive knowledge, lacking opportunities for active thinking and participation in discussions. Teachers often assume authoritative roles, while students are seen as mere recipients and digesters of knowledge. Furthermore, traditional Western economics teaching models also suffer from issues of singular content, lacking practicality and applicability. Due to the fixed and traditional nature of the curriculum, it often fails to timely reflect new problems and challenges in real economic life, leading students to doubt the interest and practicality of the course content. Additionally, traditional teaching models focus on the transmission of theoretical knowledge, neglecting the cultivation of students' practical abilities and problem-solving skills, resulting in students lacking the capacity and confidence to address real economic issues. In summary, traditional Western economics teaching models to some extent suffer from issues such as singular content, student passivity, and lack of practicality. With the changing times and evolving educational philosophies, more educators are becoming aware of the limitations of traditional teaching models and seeking innovative teaching methods and models to better cater to students' learning needs and societal development demands.

3.2. Analysis of Existing Teaching Issues and Challenges

Although traditional Western economics teaching models establish the theoretical framework of economics to a certain extent, they still face some problems and challenges that require careful

reflection and resolution. Firstly, there is the issue of singular and rigid teaching content in traditional teaching models. Economics, as an interdisciplinary subject, encompasses various fields such as macroeconomics, microeconomics, international economics, and development economics. However, traditional teaching often confines itself to the transmission of basic theories and economic models, neglecting more closely related issues and cases from real economic life. This leads to students doubting the practical application and real-world significance of economics, resulting in decreased learning interest and motivation. Secondly, there is a low level of student participation and initiative in traditional teaching models. Teachers often play the role of knowledge disseminators and decision-makers, while students passively receive knowledge, lacking opportunities for active thinking and participation in discussions. This one-way teaching model hinders the cultivation of students' critical thinking and innovation abilities, as well as equitable interaction and knowledge co-construction between students and teachers. Additionally, there is a disconnect between the curriculum content and real-world economic issues in traditional teaching models. Because curriculum content formulation and updates lag behind the pace of actual economic changes, many traditional teaching courses fail to timely reflect new problems and challenges in the real economy. This may leave students ill-prepared to tackle real economic issues upon graduation. In summary, existing traditional Western economics teaching models face a series of problems and challenges such as singular content, student passivity, and a disconnect between curriculum content and real-world problems. To improve teaching quality and learning outcomes, innovative teaching methods and models are needed to spark students' learning interest and participation and foster the development of critical thinking and practical skills.

3.3. Discussion on the Need to Change Traditional Teaching Models

Changing traditional Western economics teaching models is urgently needed, primarily for the following considerations: Firstly, with the rapid development of society and the economy, knowledge is being updated at an accelerated pace, and economic situations are changing constantly. Traditional teaching models often become rigid, unable to keep up with the pace of the times in terms of teaching content and methods, resulting in students learning outdated or disconnected knowledge. Therefore, changing traditional teaching models to introduce more flexible, open, and up-to-date teaching methods is necessary to ensure the practicality and adaptability of educational content. Secondly, traditional teaching models lead to high levels of passivity and dependence among students, lacking active thinking and problem-solving abilities. In real life, economic problems are often complex and diverse, requiring students to possess critical thinking, innovation, and problem-solving skills. Therefore, changing traditional teaching models to focus on cultivating students' self-directed learning and practical abilities, guiding students to actively participate in the learning process, is key to improving education quality and nurturing versatile talents. Furthermore, changing traditional teaching models helps promote personalized and differentiated education. Traditional teaching models often employ a "one-size-fits-all" approach that fails to meet the diverse learning needs and interests of different students. By introducing more flexible and diverse teaching methods and models, education can better adapt to students' personalized learning needs, enhancing the targetedness and effectiveness of education[4]. In conclusion, changing traditional Western economics teaching models is necessary to meet the needs of societal development, improve education quality, and cultivate students' comprehensive literacy and practical abilities. By introducing more flexible, open, and up-to-date teaching methods and models, we can better meet students' learning needs, promote their overall development, and ensure future success.

4. INTEGRATION OF PBL THEORY WITH WESTERN ECONOMICS TEACHING

4.1. How PBL Theory Combines with Western Economics Teaching

Combining Problem-Based Learning (PBL) theory with Western economics teaching can create a more flexible, practical, and student-centered teaching model, contributing to improved teaching effectiveness and student learning experiences. Specifically, integrating Western economics teaching with PBL theory can unfold in several aspects. Firstly, teaching can center around real-world economic problems, using them as the starting point and core of instruction, guiding students to learn economic theories and methods through problem-solving, stimulating their learning interests and motivations, and promoting active thinking and exploration. Secondly, students can be organized into groups to collectively research and solve economic problems, encouraging them to engage in mutual communication, discussion, and cooperation. Through teamwork, students can discuss issues, share viewpoints, negotiate solutions, and enhance their collaboration skills and team spirit. Additionally, during the problem-solving process, guiding students to integrate and apply interdisciplinary knowledge and skills such as economics, statistical methods, and information technology fosters their ability to comprehensively apply knowledge to problem-solving. Teachers also assume different roles, no longer just as knowledge providers but as guides and facilitators, offering necessary support and guidance to students. By addressing real-world economic problems, students can validate and apply the economic theories and methods they learn in practice, enhancing their problem-solving abilities and readiness to face challenges. In summary, integrating PBL theory with Western economics teaching not only helps cultivate students' critical thinking, innovation, and problem-solving abilities but also lays a solid foundation for their future learning and career development.

4.2. Analysis of the Applicability of PBL Theory in Western Economics Teaching

PBL theory demonstrates high applicability in Western economics teaching, mainly in the following aspects: Firstly, Western economics teaching emphasizes cultivating students' analytical and problem-solving abilities, while PBL theory emphasizes students acquiring knowledge and skills by solving real-world problems. Applying PBL theory in Western economics teaching enables students to master economic theories and methods in practice, fostering their independent thinking and problem-solving abilities. Secondly, the PBL teaching mode emphasizes student active participation and teamwork, aiding in enhancing students' learning enthusiasm and collaborative abilities. In Western economics teaching, students can form groups to collectively research and solve economic problems, promoting mutual learning and growth through discussion and cooperative problem-solving. Moreover, PBL theory underscores interdisciplinary integration and comprehensive application, contributing to developing students' comprehensive literacy and problem-solving abilities. In Western economics teaching, students need to not only grasp economic theories and methods but also combine knowledge and skills from disciplines such as statistics, mathematics, and information technology to analyze and solve economic problems. Additionally, the PBL teaching mode emphasizes equal interaction and knowledge co-construction between teachers and students, facilitating effective teaching processes. In Western economics teaching, teachers no longer act solely as one-way knowledge providers but as guides and facilitators, offering necessary support and guidance to help students fully realize their potential and abilities. In conclusion, PBL theory demonstrates high applicability in Western economics teaching, contributing to improved learning effectiveness and experiences, as well as promoting comprehensive development and future success. By integrating PBL theory with Western economics teaching, a more flexible, practical, and student-centered teaching model can be created, providing valuable references and insights for educational reform and innovation.

4.3. Proposing Specific Practical Methods and Strategies for Integration

The integration of PBL theory with Western economics teaching involves aspects such as problem design and scenario construction, group cooperation and discussion, interdisciplinary integration and comprehensive application, role transformation and guidance support, as well as practical and applied teaching. Firstly, teachers should meticulously design challenging and inspiring problem scenarios, guiding students to start from real economic issues to stimulate their learning interests and motivations. Secondly, students should be grouped for small group cooperation, collectively researching and solving economic problems, promoting cooperation and team spirit through discussion, debate, and solution negotiation. Regarding interdisciplinary integration and comprehensive application, students need to combine knowledge and skills from economics, statistics, mathematics, and information technology to comprehensively analyze and solve economic problems. Additionally, teachers should play the role of guides and facilitators during role transformation and guidance support, offering necessary support and guidance to help students fully realize their potential and abilities. Lastly, through practical and applied teaching, students can apply the economic theories and methods they have learned to solve real-world economic problems, enhancing their problem-solving abilities and readiness to face challenges. In summary, by applying these methods and strategies, a more flexible, practical, and student-centered teaching model can be created, improving student learning effectiveness and experiences, and promoting comprehensive development and future success[5].

5. DESIGN OF A HYBRID TEACHING MODEL FOR WESTERN ECONOMICS BASED ON PBL THEORY

5.1. Teaching Process and Activities based on PBL Theory

The design of teaching processes and activities based on PBL theory can include several key steps to enhance students' problem-solving abilities and comprehensive literacy. Firstly, before the start of teaching, teachers need to carefully design problem scenarios, selecting real-world economic problems that are challenging and inspiring to stimulate students' learning interests and motivations. Next, teachers group students and provide each group with the problem scenario, guiding them to collectively explore and analyze the problem. During group discussions, students can share their viewpoints and ideas, engage in communication, debate, and negotiate solutions, thereby enhancing their collaboration skills and team spirit. Meanwhile, teachers play the roles of guides and facilitators, offering necessary support and guidance to help students fully unleash their potential and abilities. Subsequently, based on the results of group discussions, students conduct independent research and exploration individually or in groups, gathering relevant data and information to delve into the analysis and resolution of economic problems. Finally, students present their research findings to the entire class for discussion and evaluation. Through this process, students not only grasp economic theories and methods but also cultivate critical thinking, innovation, and problem-solving abilities. This teaching process and activity design based on PBL theory immerse students in real problem scenarios, igniting their learning interests and motivations, and promoting their comprehensive development and future success.

5.2. Exploration of Integration and Utilization of Teaching Resources

In PBL-based teaching, the integration and utilization of teaching resources are crucial. The integration of teaching resources covers various aspects, including textbooks, cases, online resources, field research, etc. Firstly, teachers can select appropriate textbooks and reference books in line with the teaching syllabus and objectives to provide students with necessary theoretical knowledge foundations. Secondly, teachers can collect and organize real-life cases and data related to economics

to offer practical learning materials, helping students apply theoretical knowledge to real-world problems. Additionally, teachers can utilize online resources such as online courses, academic journals, data platforms, etc., to provide students with richer learning resources, expanding their knowledge horizons and learning channels. Meanwhile, teachers can organize students to conduct field research, stepping out of the classroom to gain in-depth insights into real economic issues and challenges, thereby enhancing their problem-solving and practical abilities. By comprehensively utilizing these teaching resources, teaching content can be enriched, teaching effectiveness can be improved, and students' learning interests and motivations can be stimulated, promoting their comprehensive development and future success.

5.3. Establishment of Evaluation and Feedback Mechanisms

In PBL-based teaching, evaluation and feedback mechanisms are crucial as they help teachers comprehensively assess students' learning outcomes, guide students' learning directions, and enhance teaching quality. Therefore, when establishing evaluation and feedback mechanisms, multiple aspects need to be considered. Firstly, evaluation should cover multiple dimensions, including knowledge level, problem-solving ability, teamwork ability, etc., to gain a comprehensive understanding of students' learning situations. Secondly, evaluation should be a continuous process, where teachers can continuously assess students through formative assessment methods such as class discussions, assignments, group reports, etc., to promptly identify problems and deficiencies. Meanwhile, self-assessment and peer assessment should also be included in the evaluation system, encouraging students to actively participate in the evaluation process, reflect on their learning processes, and improve their self-awareness and self-management abilities. Additionally, practical assessment is also an important component of evaluation, where teachers can assess students' comprehensive abilities and practical skills through evaluating field research reports, project design proposals, etc. Finally, timely feedback is crucial for students' learning, and teachers should provide timely feedback to students, pointing out their strengths and weaknesses, offering targeted advice and assistance to help them further improve their learning and enhance learning effectiveness. Through the establishment of scientifically sound evaluation and feedback mechanisms, students' comprehensive development and future success can be better promoted.

6. CONCLUSION

The PBL-based teaching model for Western economics is a beneficial teaching method that places students in real problem scenarios, stimulating their learning interests and motivations, and fostering their active thinking and problem-solving abilities. Through the discussion in this paper, we have thoroughly analyzed the core characteristics, origins, and development history of PBL theory and, combined with the analysis of the current situation of Western economics teaching, explored the reasons for the need to change traditional teaching models. Subsequently, we analyzed the applicability of PBL theory in Western economics teaching and proposed specific practical methods and strategies for integration, including the design of teaching processes and activities, the integration and utilization of teaching resources, and the establishment of evaluation and feedback mechanisms. The application of these methods and strategies provides valuable references and insights for educational reform and innovation, helping to improve teaching effectiveness and student learning experiences, and promoting their comprehensive development and future success. Therefore, we can conclude that the PBL-based teaching model for Western economics has significant significance and value, deserving further promotion and application. It is hoped that the research in this paper can provide beneficial inspirations for educational practice, promoting the continuous improvement of educational quality.

REFERENCES

- [1] Fang F .A reflection on borrowing from western economics[J].China Political Economy,2019,2(2):238-257.
- [2] Weber M I .Unlikely Partners: Chinese Reformers, Western Economists, and the Making of Global China[J].The China Quarterly,2019,(3)257-259.
- [3] WEI Z .Observing the Economic Development Trend in China from a Comparative Analysis of Western Economics and Political Economics[J].Canadian Social Science,2015,11(9):100-103.
- [4] Plekhanov D .Book review: Unlikely Partners: Chinese Reformers, Western Economists, and the Making of Global China[J].China Information,2018,32(1):168-170.
- [5] Cheng L ,Zhang S .The Spread of Western Economics in China: Features and Influence (1840–1949)[J].Frontiers of Economics in China,2017,12(2):193-227.