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Research on the Countermeasures of Implementing PBL Teaching Mode in the Course of Finance

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Abstract: *As a practical course, the course of "Finance" should be closely related to practice and be at the forefront of import theory development. However, at present, there are many problems in the teaching of "Finance", such as the old teaching content, the single teaching method, the disconnection between theory teaching and practice teaching, the single examination method, and the teachers' lack of practical experience. Therefore, this paper puts forward the implementation of PBL teaching mode to realize the teaching reform of "Finance" course, to improve the students' ability of learning and application, and to enable students to combine theory with practice, in order to achieve the training goal of applied talents.*

Keywords: *Teaching idea; Practical teaching; PBL teaching mode; Teaching reform*

The Nature and Teaching Objective of the Course of Finance

Finance is one of the core courses for Finance and economics majors defined by the Ministry of Education. It is a basic course for students majoring in finance and Economics in colleges and universities. Based on economics, finance studies monetary and financial issues, which are the core issues in economic development. It studies money and money creation mechanism from the perspectives of money, credit and bank, an independent discipline that studies financial instruments, financial institutions and financial markets, and the role, mechanism and principle of the relationship between money supply and demand and social aggregate supply and demand, in the field of economic and financial theoretical research occupies a very important position.

Through the study of this course, students will have a comprehensive understanding of the basic theoretical system of finance, have a systematic understanding of money, credit, financial system, financial market, international finance, financial Macroeconomic regulation and control and other financial categories, and lay a theoretical foundation for the follow-up study of other professional courses. Case teaching is introduced to cultivate students'financial consciousness, so that they can use their financial professional knowledge and professional methods to analyze economic and financial problems. Therefore, we should also take this as the goal in classroom teaching. In addition to systematically teaching professional theories and knowledge points, we should also integrate the development of the current economic and financial situation, guide the students to understand the monetary policy, discuss the financial problems, analyze the financial phenomenon, explore the reform methods, to achieve the close combination of theoretical teaching and practical teaching.

Vol.2 No.11 2021
https://doi.org/10.37420/j.cer.2021.084

The Current "Finance" Curriculum Teaching Problems

The Teaching Contents are Rather Old, and the Design of the Teaching Contents Does Not Keep up with the Times

Teaching material is the basic basis of teaching in colleges and universities, and is also the basic material for students to learn. Therefore, teaching material and teaching content play a very important role in the teaching process and decide the quality of teaching. After a long period of course construction, the course content system of "Finance" in colleges and universities in our country has been nearly perfect, and various teaching materials of "Finance" are rich in content, but the main topics discussed are the western financial system and financial models, there are few financial problems related to our country, and most of the teaching materials can not link up with the development of modern finance in knowledge framework and content system, and the updating speed is slow. With the development of financial science and technology, there is a great change in the business process, technology application and the range of business forms, which leads to the disconnection between the teaching contents and the practice of financial enterprises. At present, the relatively consistent and fixed curriculum system of traditional finance major mainly focuses on the theory of finance and the application system based on the theory, there has been a lack of responsiveness, convergence and focus on the cross-disciplines promoted by fintech.

In addition, college teachers in the teaching process of "Finance" mainly explain the knowledge points according to the teaching materials, but as we all know, it takes a long time for the teaching materials to be compiled and applied in the classroom, and the period of the new edition is also longer, which causes the finance textbooks used by some colleges and universities not to be updated in time, and the teaching contents are rather old, to a certain extent, some financial theories can not be applied to the current economic and financial facts, and can not track the financial hot spots. Most of the teachers emphasized the teaching of basic knowledge of money, credit, banking, financial market, financial Macroeconomic regulation and control, etc., the teaching content of macro-and micro-level analysis of financial market is too little, which leads to the teaching content of "Finance" can not keep up with the speed of the development of internet finance, nor does it carry out the comprehensive teaching of financial knowledge, as a result, students'professional knowledge does not meet the needs of the society, and they can not use their professional knowledge to work after graduation, which affects the employment rate of students.

The Teaching Methods and Means of "Finance" are Backward, and the Teaching Mode is Single

At present, "Finance" course or the main teacher classroom lectures, students take notes to listen to the traditional form of indoctrination. This method is based on the teacher's teaching theory, most of them adopt multimedia teaching, the students sit in the classroom and study passively. From the perspective of teaching effect, students'mechanical memory of basic knowledge, lack of independent thinking ability, poor practical ability, it is difficult to explain the new monetary phenomenon with the theory they have learned, and it is difficult to combine theory with practice.

At present, information technology has already obtained the huge application in the curriculum teaching, many high-quality "MOOC" "Micro-class" present in the blue ink cloud class, the Super Star and so on network teaching platform, however, the network teaching platform still has some defects such as insufficient interaction with students, difficulties in teaching supervision and management, etc. , as a result, "Finance" courses in the introduction of "Online" and "Offline" hybrid teaching mode is still less, more still using traditional offline teaching methods. However, the teaching process of offline "Finance" courses is often filled with questions and exchanges, but on the whole there is less communication between teachers and students, teachers can not timely understand the students'understanding of the classroom content and grasp the situation, teaching methods and means are old and backward, teaching effect is not good. In addition, the teaching of "Finance" lacks the corresponding practical background and the introduction of cases, or the lack of a certain representativeness of cases, etc., lack of a sensible understanding of financial phenomena.

In addition, it is well known that good and effective teacher-student interaction can not only improve the quality of students'learning, but also help to cultivate students'initiative and enthusiasm. As a basic professional course, "Finance" has many and complicated knowledge points, so most of the teaching in the classroom is still dominated by teachers, students passively accept the indoctrination of knowledge. Under the traditional teaching mode of teachers speaking and students listening, coupled with the limited class time and large number of students, questioning has become the most important interaction between teachers and students, the utilization rate of new interactive methods such as case teaching, rollover class and group discussion teaching is not high. This kind of simple and single interaction mode makes the classroom teaching lack vitality, the student's interest is not high and the participation degree is low, has restricted and hindered the student seriously to analyze the ponder and the solution question ability.

The Teaching Facilities are Relatively Single, Which Leads to the Disconnection Between the Course Teaching and the Practice

Practice teaching is an important channel to consolidate and deepen students'professional theoretical knowledge, an important manifestation of applying theoretical knowledge to guide practice, and an important link to improve students'practical ability and comprehensive quality. However, as far as the current situation is concerned, the teaching of the course "Finance" in many colleges and universities in China is still stuck in the traditional mode, which shows that the content of the course is more theoretical, and the theoretical teaching is much higher than the practical teaching, finally, it makes the practice link to be formalistic. At the same time, some colleges and universities do not have complete practical facilities, do not set up a place or platform for the practical operation of finance, and do not introduce relevant practical operation software for students to learn and use, this makes students even skilled in the relevant professional knowledge of finance but lack of the application of operational capacity training, resulting in their entry into the community after the lack of core competitiveness.

The classroom teaching of "Finance" is mainly based on the theory teaching, and the practical teaching close to the modern financial market and operation mode is extremely scarce. The teaching content of finance should be more from the experience of operation and practice, so the teaching content will be closer to the reality of finance. Although most of the teachers of finance in colleges and universities have acquired a solid

Vol.2 No.11 2021
https://doi.org/10.37420/j.cer.2021.084

knowledge of financial theory after years of teaching and research, but the basic lack of banks, securities and other financial institutions and internet financial platform work experience, financial practice and practical ability is not strong. The operation of commercial banks, various financial markets and internet financial platforms and products are only in theory, but the specific application and development of theoretical knowledge can not be accurately grasped. In addition, the relationship between colleges and financial institutions such as securities and Banks is only limited to students'graduation practice, and there is a lack of timely practical training after the initial completion of teaching related theoretical knowledge, the students lack the sense of practical gain from the knowledge they have learned, which reduces the teaching effect.

The Way of Curriculum Assessment is Single, Which Can Not Truly Reflect the Mastery of Students

Course assessment is an important link to test students'learning effect, improve course teaching quality and cultivate qualified financial talents. The university course examination marks are basically formed by the weighted average comprehensive measurement of the average scores and the test papers, in which the proportion of the test papers is larger, that is to say, the final grade is the most important examination standard. Peacetime results are based on student attendance, homework situation for the calculation. This kind of measurement standard is scientific and reasonable in structure and logic, but it can not reflect the students'real learning process completely, and the way of assessment is too simple. This kind of assessment makes students pay less attention to their daily study and practice, and students often do breakthrough study before the examination in order to get good results, although this kind of learning method can help students achieve better results in exams, their memory and mastery of knowledge and skills are problematic, students will forget their own memory of knowledge points, leading to better results, but the theory and practice of poor phenomenon. Therefore, the process assessment standards for the two aspects of the results still need to be further consolidated and improved.

Teachers are Backward in Teaching Concepts and Lack of Financial Practical Experience

As far as the teaching of finance is concerned, the ability level of teachers is very important, which directly affects the quality of teaching and the learning effect of students, the finance teachers in most colleges and universities still have the problem of insufficient ability. On the one hand, there is a shortage of finance teachers in some colleges and universities in the number of subjects and classes, as well as in the actual teaching process, which can not improve the teaching quality. On the other hand, even if the teachers'professional theory is strong, but in the face of the rapid development of the financial industry, the teachers'knowledge system is also relatively backward. In particular, practical teaching ability, most of the teachers have no experience of working in financial institutions, and they seldom come into contact with the core business of the financial industry in normal times, which leads to a lack of practical financial experience, there is a big gap between the requirements of teachers and the cultivation of applied talents.

At present, the teachers of some finance majors in China do not realize the importance of the reform of the financial industry, and carry out the teaching contents and activities according to the original knowledge sys-

tem, there is no innovation in the teaching contents and methods, which leads to the students only being able to grasp the basic theoretical knowledge of the finance specialty, and not being able to correctly establish the financial consciousness and the financial idea, also can not use own specialized knowledge to carry on the market finance question correct analysis, causes the specialized knowledge which the student studies can not satisfy the financial market development demand. At the same time, the teachers did not improve their professional knowledge and ability according to the changes in the financial industry, and there was a lag in the understanding and analysis of the financial field, which affected the students'understanding of the financial market, and that's what makes it so difficult to learn.

The Connotation and Characteristics of PBL Teaching Mode

The Connotation and Application of PBL Teaching Mode

(1) The Connotation of PBL Teaching Model

According to Linda Trop and Sara Sage in "Problem-based learning: making learning fun and easy", "Problem-based learning is a kind of targeted practice around solving poorly structured, real problems. Students should not only use their brains, but also use their hands to learn. It includes two basic processes, namely curriculum organization and strategic guidance. This kind of teaching mode means that students, under the guidance of teachers, learn to make use of the natural and social environment around them, select research topics, acquire knowledge actively by way of inquiry, and help themselves to form certain values, to solve practical problems. It can be seen that PBL teaching mode is a kind of problem-centered learning mode, which inspires students to think about problems, promotes students to strengthen self-study and emphasizes cooperation with each other.

The rise of PBL teaching model has its theoretical basis, mainly cognitive psychology in the theory of Constructivism, representative figures are Jean Piaget and Kornberg. Constructivist view of learning emphasizes initiative, sociality and contextuality of learning. As the learning environment required by constructivism is strongly supported by the latest information technology achievements, it makes the theory of constructivism increasingly integrate with the teaching practice of teachers, thus becomes the domestic and foreign school deepens the teaching reform the guiding ideology.

(2) The Application of PBL Teaching Mode at Home and Abroad

Problem-based learning (PBL) originated from medical teaching in the 1960s. The Faculty of Clinical Medicine at McMaster University in Canada divided students into small groups and placed them in "Patient" groups. In this situation, students interviewed patients, took notes and looked up information, and then prescribing them according to different symptoms, which is not what you'd expect in a traditional classroom.

University of New Mexico and Harvard Medical School in the 1980s also began to adopt PBL teaching method, and most of them have started to use PBL teaching method.

Vol.2 No.11 2021
https://doi.org/10.37420/j.cer.2021.084

Brydges and Hailin published the book "Problem-based learning for managers" based on a large amount of literature and empirical research. Since then, PBL teaching model has been formally introduced into the field of education and training, and has been widely recognized by teaching institutions. Subsequently, PBL teaching model was popularized to primary and secondary school teaching practice at home and abroad.

With the rise of information network education, people gradually turn their attention to the use of modern information technology to promote the integration of subject teaching and PBL teaching mode. So far, in the university teaching reform, under the network environment other curriculum PBL teaching pattern research is in the ascendant, has obtained the good teaching effect. How to combine the advantages of information network technology and PBL teaching mode to design and implement the teaching situation of financial courses and learning activities needs further research.

Main Features of PBL Teaching Mode

(1) The Principle of Student Subjectivity

In PBL teaching mode, students are the main body of knowledge cognition, acceptance and application, and only participate in knowledge exploration, construction, experience and application, to truly profound knowledge, accurate grasp, effective application of knowledge. The teaching design and implementation of problem-based learning (PBL) in finance course in colleges and universities must follow the principle of students'subjectivity and set students as the main body of the class, the situation teaching scheme is designed from the angle of students'cognitive level, receptive ability and interest, and students'active exploration is used to cognize, master and apply knowledge, this has changed the indoctrination teaching mode of the finance course in colleges and universities. Taking students as the subject of the course not only shows the respect to the learning role of students as the subject, but also greatly improves the interest in learning financial knowledge, and strengthens the quality and efficiency of students'learning financial knowledge. This is the essential difference between PBL teaching mode and conventional indoctrination teaching mode, and it is also a basic principle of applying PBL teaching mode to finance teaching in colleges and universities.

(2) Problem Oriented Principles

The problem-based learning (PBL) teaching of finance course in colleges and universities is opposed to the flat-lined teaching behavior, which requires the design of the whole teaching plan and the development of the teaching work to be problem-oriented, problem-based learning (PBL) is a kind of teaching activity with the core goal of solving specific problems. This ensures that each teaching session of the finance course incorporates the specific teaching content into the "Problem", "Problem-solving" is used to promote the students'ability of cognition, construction, Mastery and application of knowledge, and to strengthen the goal-orientation of the course learning process. Active exploration, active research, and hard problem-solving also enhance the fun of the finance course learning process, and students in the problem-solving process, on the one hand, it has effectively exercised its ability of communication and cooperation; on the other hand, it has also strengthened its comprehensive knowledge application literacy and professional practical ability, especially in the fierce competition to solve the problem will stimulate their strong sense of achievement, increase the interest in finance courses.

(3) The Principle of Multiple Conceptuality

The main means of problem-based learning (PBL) teaching in finance course in colleges and universities is to design a flexible situational teaching scheme according to the teaching content and the characteristics of the students, so as to make the students solve the problems in the prescribed situations, to explore, construct, experience, and apply knowledge. The situational teaching scheme not only sets up the main structure of PBL teaching in finance, but also develops all the teaching contents, links and methods in the situational teaching scheme At the same time, it also has obvious characteristics of methodology and regularity, it needs to follow the process of creating situation, introducing situation, experiencing situation, expanding situation and reappearing "Five in one". This can improve the standardization and actual effect of PBL teaching in finance course. Teachers in colleges and universities should follow the principle of multi-situation, base on the content of teaching and the characteristics of students, take the problem as the guide, set up a targeted and systematic situation teaching program, and carry out the situation teaching work strictly, in order to give full play to its due teaching value of finance course.

Innovative Design of PBL Teaching Mode in the Core Courses of Specialty

It is the key to solve the contradiction between the basic idea of PBL teaching method and the teaching conditions of the course that the PBL teaching method is introduced into the core courses of specialty. Take the research object of this project — "Finance" course as an example, the concrete methods are as follows.

The Preparation for the Grouping Phase

It is a common practice in many colleges and universities to divide the class discussion into groups to complete some special topics and make mutual evaluation. Under the PBL teaching method, students should not only complete the grouping, but also consider the influence of group size on the teaching effect. If the number of groups is too large, the discussion and communication objectives of each group may not be achieved during the limited class hours, and if the number of groups is too small, as the number of teaching classes is generally over 50, the number of groups will be too large, the inability of some students to participate in learning activities was not conducive to the division of labor within the group and encouraged active contributors.

The researchers controlled the number of students in each class to 3 ~ 4. Taking 50 students in each class as an example, the students could be divided into about 15 groups. The teaching activities were mainly based on the model of "Drawing lots and assigning teachers", that is, on the basis of drawing lots at random, and in combination with the discussions of teachers'daily inspection groups, members of the designated groups were selected to give presentations, at one time, more than half of the group will participate in teaching activities. Since speakers are chosen randomly and each presentation is part of the group, each group member is required to prepare a presentation before class begins, thus, each group can study according to the same level of effort, and the phenomenon of "Free riding" can be avoided effectively, and the participation of students can be improved.

Vol.2 No.11 2021
https://doi.org/10.37420/j.cer.2021.084

The Stage of Classroom Teaching

One of the key links of PBL teaching method is to set appropriate questions. This is the key to guide students to self-exploration of the set teaching goals, but also an important condition for teaching evaluation and performance evaluation.

The problem setting in the course of finance should fully consider the comprehensiveness, reality and extensibility. Comprehensiveness means that the analysis of problems should include multiple knowledge relations, which need to call several elective courses and teaching contents of several chapters. Realism means that the problem should be taken directly from reality as much as possible, reflecting the new situation and changes on the ground at that time, and simulating as much as possible the real situation of jobs related to finance, including the needs of financial institutions, the types of financial instruments available, real-time financial market data and money supply, to improve the pertinence of the course teaching, help students adapt to the upcoming job search and work environment. Extensibility means that the analytical thinking of the problem should have certain diversified characteristics, especially the problem of setting up courses in social sciences, which can usually be analyzed from different angles, and should be worth affirming as long as it is well-founded, the fundamental criterion of "Whether or not to solve the practical problems of simulation effectively" should be highlighted.

Group discussions should adhere to the principle of integrating decentralized thinking with focused communication. Before the end of each session, teachers should publish the questions to be discussed at the next session. Each group should collect information during extra-curricular time. Class time is mainly used to focus on communication, first for group discussion, then for group communication and mutual evaluation, learn from each other to avoid similarities, so as to improve the quality of communication.

Summing up the Stage of Improving and Writing the Experimental Report of the Course

About a fifth of the final class time is spent summarizing student learning outcomes and writing small course papers. From the perspective of group work simulation, each student summarizes the individual work flow, records the results of each phase, evaluates the pros and cons and analyzes the reasons.

The Stage of Final Examination and Investigation of Teaching Effect

The examination of the core curriculum focuses on the achievement of the learning objectives at each stage. Problem-based learning (PBL) has strengthened the management of teaching process and released the information of course evaluation in time based on the principle of openness. Taking the course of finance as an example, we can introduce the group competition mechanism in the examination, and give bonus to the group with better performance, so as to fully arouse the enthusiasm of students and form a good learning atmosphere of competition and cooperation.

The view of modern education requires the cultivation of students'ability and the improvement of their

overall quality, rather than the teaching of knowledge. Problem-based learning (PBL) can stimulate students'learning initiative, strengthen students'ability to comprehensively apply various theoretical knowledge in the complex and changeable economic situation, and thus solve various new problems in the financial field, realizing the transformation from "Knowledge-centered" education to "Ability-centered" education.

For the course of "Finance", the adoption of PBL teaching model, for students, can not only introduce changes in the field of finance into the classroom, so that students learn to combine theory with practice, it can also improve students'interest in learning, and feel the sense of achievement of learning for practical use. For teachers, it really realizes the mutual benefit of teaching, deepens teachers'knowledge system and improves teachers'teaching quality For the course of "Finance", PBL teaching mode has realized the course system keeping pace with the times, and is helpful to solve all kinds of difficulties in the present teaching, pBL teaching mode is conducive to the cultivation of high-quality applied talents and high-tech talents who can analyze and solve problems.

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References

Wang, R. H. (2017). Research on teaching reform and innovation of Finance under Internet + Finance Environment. *Journal of ABC University*, (3), 78-80.

Pei, D. H. (2016). On the challenge and reform of the teaching of finance under the new situation. *Guide to Business*, (16), 130-131.

Jiang, L. L., Tong, A. H., & Hu, Z. F. (2019). Exploration on the transformation of finance major to Internet finance major in the background of "Internet +". *Business & Economy*, 509(01), 181-184.

Wang, H. P. (2016). The new trend of practical teaching ability development of finance teachers under the background of Internet + . *Education and Teaching Forum*, (43), 25-26.

Xie, L. H. (2019). A practical study on the application of project-based teaching method to improve students'innovative consciousness—Take monetary and banking as an example. *Education Forum*, (27), 124-125.

Sheng, C. R. (2018). *New Curriculum and Experiential Teaching*. Hangzhou: Zhejiang Gongshang University.