

# *Research on the Application of a Variety of Teaching Methods in the Teaching of Undergraduate Financial Market Course*

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**Keywords:** Undergraduate education; Financial markets; Teaching methods; Diversified teaching; Teaching reform

**Abstract:** With the rapid development of the financial industry and the increasing complexity of the financial market, the teaching quality of the undergraduate course "financial market", as the core basic course for financial majors, directly affects the cultivation of students' financial literacy and the improvement of their professional ability. The traditional single teaching method has been difficult to meet the teaching objectives and students' development needs. Based on constructivist learning theory, situational learning theory and multiple intelligences theory, combined with the teaching characteristics and current situation of the undergraduate financial market course, this paper systematically studies the application path of case teaching method, project-based teaching method, flipped classroom teaching method, simulation experiment teaching method and group cooperative learning method in the course. Through the design of teaching experiments, the teaching effects of a variety of teaching methods and traditional teaching methods are compared and analyzed, and the experimental data and results are intuitively presented by charts, and the safeguard measures for optimizing the application of a variety of teaching methods are put forward. The purpose of this study is to provide theoretical reference and practical guidance for improving the teaching quality of the course of financial market and cultivating high-quality talents to meet the development needs of the financial industry.

## **1. Introduction**

### **1.1. Research Background**

In recent years, the global financial market has shown a trend of integration, digitization and complexity. Financial products have been continuously innovated, and financial regulatory policies have been continuously adjusted, which puts forward higher requirements for the professional quality and comprehensive ability of financial practitioners. As an important position for cultivating financial talents, the core course of undergraduate finance majors, financial market, undertakes the important task of systematically teaching students the basic theory, core mechanism, various financial instruments and market operation rules of financial market. It is a key course to build

students' financial knowledge system and cultivate their financial thinking and practical ability.

However, there is still a problem of single teaching method in the current undergraduate course of financial market. Most colleges and universities still focus on traditional lecture teaching, teachers occupy the dominant position in the classroom, students passively accept knowledge, and it is difficult to effectively participate in the teaching process. This teaching mode is not only difficult to stimulate students' interest and initiative in learning, but also not conducive to students' understanding and application of abstract financial theory, leading to the disconnection between students' theory and practice, and difficult to adapt to the actual work needs of the financial industry. Therefore, it has become an important topic of the current undergraduate financial education reform for the researchers to optimize the teaching process of financial market course and improve the teaching quality in order to explore and apply a variety of teaching methods[1-2].

## **1.2 Research Significance**

### **1.2.1 Theoretical Significance**

This paper systematically combs the theoretical basis of a variety of teaching methods, combines the teaching characteristics of the undergraduate course "financial market", constructs the application system of a variety of teaching methods in the course, and enriches the theoretical results of the research on the teaching methods of financial courses. At the same time, the teaching effect of various teaching methods is verified through empirical research, which provides practical support for the application of constructivist learning theory and situational learning theory in the field of financial education, and expands the application scenarios of relevant educational theories.

### **1.2.2 Practical significance**

The application path and optimization strategy of various teaching methods proposed in this paper can provide specific teaching practice guidance for teachers of the course of financial market in Colleges and universities, help teachers innovate teaching mode and improve teaching quality. The application of a variety of teaching methods can stimulate students' interest and initiative in learning, cultivate students' autonomous learning ability, practical operation ability and team cooperation ability, promote students to combine theoretical knowledge with practical application, improve students' employment competitiveness, and provide more high-quality professionals for the financial industry.

## **1.3 Research Status at Home and Abroad**

### **1.3.1 Foreign Research Status**

The research on the teaching methods of financial courses in foreign countries started earlier and has formed rich research results. In terms of the application of case teaching method, Harvard Business School first applied the case teaching method to the teaching of business management courses, and then it was widely used in financial courses. Foreign scholars have proved through a large number of empirical studies that case teaching method can effectively improve students' problem-solving ability and decision-making ability. In terms of simulation experiment teaching, foreign colleges and universities generally attach importance to the construction of financial laboratories, and use advanced financial simulation software to create a real financial market environment for students, so that students can improve their practical operation ability through simulated transactions. In addition, flipped classroom, project-based learning and other teaching methods are also widely used in foreign undergraduate financial education, and relevant research

focuses on the application effect evaluation and optimization strategies of teaching methods [3-4].

### **1.3.2 Domestic Research Status**

In recent years, the research on the teaching methods of undergraduate financial market course in China has gradually increased. Scholars generally believe that the traditional teaching method has many disadvantages, and it is necessary to introduce a variety of teaching methods to improve the teaching quality. In the application research of case teaching method, domestic scholars mainly discussed the selection, design and implementation process of cases, emphasizing that cases should be close to the reality of China's financial market. In the aspect of simulation experiment teaching, the research focuses on the construction of financial laboratory and the application of simulation software, and analyzes the role of simulation experiment teaching in improving students' practical ability. In addition, domestic scholars have also explored the application of flipped classroom, group cooperative learning and other teaching methods in the course of financial markets, but most of the relevant research is based on theoretical discussion, empirical research is relatively insufficient, and there is a lack of research on the systematic integration and application of a variety of teaching methods [5-8].

## **1.4 Research Methods and Contents**

### **1.4.1 Research Methods**

This paper adopts the methods of literature research, empirical research and comparative research. Through the method of literature research, this paper systematically combs the relevant research results at home and abroad on teaching methods and the teaching of financial market course, and lays the theoretical foundation for the research. Using the empirical research method, this paper selects two classes of undergraduate finance major in a university as the experimental object, and uses a variety of teaching methods and traditional teaching methods to teach. By comparing and analyzing the learning performance, learning interest and ability improvement of the two classes, it verifies the application effect of various teaching methods. By using the method of comparative study, the characteristics and application scenarios of different teaching methods are compared and analyzed, so as to provide the basis for the rational collocation and application of various teaching methods.

### **1.4.2 Research Content**

The research content of this paper mainly includes the following aspects: first, sort out the teaching characteristics and teaching objectives of the undergraduate course financial market, and analyze the problems existing in the traditional teaching methods; The second is to elaborate the theoretical basis for the application of various teaching methods, including constructivist learning theory, situational learning theory and multiple intelligences theory; The third is to design the application path of various teaching methods in the course of financial market, including the specific application scheme of case teaching method, project teaching method, flipped classroom teaching method, simulated experiment teaching method and group cooperative learning method; The fourth is to verify the application effect of various teaching methods through empirical research; The fifth is to propose safeguard measures to optimize the application of a variety of teaching methods.

## **1.5 Research Innovation**

The innovation of this paper is mainly reflected in the following two aspects: first, the teaching mode of financial market course, which integrates a variety of teaching methods, not only discusses the application of a single teaching method, but also pays attention to the reasonable collocation and synergy of different teaching methods to improve the teaching effect; The second is to adopt strict empirical research methods, set up experimental group and control group, collect multi-dimensional experimental data, comprehensively and objectively evaluate the application effect of various teaching methods, and make up for the deficiency of empirical research in China.

## **2. Analysis of Teaching Characteristics and Traditional Teaching Methods of Undergraduate Financial Market Course**

### **2.1 Teaching Characteristics of Undergraduate Financial Market Course**

#### **2.1.1 Coexistence of Theory and Practice**

The course "financial market" contains a lot of abstract theoretical knowledge, such as pricing theory, efficiency theory, risk management theory, etc. these theories are the basis for understanding the operation law of the financial market and have a strong theoretical nature. At the same time, the course is closely related to the practice of financial markets, involving the actual trading process of a variety of financial instruments such as stocks, bonds, futures, options, as well as the actual cases of the business operation and financial supervision of financial institutions, with distinct practicality.

#### **2.1.2 Many Knowledge Points and Fast Update Speed**

The financial market covers many sub markets, such as the money market, capital market, derivatives market, foreign exchange market, and so on. Each sub market also contains many knowledge points, such as market participants, trading instruments, trading mechanisms, regulatory policies, and so on. The knowledge points are numerous and the system is complex. In addition, with the rapid development of the financial market, new financial products, new trading modes and new regulatory policies continue to emerge, requiring the course content to be updated in time to meet the needs of market development [9].

#### **2.1.3 Strong Comprehensiveness and Applicability**

The course of financial market is closely related to economics, management, accounting, law and other disciplines, requiring students to have strong comprehensive discipline literacy. At the same time, the application of the course is strong, requiring students to be able to use the theoretical knowledge they have learned to analyze and solve practical problems in the financial market, such as predicting the trend of the financial market, formulating investment strategies, assessing financial risks, etc.

### **2.2 Problems Existing in Traditional Teaching Methods of Undergraduate Financial Market Course**

#### **2.2.1 The Teaching Method is Single and Students' Learning Initiative is Insufficient**

At present, the course of financial market in most colleges and universities is still dominated by traditional teaching. Teachers pass knowledge to students through classroom teaching, and students

passively accept knowledge, lacking opportunities for active thinking and participation. This single teaching mode is difficult to stimulate students' interest in learning, resulting in students' lack of learning initiative and poor learning effect.

### **2.2.2 Theory is Divorced from Practice, and Students' Practical Ability Is Weak**

Traditional teaching methods pay too much attention to the teaching of theoretical knowledge and ignore the practice teaching link. In the teaching process, teachers mainly focus on theoretical explanation, and lack of in-depth analysis of the actual cases and practical operation of the financial market. Although students have mastered certain theoretical knowledge, it is difficult to apply it to solve practical problems, resulting in weak practical ability and difficult to adapt to the actual work needs of the financial industry [10-12].

### **2.2.3 The Teaching Content is not Updated in Time, Which is Difficult to Meet the Market Development Needs**

Traditional teaching methods are limited by textbooks and teaching plans, and the updating speed of teaching content is slow. With the rapid development of the financial market, new financial products, trading modes and regulatory policies continue to emerge. The traditional teaching content is difficult to cover these new knowledge points, which leads to the disconnection between the knowledge learned by students and the actual market and the inability to timely understand the latest developments of the financial market.

### **2.2.4 Lack of Personalized Teaching, Which is Difficult to Meet the Differentiated Needs of Students**

There are differences in the learning basis, learning interest and learning ability of different students, while the traditional teaching mode of "one size fits all" teaching mode is difficult to take into account the different needs of students. For students with good learning foundation, the teaching content may be too simple to meet their needs of in-depth learning; For students with poor learning foundation, it may be difficult to keep up with the teaching progress, resulting in learning difficulties.

## **3. Theoretical Basis for the Application of Various Teaching Methods in the Course of Financial Market for Undergraduates**

### **3.1 Constructivist Learning Theory**

Constructivist learning theory believes that learning is a process in which learners actively construct internal psychological representation. Learners are not passively accepting external information, but actively selecting, processing and processing external information according to their previous experience and cognitive structure, so as to build their own knowledge system. Constructivist learning theory emphasizes the dominant position of learners and believes that the core of teaching is to guide learners to actively participate in the learning process and build knowledge through independent exploration, cooperation and communication [13].

In the teaching of the course of financial market for undergraduates, the application of constructivist learning theory to guide the practice of various teaching methods can give full play to the main role of students. For example, through the flipped classroom teaching method, students can learn relevant theoretical knowledge autonomously before class, and deepen their understanding of knowledge through group discussion and problem exploration in class; Through the

project-based teaching method, students can carry out independent exploration and practice around specific financial projects, and build a knowledge system in the process of project implementation.

### **3.2 Situational Learning Theory**

Situational learning theory believes that learning takes place in real situations. Learners acquire knowledge and skills through interaction with situations and cooperation with others. Situational learning theory emphasizes the authenticity and practicality of learning, and believes that only in the real situation, learners can really understand and apply what they have learned.

The course of financial market is highly practical, and situational learning theory provides important guidance for the application of a variety of teaching methods. For example, through the case teaching method, the researchers select real financial market cases, create real problem situations for students, and let students learn and apply theoretical knowledge in the process of analyzing cases; Through the simulation experiment teaching method, we use the financial simulation software to build a real financial market trading situation, so that students can improve their practical operation ability in the simulation trading [14].

### **3.3 Multiple Intelligences Theory**

According to the theory of multiple intelligences, human intelligence is diversified, including linguistic intelligence, logical mathematical intelligence, spatial intelligence, body kinesthetic intelligence, musical intelligence, interpersonal intelligence, introspective intelligence and natural observation intelligence. Different learners have different intelligence advantages. Teaching should focus on giving full play to learners' intelligence advantages and adopt diversified teaching methods to meet students' differentiated needs [15].

In the teaching of financial market for undergraduates, the theory of multiple intelligences requires teachers to adopt a variety of teaching methods, taking into account the intelligent advantages of different students. For example, for students with strong language intelligence and logic mathematics intelligence, the teaching method of combining case analysis and theoretical explanation can be adopted; For students with strong body kinesthetic intelligence and interpersonal intelligence, the teaching method of combining simulation experiment and group cooperative learning can be adopted, so that each student can play his own advantages in learning and improve the learning effect.

## **4. Application Path Design of Multiple Teaching Methods for Undergraduate Financial Market Course**

### **4.1 Application Path of Case Teaching Method**

#### **4.1.1 Case Selection and Design**

Case selection is the key to the application of case teaching method, which should follow the principles of authenticity, pertinence and timeliness. The selected cases should come from the actual events in China's financial market and can reflect the core knowledge points and teaching objectives of the course. For example, when explaining the relevant content of the stock market, you can choose "analysis of the stock price fluctuation in Moutai, Guizhou" and "listing cases of enterprises on the science and Innovation Board" and so on; When explaining the relevant content of financial risk management, you can choose "risk prevention and control in Ruixing coffee's financial fraud" and "P2P online loan platform risk outbreak case", etc. At the same time, the case design should be

enlightening and challenging, and can guide students to actively think and analyze problems.

#### **4.1.2 Implementation Process of Case Teaching**

The implementation process of case teaching method mainly includes case presentation, group discussion, class communication and summary Comments. First, teachers present cases to students through PPT, video and other ways in class, and put forward relevant thinking problems; Secondly, divide the students into several groups, each group of 5-6 people, let the students carry out group discussions around thinking problems, and the teachers conduct patrol guidance among the groups to answer the students' questions; Thirdly, each group selects a representative for class communication to share the analysis ideas and conclusions of the group; Finally, the teacher summarizes and comments on the communication of each group, sorts out the key points of case analysis, and makes in-depth explanation in combination with the theoretical knowledge of the course to help students consolidate what they have learned.

### **4.2 Application Path of Project Teaching Method**

#### **4.2.1 Project Subject Determination**

The theme of the project should be determined in combination with the teaching content of the course financial market and the actual needs of the financial market, which is practical and exploratory. For example, project themes such as "analysis of investment value of a listed company", "design of personal financial management scheme" and "formulation of investment strategy in financial derivatives market" can be determined. The difficulty of the project theme should be moderate. It should not only cover the core knowledge of the course, but also enable students to complete it within the scope of existing knowledge and ability.

#### **4.2.2 Project Implementation Process**

The implementation process of project-based teaching method mainly includes project layout, project planning, project implementation, project results display and project evaluation. First, the teacher assigns the project tasks to the students and defines the project objectives, requirements and time nodes; Secondly, students carry out project planning in groups, formulate project implementation plans, and clarify the division of labor among members of the group; Thirdly, each team carries out the project implementation according to the project plan, and completes the project tasks through data access, field research, data analysis, etc; Then, each team will display the project results and share the research process and conclusions of the project; Finally, the teacher evaluates the project results of each group, and the evaluation indicators include the quality of project completion, team cooperation, innovation, etc.

### **4.3 Application Path of Flipped Classroom Teaching Method**

#### **4.3.1 Design of pre Class Autonomous Learning Resources**

Teachers design pre class autonomous learning resources according to the teaching content and teaching objectives, including teaching videos, PPT courseware, reading materials, exercises, etc. The teaching video should be concise, focused, and the duration should be controlled within 15-20 minutes to facilitate students' learning in fragmented time; Reading materials can select academic papers and industry reports related to financial markets to help students expand their knowledge; Exercises are used to test the effect of students' autonomous learning and help students consolidate

what they have learned. Teachers can publish autonomous learning resources to students through the online learning platform, and specify the learning requirements and deadline.

### **4.3.2 Design of Classroom Interaction**

Classroom interaction is the core of flipped classroom teaching method, which mainly includes question answering, group discussion, case analysis, practical operation, etc. Teachers first answer questions and solve problems in students' autonomous learning before class; Then, design interactive questions around the core knowledge points of the course, and organize students to carry out group discussions; Then, combined with the actual case analysis, guide students to combine theoretical knowledge with practice; Finally, the practical operation link is arranged to let students improve their practical ability through simulation experiments.

## **4.4 Application Path of Simulation Experiment Teaching Method**

### **4.4.1 Construction of Simulation Experiment Platform**

Colleges and universities should strengthen the construction of financial simulation experiment platform and introduce advanced financial simulation software, such as guotai'an financial laboratory software and Shihua Caixun financial simulation software. The simulation experiment platform should cover the simulation trading function of multiple financial markets such as stocks, bonds, futures, options, foreign exchange, etc., and can create a real financial market trading environment for students. At the same time, the platform should provide data analysis, risk assessment and other functions to help students improve their ability of data analysis and risk management.

### **4.4.2 Implementation Process of Simulation Experiment Teaching**

The implementation process of simulation experiment teaching method mainly includes three links: experimental preparation, experimental operation and experimental summary. First, the teacher explained the purpose, content, steps and precautions of the experiment to the students before the experiment, and demonstrated the operation of the experimental software; Secondly, students are divided into groups to carry out experimental operations, carry out simulated transactions according to experimental tasks, and record transaction data and experimental process; Finally, the students write the experimental report, summarize the experimental harvest and experience, and the teachers comment and guide the students' experimental report to help students sort out the problems existing in the experimental process and improve the experimental teaching effect.

## **4.5 Application Path of Group Cooperative Learning Method**

### **4.5.1 Group Grouping Principle**

Group grouping should follow the principle of heterogeneous grouping, that is, each group contains students with different learning foundations, learning interests and learning abilities, so as to achieve complementary advantages. At the same time, the group size should be moderate, with 5-6 people in each group, which can not only ensure that each student has the opportunity to participate, but also improve the efficiency of group cooperation. Teachers can group students according to their specific conditions, or let students group independently, and teachers can make appropriate adjustments.

## 4.5.2 Implementation Process of Group Cooperative Learning

The implementation process of group cooperative learning method mainly includes task allocation, group discussion, achievement sharing and evaluation feedback. First, the teacher assigns learning tasks to each group, and defines the task requirements and time nodes; Secondly, each group carries out group discussion, and members communicate and cooperate with each other to complete the learning task together; Then, each group will share the learning results and exchange experience; Finally, the teacher evaluates and feeds back the cooperative learning of each group. The evaluation indicators include task completion, team cooperation ability, communication ability, etc., to help students improve the effect of cooperative learning.

## 4.6 Collaborative Application of Multiple Teaching Methods

In the teaching of undergraduate financial market course, a single teaching method is difficult to meet the teaching objectives of the course and the development needs of students, so we should pay attention to the collaborative application of a variety of teaching methods. For example, when explaining the chapter of "financial derivatives market", the collaborative teaching mode of "flipped classroom+simulation experiment+group cooperation" can be adopted: students can learn the basic theoretical knowledge of financial derivatives by themselves through flipped classroom before class; The researchers organize students to carry out group discussion in class and analyze the actual cases of financial derivatives market; Then, through the simulation experiment, students can carry out the simulated trading of financial derivatives to improve their practical operation ability; Finally, relevant project tasks are completed through group cooperation, such as financial derivatives investment strategy design. Through the collaborative application of various teaching methods, we can give full play to the advantages of various teaching methods and improve the teaching effect.

## 5. Empirical Study on the Application Effect of Various Teaching Methods in the Course of Financial Market for Undergraduates

### 5.1 Experimental Design

#### 5.1.1 Selection of Experimental Objects

Two classes of 2023 undergraduate financial engineering major in a university were selected as the experimental objects, in which the experimental class (30 people) used a variety of teaching methods, and the control class (30 people) used traditional teaching methods. There is no significant difference between the students in the two classes in terms of admission performance, learning foundation and learning ability, which is comparable.

#### 5.1.2 Setting of Experimental Variables

The independent variable of this experiment is the teaching method, that is, the experimental class uses a variety of teaching methods (case teaching method, project teaching method, flipped classroom teaching method, simulation experiment teaching method, group cooperative learning method), and the control class uses the traditional teaching method; The dependent variable is teaching effect, which is mainly measured by students' academic performance, learning interest and ability improvement.

### 5.1.3 Test Time and Process

The experiment lasted for one semester (18 weeks), and the experimental process was as follows: in the first week, the students in two classes were given a pre-school test to understand the students' learning foundation; From week 2 to week 17, the experimental class was taught with a variety of teaching methods, while the control class was taught with traditional teaching methods; At the 18th week, the students in the two classes were tested after school, and a questionnaire was issued to understand the improvement of students' learning interest and ability; Finally, the experimental data are sorted and analyzed to evaluate the application effect of various teaching methods.

## 5.2 Collection and Collation of Experimental Data

### 5.2.1 Academic Performance Data Collection

The pre-school test scores and post-school test scores of the students in the two classes were collected respectively. The test content covered the core knowledge points of the financial market course. The question types included multiple-choice questions, short answer questions, case analysis questions and discussion questions, with a total score of 100 points.

### 5.2.2 Data Collection for Learning Interest and Ability Improvement

Collect the data of students' learning interest and ability improvement by issuing questionnaires. A total of 20 questions were designed in the questionnaire, including 10 questions about learning interest (such as "my interest in learning the course of financial markets has significantly increased"), 10 questions about ability improvement (such as "my autonomous learning ability has been improved", "my practical operation ability has been improved"), and the Likert 5-point scale was used to score. 1 means "very disagree" and 5 means "very agree". A total of 60 questionnaires were distributed and 60 valid questionnaires were recovered, with an effective recovery rate of 100%.

## 5.3 Analysis of Experimental Results

### 5.3.1 Comparative Analysis of Academic Performance

Table 1 Comparison of academic performance between experimental class and control class

class	No.	average score of pre-school test	average score of post-school test	average score improvement range	pass rate (%)
Experimental class	30	65.2	82.5	26.50%	96.7
Control class	30	64.8	73.2	13.00%	86.7

It can be seen from table 1 that the average scores of the pre-school test of the experimental class and the control class are relatively close, 65.2 and 64.8 respectively, indicating that there is no significant difference in the learning basis between the two classes. In the post-school test, the average score of the experimental class (82.5) was significantly higher than that of the control class (73.2), and the average score improvement rate (26.5%) was also significantly higher than that of the control class (13.0%). In addition, the pass rate of the experimental class (96.7%) was also higher than that of the control class (86.7%). This shows that the application of a variety of teaching methods can effectively improve students' academic performance.

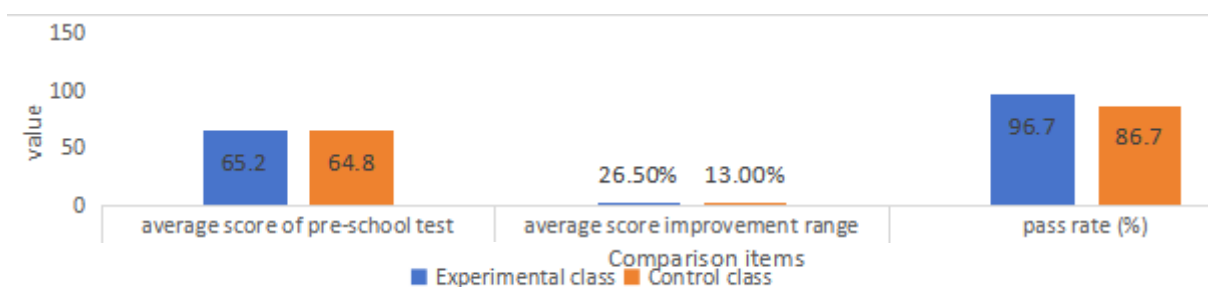


Fig. 1 Comparison of academic performance between experimental class and control class

Figure 1 visually shows the comparison of the average scores of the experimental class and the control class in the pre-school test and the post-school test, and it can be clearly seen that the improvement of the scores of the experimental class is more obvious.

### 5.3.2 Comparative Analysis of Learning Interest

Table 2 Comparison of learning interest scores between experimental class and control class

class	No.	average score of learning interest	standard deviation
Experimental class	30	4.25	0.52
Control class	30	3.12	0.68

It can be seen from table 2 that the average score of students' learning interest in the experimental class (4.25 points) is significantly higher than that in the control class (3.12 points), and the standard deviation of the experimental class (0.52) is less than that in the control class (0.68 points), indicating that the students' learning interest in the experimental class is generally high, and their opinions are relatively consistent. This shows that the application of a variety of teaching methods can effectively stimulate students' interest in learning.

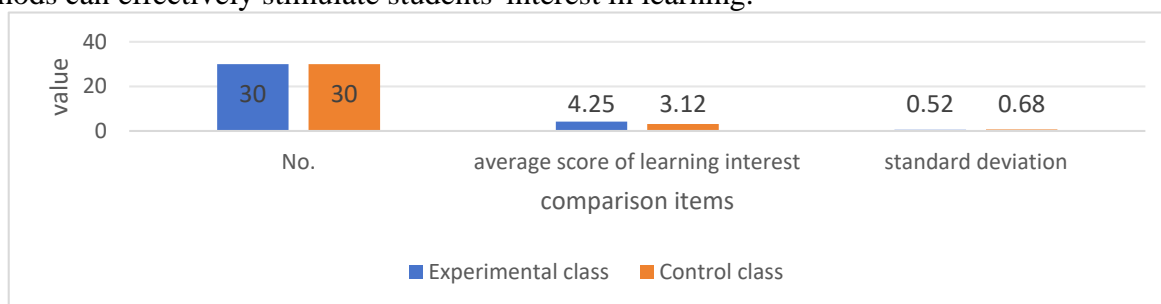


Fig. 2 Comparison of the distribution of learning interest scores between the experimental class and the control class

Figure 2 shows the distribution of the scores of students' interest in learning in the experimental class and the control class. The scores of students in the experimental class are mainly 4 and 5, while the scores of students in the control class are mainly 3, which further shows that a variety of teaching methods can improve students' interest in learning.

### 5.3.3 Comparative Analysis of Capability Improvement

Table 3 Comparison of ability improvement scores between experimental class and control class

ability dimension	average score of experimental class	average score of control class	difference value
Autonomous Learning Ability	4.32	3.05	1.27
Practical operation ability	4.45	2.98	1.47
Problem solving ability	4.28	3.12	1.16
Teamwork ability	4.51	3.20	1.31
Communication skills	4.36	3.15	1.21

It can be seen from table 3 that the average scores of students in the experimental class are significantly higher than those in the control class in the five dimensions of autonomous learning ability, practical operation ability, problem solving ability, teamwork ability and communication and expression ability, and the difference is between 1.16 and 1.47. Among them, the difference in practical operation ability is the largest (1.47), indicating that the application of various teaching methods has the most significant effect on improving students' practical operation ability. This shows that the application of a variety of teaching methods can comprehensively improve students' comprehensive ability.

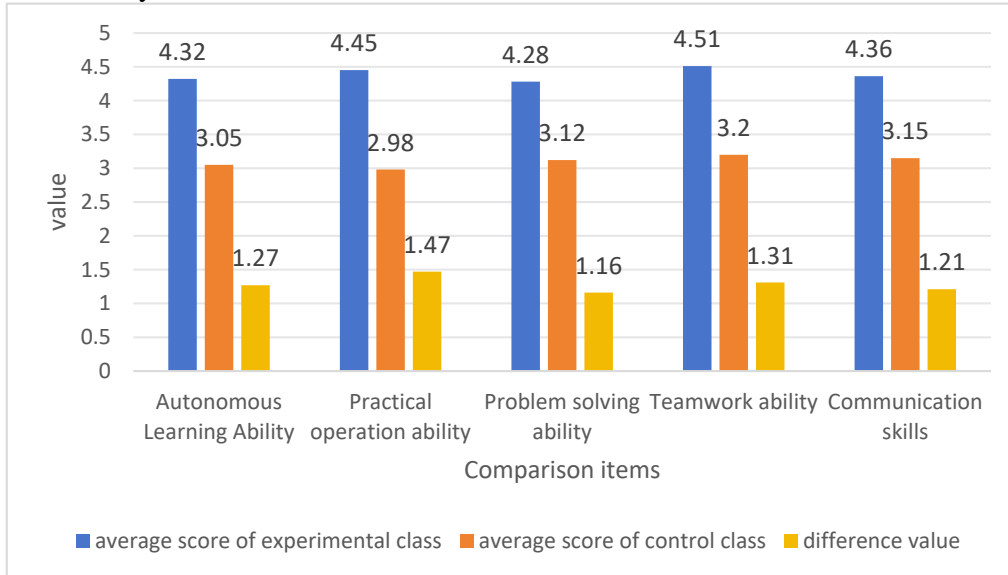


Fig. 3 Comparison of ability improvement between experimental class and control class

Figure 3 visually shows the comparison of the average scores of the experimental class and the control class in each ability dimension, clearly showing that the students in the experimental class are better than the control class in each ability.

### 5.3.4 Satisfaction Analysis of Teaching Methods

Table 4 scores of students' satisfaction with various teaching methods in the experimental class

teaching methods	average score of satisfaction	number of very satisfied	number of satisfied	satisfaction%
case teaching method	4.30	15	12	90.0
project teaching method	4.25	14	13	90.0
flipped Classroom	4.18	13	12	83.3
simulation experiment teaching method	4.42	16	12	93.3
group cooperative learning method	4.35	15	13	93.3

It can be seen from table 4 that the experimental class students' satisfaction with a variety of teaching methods is high, and the satisfaction is above 83.3%. Among them, the satisfaction of simulation experiment teaching method and group cooperative learning method was the highest (93.3%), the satisfaction of case teaching method and project teaching method was 90.0%, and the satisfaction of flipped classroom teaching method was 83.3%. This shows that a variety of teaching methods have been widely recognized by students and can meet the learning needs of students.

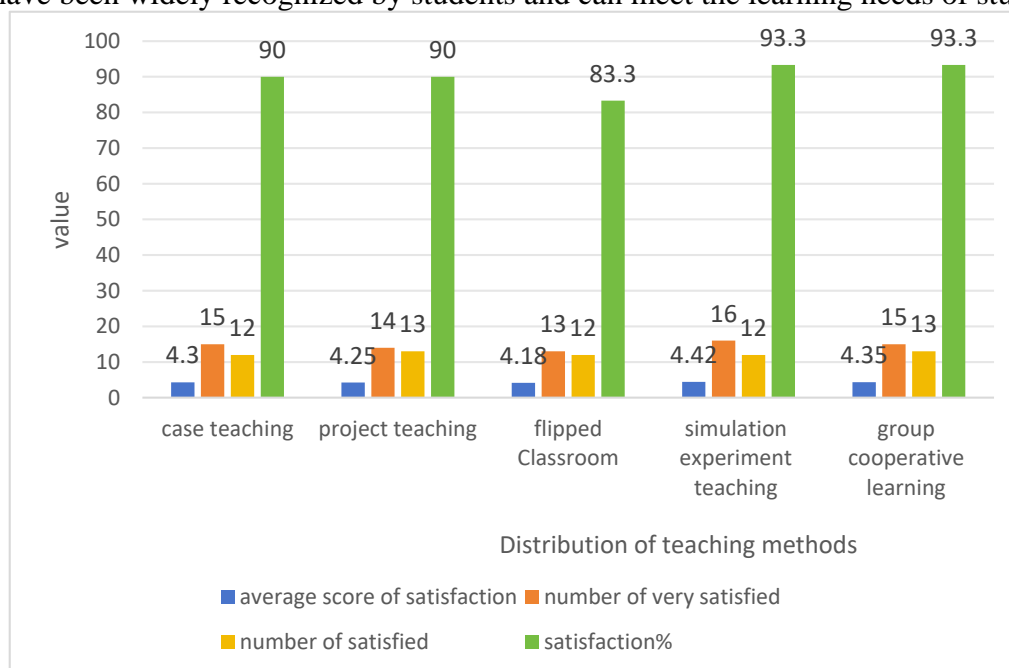


Fig. 4 Comparison of students' satisfaction with various teaching methods in the experimental class

Figure 4 intuitively shows the satisfaction of the students in the experimental class with various teaching methods, and clearly shows that the simulated experimental teaching method and the group cooperative learning method have the highest satisfaction.

### 5.3.5 Experimental Conclusion

The empirical study shows that, compared with the traditional teaching method, the application

of various teaching methods in the undergraduate course of financial market has significant advantages: first, it can effectively improve students' academic performance and improve the pass rate of the course; Second, it can stimulate students' interest in learning and enhance their learning initiative; Third, it can comprehensively improve students' comprehensive ability, especially their practical operation ability and team cooperation ability; Fourth, it has been widely recognized by students, and students' satisfaction with a variety of teaching methods is high. Therefore, the application of a variety of teaching methods can effectively improve the teaching quality of undergraduate financial market course.

## **6. Safeguard Measures for The Application of Various Teaching Methods in the Undergraduate Course of Financial Market**

### **6.1 Strengthen the Construction of Teaching Staff**

Teachers are the core subject of the application of various teaching methods, and their teaching ability and professional quality directly affect the teaching effect. Therefore, we should strengthen the construction of the teaching staff of the course of financial market. On the one hand, colleges and universities should regularly organize teachers to participate in the training of teaching methods, such as case teaching method, project-based teaching method, flipped classroom teaching method and other special training, so as to improve the application ability of teachers' teaching methods; On the other hand, teachers should be encouraged to go deep into the practice of the financial industry, take a temporary job in financial institutions, understand the latest developments and actual operation of the financial market, enrich teachers' practical experience, and provide support for the innovation and application of teaching methods. In addition, we should strengthen the teaching exchange and cooperation among teachers, establish a teaching discussion mechanism, share teaching experience and teaching results, and jointly improve the teaching quality.

### **6.2 Improve the Construction of Teaching Resources**

Perfect teaching resources are the basic guarantee for the application of various teaching methods. Colleges and universities should increase investment in the construction of teaching resources for the course of financial markets, including the following aspects: first, strengthen the construction of teaching materials, organize teachers to compile teaching materials that meet the application needs of a variety of teaching methods, and pay attention to the combination of theory and practice in the content of teaching materials, and integrate a large number of actual cases and project tasks; Second, build high-quality online learning resources, such as teaching videos, PPT courseware, reading materials, exercises, etc., and build an online learning platform to support the application of flipped classroom and other teaching methods; The third is to strengthen the construction of financial simulation experiment platform, introduce advanced financial simulation software, improve experimental teaching equipment, and provide good hardware conditions for the application of simulation experiment teaching method; The fourth is to establish a case library and a project library, collect and sort out a large number of actual cases and project tasks of the financial market, and provide rich materials for the application of case teaching method and project-based teaching method.

### **6.3 Optimize the Teaching Evaluation System**

The traditional teaching evaluation system mainly focuses on students' final exam scores, which is difficult to fully reflect the application effect of various teaching methods and students'

comprehensive ability. Therefore, the teaching evaluation system of financial market should be optimized. On the one hand, we should construct diversified evaluation subjects, including teachers' evaluation, students' self-evaluation and group mutual evaluation, to ensure the objectivity and fairness of the evaluation results; On the other hand, we should improve the evaluation index system, including students' learning process, practical operation ability, team cooperation ability, innovation ability and so on, and adopt the combination of process evaluation and summative evaluation. For example, process evaluation can include classroom performance, group discussion, project completion quality, experimental report, etc., accounting for 50% of the total score; The final evaluation can include the final examination, accounting for 50% of the total score. By optimizing the teaching evaluation system, we can better guide students to pay attention to the learning process and improve their comprehensive ability.

#### **6.4 Strengthen Teaching Management and Support**

Colleges and universities should strengthen the teaching management and support for the application of various teaching methods in the course of financial market. On the one hand, we should establish and improve the teaching management system, clarify the teaching requirements and teaching norms, strengthen the supervision and inspection of the teaching process, and ensure the effective implementation of a variety of teaching methods; On the other hand, sufficient teaching funds should be provided to ensure the smooth development of teaching resources construction, teacher training, experimental platform construction and other work. In addition, it is also necessary to strengthen the cooperation between various departments, such as the academic affairs office, the College of finance, the experimental center, etc., to form a teaching force and provide a good teaching environment and guarantee conditions for the application of a variety of teaching methods.

#### **6.5 Create a Good Teaching Atmosphere**

Good teaching atmosphere is an important guarantee for the application of various teaching methods. Colleges and universities should actively create an atmosphere that attaches importance to teaching reform and encourages teaching innovation, guide teachers to establish a student-centered teaching concept, and actively explore and apply a variety of teaching methods. At the same time, we should strengthen the guidance of students, change their learning concepts, let students realize the importance of autonomous learning and cooperative learning, and actively participate in the teaching process of a variety of teaching methods. In addition, activities such as teaching achievement display and teaching competition can be held to stimulate the enthusiasm and initiative of teachers and students and create a good teaching and learning atmosphere.

### **7. Conclusion and Prospect**

#### **7.1 Research Conclusion**

Through the research on the application of various teaching methods in the course of financial market for undergraduate students, this paper draws the following conclusions: first, the course of financial market for undergraduate students has the characteristics of coexistence of theory and practice, many knowledge points and fast update speed, strong comprehensiveness and applicability, etc. the traditional teaching method has the problems of single teaching method, disconnection between theory and practice, untimely update of teaching content, lack of personalized teaching, etc., which is difficult to meet the teaching objectives and students' development needs; Second,

constructivist learning theory, situational learning theory and multiple intelligences theory provide a solid theoretical basis for the application of a variety of teaching methods; Third, case teaching method, project-based teaching method, flipped classroom teaching method, simulation experiment teaching method and group cooperative learning method have clear application paths in the course of financial market. The collaborative application of various teaching methods can give full play to their respective advantages and improve the teaching effect; Fourth, empirical research shows that the application of a variety of teaching methods can effectively improve students' academic performance, stimulate students' interest in learning, and comprehensively improve students' comprehensive ability, which has been widely recognized by students; The fifth is to strengthen the construction of teachers' team, improve the construction of teaching resources, optimize the teaching evaluation system, strengthen teaching management and support, and create a good teaching atmosphere, which are important guarantee measures for the application of various teaching methods.

## 7.2 Research Prospects

This paper makes a preliminary study on the application of various teaching methods in the course of financial market for undergraduate students, but there are still some shortcomings, which can be further studied from the following aspects in the future: first, expand the sample size of empirical research, select students from different universities and majors as experimental objects, and improve the universality and applicability of research conclusions; The second is to deeply study the combination mode of different teaching methods, and explore the optimal combination of teaching methods for different teaching contents and different student groups; The third is to combine digital technology, such as artificial intelligence, big data, etc., to innovate teaching methods and build an intelligent teaching mode for the course of financial market; The fourth is to track the impact of the application of various teaching methods on students' employment and career development for a long time, and further verify the application effect of teaching methods.

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