

Analysis on the Application of the Improved “PCDCEA Cycle” Model in the Teaching Reform of Economic Law Course

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Abstract—Along with the development of market economy and the deepening of higher education reform, vast majority of colleges and universities operate specialized course of economic law to promote the all-round development of students and to better meet the society's demand for innovative and entrepreneurial talents. The course of economic law covers a wide range of students in college of management, the knowledge structure is integrated and the curriculum position is relatively important. By analyzing the current status of teaching reform, this paper brings forward some countermeasures for existing problems in economic law course. In order to improve learning effect and the information ability of students, this paper tries to adopt PCDCEA cycle of teaching mode which includes six links (Acronyms PCDCEA are words formed from the first letter of these words: Plan, Communicate, Do, Check, Evaluate and Adjust). The application of the improved "PCDCEA cycle" model in the teaching reform should penetrate the whole teaching process and permeates in every aspect of teaching activity. The "PCDCEA cycle" model can enhance the combination of theory teaching and practice teaching, and improve the alignment of information technology and teaching methods. This paper analyzes the application of "PCDCEA cycle" model in teaching practice, teaching content and teaching methods of the economic law course, and brings some practical suggestions on improving college students' legal quality and strengthening students' innovative undertaking ability.

Keywords: *PCDCEA cycle, economic law, teaching reform*

I. INTRODUCTION

The course of economic law starts from the basic knowledge of law, combines the related legal theory with practical cases, and helps students to understand economic law. With the development of market economy, economic law has become a popular basic curriculum for the majors of Economics and Management of Business Administration in college. The economic law can be a compulsory course for students of management major or a public elective course for universities. This course attaches importance to the cultivation of application ability of students in terms of economic law and make it practical.

The four steps of the action-oriented practical teaching method are consultation, planning, implementation and evaluation. The practical teaching method can help to improve teaching efficiency and have achieved some results, but in many universities, there are still some problems in economic law teaching. Such as: the class time is limited, the classroom interactions and group discussions are lacking, and the traditional evaluation criteria of exam are relatively simple. Also, there are few teaching resources and real legal case for analysis and relevant practical application. Moreover, great individual differences of learning affection are among students, some students think that the theoretical knowledge of economic law is difficult and boring for them, and the overall learning experience is not good.

In view of the above teaching problems, the teaching reform is much more realistic and necessary. This paper adopts the improved "PCDCEA teaching cycle" model and takes the economic law course as an example to bring some advice for teaching reform so as to meet the needs of high-quality, highly skilled and application-oriented innovative talents.

II. ANALYSIS OF THE LEARNING SITUATION OF ECONOMIC LAW COURSE

As a fundamental course, economic law has many characteristics such as high theoretic value, multiple and detailed knowledge points, large content coverage and strong practical operation. The existing problems of traditional teaching method of economic law are listed as follows:

A. *Limits of teaching environment*

The teaching environment of traditional teaching method is the classroom, and it ignores the educational function outside the classroom. The practice that takes textbooks as the core teaching tool neglects the practical value of economic law course. What's more, taking teacher as the center of traditional teaching could inhibit students' learning enthusiasm and bound the development of students' innovative talents. Moreover, it ignores students' initiative and creativity in the learning process. Students' learning

enthusiasm will affect colleges' educational goals directly. So how to mobilize students' learning enthusiasm is an important subject of college education.

B. Lack of curriculum teaching resources

From the perspective of curriculum resources, the traditional teaching materials are mainly based on textbooks, teaching plans and courseware. But few practical resources and cases of enterprises is not conducive to the combination of theoretical knowledge and practice. In that case, students are not actively involved in economic law class because of the weak connection between theoretical knowledge and practice. It is difficult for them to understanding knowledge points and to actively participate in classroom interaction.

C. Simplicity of evaluation criterion

In terms of evaluation and examination, the way to evaluate students' learning effect is relatively simple. The formative assessment of traditional teaching system is mainly carried out through students' attendances and behaviors in class. Summative tests and exams usually focus on the conclusive evaluation of theoretical knowledge, ignore the comprehensive evaluation of learning process and learning initiative.

This paper sent out an investigating questionnaire to 160 students of the school's economic law course, and 148 pieces of effective feedback were obtained. The analysis of students' learning situation is shown as below with two questions Q2&Q6 of the research: (See "Fig. 1")

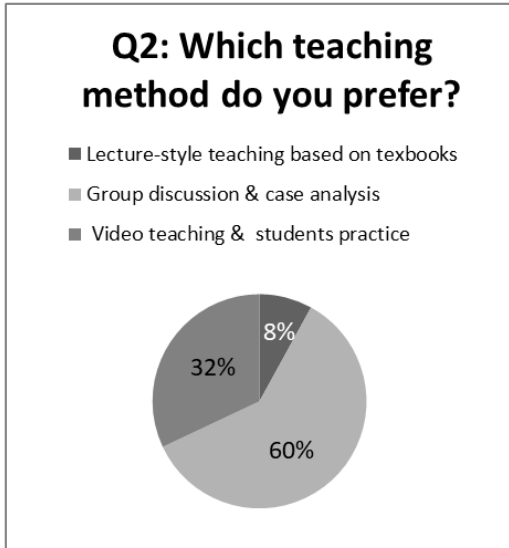


Fig. 1. Pie chart of students' preference for teaching methods.

As can be seen from the survey results in "Fig. 1", 60% students prefer the class with group discussion and case analysis, 32% students prefer watching teaching videos and completing practice, few students like theoretical teaching style. So, various methods of teaching such as case studies and group discussions should be adopted in class. In "Fig. 2", it shows that most students do not review the knowledge

frequently after class, and students are not active in autonomous learning. Therefore, one of the most important tasks of teaching reform is to cultivate students' autonomous learning ability.

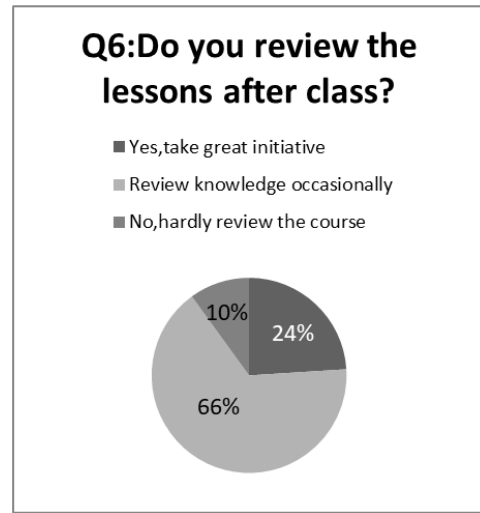


Fig. 2. Pie chart of students' review situation after class

From the survey results and learning situation analysis of economic law, it can be seen that in order to cultivate economic and legal talents, the teaching methods should pay attention to practicality and applicability. The teaching reform should focus on the goal of "application-oriented" talent training, and assist with the combination of teaching, practicing, group discussion and other modes to achieve classroom teaching interaction and increase students' learning enthusiasm.

III. THE CONCEPT OF "PCDCEA TEACHING CYCLE"

"PCDCEA" is a new teaching cycle based on PDCA (Deming Ring). PDCA cycle is also known as a quality cycle model in management science. In 1950, it was widely publicized by Dr. Deming, an American quality management expert, and applied to continuous improvement of product quality management. According to the PDCA cycle theory, this paper constructs the PDDCEA cycle combined with the task-driven teaching method, which consists of the following six links: Plan, Communicate, Do, Check, Evaluate and Adjust as the flow diagram shows. Communication and evaluation are the key points of the cycle as important intermediate links. (See "Fig. 3")

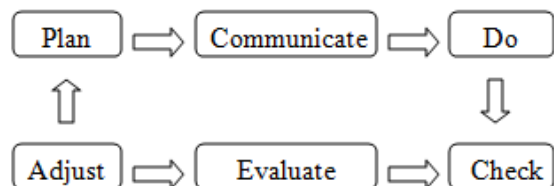


Fig. 3. The PCDCEA teaching cycle graph.

"PCDCEA teaching cycle" is a new type of teaching design in teaching reform. This cycle based on the teaching tasks, starts from the specific teaching goal, and then enter the following links of communication, task Execution, task Checking, curriculum result evaluation and finally Adjust the PCDCEA teaching cycle in the next class. This cycle can help to promote teaching process circulation to the next higher level, achieve effective improvement of teaching methods and actively promote the teaching quality.

"Blended learning" is a key point of teaching reform, and blended teaching is a new teaching mode that seamlessly connects online and offline studies. Blended teaching focuses on cultivating students' professional quality and life-long learning ability, and it can promote students' independent learning ability and enhance teachers' dynamic tracking and process guidance. It. Blended teaching mode also focuses on the use of information technology to manage the learning content, the blended teaching mode is based on the improved "PCDCEA teaching cycle", it fully adopts the information teaching method to achieve the teaching effect of task planning, communicating, evaluating, feedback and other links needed in the teaching process.

The economic law course should adapt to diversified needs of economic management talents with the development of the market economy. The teaching reform of "Blended learning" should be guided by the "PCDCEA teaching cycle". Through this reform, students can master the basic principles of economic laws and enhance their case analysis ability. Also, by learning this course, students can lay a good foundation for follow-up courses. The course construction of economic law should be designed from three aspects of "knowledge and ability", "process and method" and "emotion, attitude and values" by using "PCDCEA teaching cycle" model.

IV. APPLICATION OF "PCDCEA TEACHING CYCLE" MODEL IN ECONOMIC LAW COURSES

The teaching process is divided into six stages including task planning, task communication, task implementation, task inspection, task evaluation and task adjustment (six links of PCDCEA: Plan, Communicate, Do, Check, Evaluate and Adjust). This cycle helps teachers to design student-centered teaching objectives and formulate appropriate teaching tasks. Through communication, task implementation, collaborative learning and discussion, teachers evaluate the teaching effect and make further task adjustment. According to the actual needs of management and entrepreneurial talents, the "PCDCEA teaching cycle" model should be applied to promote the achievement of teaching objectives. The following shows a detailed analysis and application of each link in the "PCDCEA teaching cycle".

A. Task planning (P)

At this stage, students should be aware of what they need to do and how to achieve the task objectives of the course. And teachers should understand what kind of knowledge and

skills are required. Before class, teachers upload the teaching plans and learning resources to the network teaching platform, and students prepare the course by self-study. These relevant online learning resources can stimulate students' interest and guide them to think actively and study spontaneously. In addition, the process of students' self-learning is traceable throughout the whole process, and teachers can check the students' learning time and learning progress through the mobile management platform online.

Take the unit two of commercial organization legal system for example, before class, teachers assign preview tasks to guide students to investigate commercial organizations in economic life, such as partnership enterprises, limited companies and joint stock limited companies. Students should learn the basic knowledge independently and think about the similarities and differences among various commercial organizations.

B. Task communication (C)

Communication is mainly used as a medium between pre-class task planning and task implementation in the classroom. After task planning, students can search the content that teachers require to learn by themselves, and they can also interact with teachers timely through the interactive function of the mobile teaching platform to give feedbacks timely. It requires teachers to communicate with students in time to collect the problems and difficulties which encounter in the preliminary planning. According to the collected feedbacks, teachers prepare the key points of the lessons and adjust the teaching plan.

C. Doing the task (D)

This stage aims to solve the problem of "How to implement and complete the teaching task?". The basic knowledge is studied independently by students through the online teaching platform before class. In classroom teaching, teachers divide students into small groups, then through videos and cases to assign tasks to each group, the tasks include legal case analysis, project training and consultation. Everyone in the team should be in compliance with the division of duties, make joint efforts to complete the task.

Teachers should guide students' learning progress and content through brainstorming of case analysis and topic discussion. What's more, the classroom interactions should be recorded and teachers can give encouragement, evaluation and feedback to students.

Based on the purpose to increase students' analytical and practical ability, the class can be carried out interactively with a knowledge topic discussion between teachers and students. Take the unit two of commercial organization legal system for example, the situational simulation teaching method and role playing teaching method are important. Students play various business organization personnel, and illustrate the qualifications, obligations and responsibilities of listed organizations, then perform corresponding duties according to their roles. Based on the knowledge and skills objectives, a group of five students are required to set up a

partnership and draw up a written partnership agreement. Then, students discuss the rights and obligations of each partner. After that, teacher simulates a situation, and explains the partnership responsibility and other issues such as partnership withdrawal and the rights of creditors. When teaching the company law, a group of eight students set up a virtual limited company, jointly formulate the company's articles of association and discuss the capital, company name, residence, the rights and obligations of shareholders, organizational structure and other issues. Through implementing the task by group discussion and interactive learning, students can master the knowledge and improve cooperative ability.

D. Task checking (C)

In this stage, teachers should make clear one problem "whether or not the task objectives have been reached". For example, in the class of contract law, two groups of students simulate two companies to sign a sales contract, determine the liability for breach of contract, or require a debtor to provide corresponding guarantee. Then, group members write down the content of the contract, Teachers determine each group in the form of random, specify or take turns talking a classmate and multimedia presentation, and teacher open the real-time evaluation function on the online platform, each student can evaluate on the advantages and disadvantages of other group's contract by using the platform on mobile phones. This way could strengthen the classroom interaction, and exercise students' ability of language expression. Finally, teachers explain the contract law and analyze students' group work.

E. Task evaluation (E)

After checking task completion effect, the crucial link is teaching and task evaluation. It is an important component and it guides and monitors the whole process of the "PCDCEA teaching cycle". This paper aims to introduce the multi-evaluation method including teachers and students. The multi-evaluation is divided into three parts: self-evaluation, group evaluation and teacher evaluation. The evaluation standard and each proportion of the scores are shown in the following table: (See "Table I")

TABLE I. THE EVALUATION STANDARD AND EACH PROPORTION OF THE SCORES

Proportion	Evaluation Standard
Self-evaluation (10%)	Preparation, attitude, learning ability
Group evaluation (25%)	Team cooperation, analytical ability, task completion
Teacher evaluation (65%)	Participation, basic knowledge, practical ability

- The self-evaluation accounts for 10%, which is composed of three scoring points: preparation, attitude and independent learning ability. and completion of practice;

- The group evaluation accounts for 25%, which is composed of three scoring points: group cooperation, analytical ability of legal cases and task completion.
- The teacher evaluation accounts for 65%, which is composed of three scoring points: classroom participation, mastery degree of knowledge and practical ability.

The evaluation by teachers and students can create a positive learning atmosphere and also increase the fun of classroom learning. For summative assessment in the final exam, students' political and legal knowledge, analytical ability, practical ability of economic law will be evaluated, students should choose the appropriate law to analyze cases reasonably.

F. Task adjustment (A)

The main task of this stage is to summarize and conclude the teaching cycle of this round and adjust the next round of tasks in time. Teachers should adjust the teaching content and key points according to the students' learning state, and adjust the teaching method according to students' feedbacks. Meanwhile, students should consider whether there are problems that need to be improved due to the lack of knowledge and professional quality in the process of task completion. Through the "PCDCEA teaching cycle", teachers' linear teaching mode is modified into a circular teaching mode with six links. This teaching cycle can improve teachers' teaching methods and constantly optimize teaching outcome, at the same time, students are guided to complete the task and enhance their abilities gradually in this cycle.

The application of "PCDCEA teaching cycle" is consistent with Bloom's Taxonomy. The Bloom's Taxonomy is shown as below "Fig. 4".

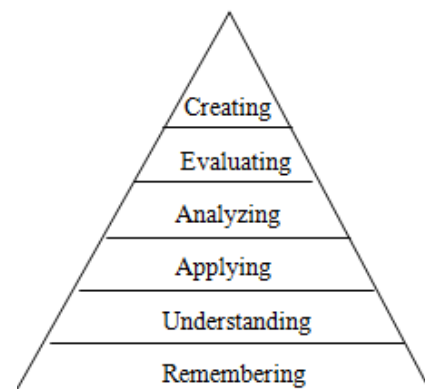


Fig. 4. The New Version Pyramid of Bloom's Taxonomy.

This idea was put forward by Benjamin bloom, a famous American psychologist and educator. Bloom divides the goals of cognitive learning into six levels: creating, evaluating, analyzing, applying understanding and remembering. In "PCDCEA teaching cycle", the first step is task planning, in this stage, students remember the basic knowledge through self-studies; the second stage of

communication help students to understand the learning tasks and goals; in the third stage, students apply knowledge to practice by doing the tasks; in the fourth stage, students analyze whether or not the task objectives have been reached; in the fifth stage, students and teacher evaluate the tasks together; in the last stage, teacher should update the teaching plan and students should adjust learning method according to the evaluation.

V. CONCLUSION

The construction of "PCDCEA teaching cycle" model needs to be promoted step by step in the teaching reform, and it also need assistance and supports from various aspects. To ensure its implementation of the "PCDCEA teaching cycle", this paper forwards the following suggestions:

A. *Constructing the information-based teaching environment*

The adoption of blended learning should be supported by information teaching facilities, such as the wireless network coverage, mobile terminal equipment for students, mature and easy-to-use network teaching platform, suitable teaching resources and so on. Most colleges and universities have realized the full coverage of wireless network, and the next step is to promote the popularization of online teaching platforms, especially the construction of mobile network teaching platforms. It is necessary to further deepen the joint construction and sharing of digital teaching resources.

B. *Enhancing the support for online resources*

By using multimedia presentation courseware and relevant analysis materials of legal cases, teachers can share students with reference materials such as interpretation of legal provisions on the teaching platform, so as to cultivate students' independent learning ability. Meanwhile, online exercises and tests in class can help to track students' learning status and feedbacks. Share legal case analysis, relevant legal provisions and interpretation on the teaching resource platform. Other resources such as teaching video, legal program video and related reference materials should be used as auxiliary material in learning process.

C. *Strengthening the teachers' training and improve their ability to implement the curriculum*

Under the background of Blending Learning, there are some requirements of teaching skills for teachers. The reform of teaching mode increases teachers' initial workload and change their classroom role, and teachers have become the organizers and instructors of students' learning, not simply to indoctrinate students with knowledge, but to cultivate students' sustainable learning ability. Teachers should constantly enhance the level of professional skills to improve their teaching ability, and they should learn how to use information technology teaching methods to stimulate students' interest in learning and cultivate students' autonomous learning ability and high degree of professional quality.

REFERENCES

- [1] Wang Tiejun. Reform of practical education and teaching system based on innovation and entrepreneurship training [J]. Education for Chinese After-school,2018.(12):37-38.
- [2] Wang Yan. Exploration on teaching reform of economic law course for economics majors in application-oriented universities [J]. Educational theory and practice, 2016. (06) : 48-49.
- [3] Qiu Yujie, Lei Yuchun. Rational thinking on economic law curriculum reform of economics and management majors under the background of innovation and entrepreneurship [J]. Journal of legal system and higher education,2017. (5).
- [4] Wu Hao. Research on the reform and innovation of economic law curriculum for illegal majors [J]. Rural economics and technology,2016.(22).
- [5] Ma Xiaofeng. Discussion on the application of case teaching method in economic law courses of economics and management majors [J]. Knowledge economy, 2015.(22):143.
- [6] Du Shichun, Fu Zetian. Research on blended learning [J]. China Higher Education Research,2016.(10):54.