

# Discussion and Practice of Flexible Teaching Mode in Course Teaching

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## Abstract

**In view of the disadvantages of the traditional teaching mode of vocational education system, this paper introduces the flexible teaching concept into the classroom teaching, first analyzes the advantages of the flexible teaching mode, and then conducts in-depth analysis and research on the cultivation and practice of students' innovative ability and comprehensive ability under the flexible teaching mode.**

## Keywords

**Flexible Teaching Mode Innovation Ability, Practical Ability.**

## 1. An Overview of The Flexible Teaching Mode

The rigid teaching mode is bound by the traditional classroom teaching concept, and pays attention to "respecting teachers and valuing ways" and "teaching knowledge and solving doubts". Under this idea, teachers' thinking stays in imparting knowledge, teaching their studies and relieving doubts. The task of the students is to accept, understand and master the knowledge taught by the teacher. Although the students cultivated have strong imitation ability, they lack of exploration ability and innovation ability. The main reason lies in the disadvantages of the traditional classroom teaching mode.

Flexible teaching mode is a new teaching mode relative to the rigid teaching mode. The teaching research in the 20th century is mainly carried out from the perspective of system, technology and behavior, which is called the rigid teaching mode. In the 21st century, with the development of knowledge economy, people begin to study the flexible teaching mode with the new perspectives of culture and interactivity. The purpose of flexible teaching is to produce a potential persuasion and acceptance in the minds of students, so as to turn the cramming rigid teaching into a diversified and multi-level teaching mode of students' conscious learning behavior[1].

Flexible teaching requires universities to adopt the strategy of "student-centered" and "caring for students" and implement "ability education". This ability education requires educators to teach transfer ability skills (transferable skills) in educational activities, especially in classroom design and practice, to encourage participation, do multiple research, frequently modify curriculum designs, provide short courses, and do business innovation projects. The results focus on what students can do after the transfer ability skills course. Obviously, this kind of education emphasizes the cultivation of students' practical ability, including mathematical and logical ability, communication ability, team work ability, adaptability, self-drive and self-management ability, so as to lay a solid foundation for their future development.

Flexible teaching has a far-reaching significance, which makes the purpose of education no longer single, but a multi-layered goal system, which is a dynamic and variable process of goal achievement. Flexible teaching mode can be in the students' ideological education work, according to the actual situation, abandon those direct and stiff, powerful and rough working

methods, with listening, trust, penetration, buffer, innovative education methods to carry out student work. The core content of flexible education is the interaction and understanding of knowledge between both sides, with the premise of people-oriented, equality between teachers and students and mutual respect. If the teacher can decide according to the specific situation, the appropriate use, will play an unexpected effect.

In short, the flexible teaching mode will be able to fully mobilize the enthusiasm of students to learn, which is conducive to cultivating students' subject consciousness, and plays a positive and effective role in the learning ability, work ability and knowledge expansion. On the one hand, it follows the principle of self-sufficiency, chooses learning goals and methods, and absorbs the knowledge into its own things; on the other hand, it reflects the initiative of learning, changes the passive into the master of knowledge, and will have a positive impact on the development of students in other aspects and even for life.

## **2. The Cultivation of Students' Ability Under The Flexible Classroom Teaching Mode**

Flexible teaching mode requires classroom teaching to cultivate students, including: " the ability to observe and judge problems independently, the ability to think independently, the ability to solve problems independently and the ability of independent innovation."These four abilities are connected and interdependent with each other, forming a complete ability system. Without any one of them, the other abilities are difficult to exist or play their role. Therefore, the cultivation of students' ability should be the comprehensive cultivation of the above four abilities for students. This requires us to do well in the classroom teaching from the following aspects.

### **1) Focus on tapping students' potential in classroom teaching**

Every student has great potential. Only by continuous mining can his potential ability be transformed into realistic ability. The ability training process is the process of ability mining, and in this process, the lecturers of classroom teaching should play an important role.

### **2) Cultivate students' ability to expand in classroom teaching**

Each student's potential is different, the task of higher learning is not only to tap the potential of each student. At the same time, we should also cultivate and train our students to have more abilities. Ability training and ability training should be the primary task of teachers, and the indoctrination of knowledge occupies a secondary position compared with ability cultivation. The cultivation of different abilities requires different teaching and training methods, and the ability cultivation and training should run through the whole stage of undergraduate education.

### **3) Cultivate students' ability to show themselves in classroom teaching**

The traditional classroom teaching mode is that the teacher speaks in class and the students listen and record in class; the teacher ask questions and the students answer. In the whole classroom teaching, the teachers occupy the initiative, and the students are in the passive position. This kind of teaching mode cannot fully cultivate students' ability. Because students do not have the space to show their own ability and have no opportunity to deal with problems independently, so in the four years of study and life, the passion and enthusiasm for learning gradually disappear, and become more and more numb and perfunctory. Therefore, it is especially important to keep students' learning passion and enthusiasm, which is what teachers should pay attention to in daily teaching, but also the basic task of teachers. In daily teaching, teachers should create a space for students to give full play to their abilities, and cultivate students' sense of achievement, independence and creativity.

### 3. Structure and Practice of Flexible Classroom Teaching Mode

"Flexible education" means that the education mode, teaching system, teaching content and teaching method should fully reflect the modern education thought and modern education concept; establish the teaching idea of teaching students in accordance with their aptitude, cultivating personality and encouraging innovation; and create a relaxed environment for students' personality development. Specifically, provide students with flexible teaching methods and colorful course content, provide good service system and teaching guarantee; provide students with different backgrounds, different interests, different abilities and different job objectives with diversified teaching needs, allowing students to make their own study plan according to their career goals and job direction, select their own learning courses, so that students and resources can achieve reasonable scheduling and flexible matching.

#### 1) Flexible classroom teaching mode

The basic guiding ideology of course teaching design is to create different learning conditions and learning environments according to different teaching requirements and talent training objectives. At present, there are two main learning theories guiding the course teaching design: behaviorism learning theory and constructivism learning theory. The former emphasizes the central position of teachers, the application of teaching strategies and teaching methods, the order of knowledge, the strengthening feedback of learning results and the realization of learning objectives. The latter believes that learning is constructed by learners through the interaction with the learning environment, which emphasizes the subject status of learners, pays attention to the creation of situations, and emphasizes the cooperation and communication with others. Therefore, the flexible teaching mode should combine the two theories, follow the principle of student-oriented and teacher-oriented, and design the classroom teaching into an interactive teaching state that can better stimulate students' interest in learning. In terms of classroom teaching, heuristic teaching should be adopted, and the "teaching" and "learning" of the teaching content should interact reasonably, so as to enhance students' learning initiative and the effectiveness of classroom teaching.

#### 2) Multi-level q & A counseling

"Flexible teaching" can get good teaching effect. The form of q & A should be flexible and diversified, using the form of collective tutoring, individual tutoring, knowledge lectures and so on. For the problems that generally appear or reflect in students' learning, or the key and difficult problems in teaching, they can generally take the form of collective tutoring. According to the different learning requirements of different students, individual tutoring can be adopted, and individual tutoring should adopt discussion and heuristic, so as to achieve the purpose of deepening understanding and drawing inferences from one example. In addition, in order to better cultivate innovative talents in the 21st century and cultivate students' engineering quality and strong practical ability, a series of knowledge lectures can be introduced in combination with professional characteristics[2]. Cultivate students to have the consciousness of flexibility, plasticity and innovation, so that they can adapt to the environment as soon as possible and be competent after entering the society.

#### 3) Open ended experimental teaching

The "flexibility" of experimental teaching is reflected in the diversity, openness and flexibility. The diversity of experiments means that the experimental content should be hierarchical, interesting and applied, so that students are easy to choose independently according to the requirements of experimental teaching and their own learning situation and interests. Experimental projects can be generally divided into three categories: basic experiment, design experiment and research experiment. Basic experiments enable students to further consolidate classroom teaching knowledge and be familiar with basic experimental methods and skills to cultivate students' knowledge application ability and independent thinking ability. Research

experiments can provide basic requirements for experiments for students to consult data, select topics, design, install and analyze test results independently, so as to cultivate students' innovation consciousness and independent work ability. Experimental teaching should be open and flexible, which means that students can independently choose the experimental items, experimental content and experimental time according to their own course arrangement and learning plan.

#### 4) Flexible and diverse assessment modes

The ultimate goal of teaching is to guide students to analyze and solve problems. Therefore, the form, method and content of the examination should not leave this fundamental goal. But now school exams turn some knowledge into uninnovative questions, and students have become truly "high scores and low ability" students to cope with the exams. Therefore, the need to reform the assessment method. The assessment method should change with the learning stage and learning task of the course, and the evaluation system should be implemented, including periodic closed-book quiz, study report, oral test and discussion, etc.; the assessment content includes basic theory, example analysis and special report. This can not only timely find the shortage of students learning, can also timely find the differences in students' learning attitude, help teachers targeted guidance and management, can also cultivate students' ability of observation ability, thinking, judgment ability and ability, create a good learning atmosphere, promote teaching and learning together.

Based on the flexible teaching mode, in the teaching of electrical engineering major, different students are taught in accordance with their aptitude, so as to stimulate students' desire for innovation, strengthen the consciousness of innovation, and enhance their entrepreneurial ability and confidence. Teachers based on the training of students to learn to learn and independent research ability, in teaching is not only impart knowledge, the most important is their own "flexible skills" —— research experience and find problems, problems and solve the idea, consciousness and methods, penetrate into the teaching, guide students to independent thinking, self-criticism and self-reflection.

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