Research on the Optimization of Contemporary Classroom Teaching in Colleges and Universities

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Abstract. In order to improve the enthusiasm of professional technology level, this paper explores a set of suitable education training mode and the corresponding management measures to improve reform and practice of college curriculum and teaching. According to the usual experience summary of students of environmental engineering, this paper displayed a detailed description of how to carry out the reform of classroom teaching based on process management. That is the way on the college teaching process, the mode of classroom environment and the implementation methods. Practice shows that the process management of teaching classroom environment can greatly enhance the enthusiasm of the students based on learning, improve the teaching effect, to adapt to the current application type talents demand, has the value of popularization and reference. Reform the teaching classroom environment and increase the intensity of interactive teaching and learning, learning and learning, improve student participation in classroom the extent to enhance classroom teaching quality is important.

1. Introduction

The study of college teaching environment is a new research field in the circle of educational theory in recent years. This study focuses on the classroom teaching environment of the school, focusing on the intervention and influence of the teaching environment on the teaching process, and investigating the comprehensive effect and mechanism of various environmental factors on the physical and mental development of the students in order to improve the quality of school education and find a new breakthrough, it also explores a new way for the development of contemporary teaching theory [1-3].

In the scope of the study of teaching theory, any teaching activities must be carried out in a certain condition of time and space, this condition is tangible and intangible specific teaching environment [4-5]. Psychologist Albert Bantula believes that the interaction between man and the environment is an interactive decision process; behavior, human factor and environment are the decisive factors that interact with each other, and the psychological function of human being is determined by the continuous interaction between human beings, behavior and environment.

2. Optimize classroom teaching environment

In the teaching process, we should take the student as the center and optimize the teaching environment. Through the active learning, situational learning, collaborative learning and Experiential learning in the study, students can understand and master the knowledge [6]. It also makes students learn happily and on their own initiative, learning how to think, so that students can learn effectively.

Create a participatory teaching environment, so that students master the initiative of learning, students take part in the teaching process and set their own learning goals, they control the learning process according to their own learning plan. Teachers should guide students to find problems and analyze the problem in the abundant information resources; the formation of objective things to understand and solve the problem can cultivate students’ ability of self exploration. In the process of learning, it is necessary for teachers to help students moderately, but teachers should deal with the
relationship of "help" and "put", so that students realize that learning cannot do without their own efforts.

Create rich information resources and environment, with the help of situational learning, students achieve the active construction of the knowledge meaning. Optimized learning situation to reflect the following two points: First, it has a sense of reality for the creation of the situation and relates to the social life of the students; second, create a real learning situation with the integration of learning content, build a learning task that is intertwined by problems and instances and give students vast space. Such as raising some questions related to teaching materials, creating problem situations, making a kind of "incongruity" between the content of the textbook and the students' psychology of seeking knowledge, introducing the students into a problem-related scene. This process is the process of "disharmony-exploration-think-discovery-solution". In order to make students' cognition, memory and thinking become harmonious and achieve the best learning state, we should form a kind of suspense consciously and skillfully.

Create a shared environment of knowledge and experience, so that students can learn in collaboration. In the process of collaborative learning teachers should create a good atmosphere of collaborative learning. They should treat their students as friends and confidant have more understanding, encouragement and tolerance to students, so that students will be more active thinking and the classroom will be more vibrant. At the same time, teachers should consciously give them more opportunities to create some performance to inspire them to work hard and create the conditions for students to learn successfully.

Create a real environment for students to learn in the experience. Students not only learn the book knowledge in the classroom, but also through experiments, imitation, investigation, etc. in practice, they should be personally on the scene, develop thinking and increase the ability to solve the problem, students also should learn to know the world in the feel and experience and enrich their experience of lives. To achieve this teaching effect, teachers need to design and put forward some enlightening issues and provide some appropriate topics, teachers and students interact, think, discuss and communicate in the together; it can guide students into a teaching situation. At this point, whether the students play a role or not, they will experience, feel and expand the limited classroom to the broad social life so as to expand the student's learning space.

3. The Application of Information-based Teaching Environment

Modern physiology and psychology of the study shows that when people immersed in his favorite things, the body and mind will be in a high degree of relaxation and coordination, the mind also become more agile and active. Using modern information technology, we create a teaching environment that inspires students' emotions, motivates students' enthusiasm and places students' creativity, it promotes the exchange and cooperation of teachers and students, encourages students to different thinking, strengthens students' achievement motivation, and ultimately makes students feel that learning is a happy thing [4]. In the teaching process, the use of modern information technology has a direct impact on the relationship and function among teachers, teaching contents and teaching objects, it also directly affects the teaching efficiency and teaching effect level [7-9].

The multimedia classroom is an informational teaching environment based on classroom teaching, which can meet the requirements of multimedia combination teaching and achieve the purpose of information display diversification. So that teachers choose the right media and optimize the teaching process.

The electronic media reading room is an environment based on individual learning. Learners are free to choose the media to learn, through the modern teaching media for independent learning, and actively participate in the learning process, fully embodies the learner's dominant position. The control center can also transmit the required media information to the learner's audiovisual reading, learning resource sharing and making efficient use according to the learner's request.

The electronic media reading room is a kind of environment based on individual learning. Learners are free to choose media learning, it also fully embody the main body position of learners
through the modern teaching media for independent study and actively participate in the learning process. The control center can also transmit the required media information to the learners according to the requirements of learners; learning resources can be shared and used effectively.

The campus network teaching environment is a teaching environment based on the sharing of teaching resources. Teaching information transmission is networked, all the computers in the campus are connected to the network to build a powerful teaching resource library, teachers and students can obtain resources information for the teaching and management in any terminal, and it is conducive to individual learning and collaborative learning. The campus network teaching environment plays an important role in the sharing of resources between teachers and teachers, teachers and students, between students and students. The use of campus network, teachers and teachers can share the results between each other, at the same time, teaching methods and teaching methods can be exchanged, which not only greatly improve the quality of teaching, but also provide the conditions for the teaching field to add new "blood".

4. Provide an Innovative Learning Environment

Creativity is the high performance of people's enthusiasm, the enthusiasm of people is all the psychological activities of the conscious, vigorous and active state, the performance is a deep insight, quick thinking, rich imagination and strong willpower, etc. Neurophysiological studies have shown that the number of neurons in the brain can be up to about 1 billion, while the actual use of only 20-30%; the remaining neurons are not developed. So we need to fully develop the students' brains, to promote the whole brain to learn, to fully stimulate the enthusiasm and creativity of students, to promote a pleasant and happy learning.

Research teaching methods and establish innovation consciousness. In the course of teaching, teachers should consciously leave a "blank": that is, leave some time and teaching content to the students in the classroom, and make their own possible conclusions, its purpose is to improve the creativity of students, so that students actively participate. In the teaching process, teaching should also pay attention to the creative ability of students and personality development are closely linked, classroom teaching should encourage students to curiosity and personality, if the personality can be healthy development, the potential of creativity may also be fully exploited.

Carry out scientific management and cultivate the spirit of innovation. The cultivation of scientific research ability should be trained and exercised at the university stage, create a good atmosphere for students to early contact with scientific research, such as the establishment of student scientific research groups, encourage students to set up academic journals, appropriate to establish a number of information stations, professional associations, academic lectures and research conference, It can not only enrich the students' after-school life, but also increase the access to a variety of information, but also active student thinking and stimulate innovation sparks.

Establish an effective practice base and enhance the ability of innovation and practice. Off-campus teaching practice base is a bridge between schools and society; it is a link to cultivate college students' comprehensive use of knowledge to solve practical problems. College students’ work and study at the teaching practice base, they combine theory with production practice, it not only enhances the practical ability, but also strengthens the understanding and consolidation of theoretical knowledge, and in addition, it also inspires the enthusiasm and learning consciousness.

Strengthen experimental teaching and cultivate innovative thinking ability. Experimental teaching has an irreplaceable role in cultivating college students' practical ability and innovation ability. Through the implementation of student-centered open experimental or innovative experiments, it greatly promotes the students' comprehensive ability and innovation ability. Through the students' own practice, they form a process of finding problems, analyzing problems and solving problems from shallow to deep, it raises the ability of students to identify problems; it is also conducive to cultivating students' ability to analyze and solve problems independently. This not only increases the ability of each student, but also fundamentally conducive to improving the quality of teaching teachers.
Build an undergraduate innovation base and improve the comprehensive ability of innovation. Undergraduate innovation training base is a specialized research base, its goal is to enable the undergraduate to get scientific research training as soon as possible, cultivate and improve the innovative spirit, innovation ability, improve the comprehensive quality of undergraduates. It can let the student's innovation consciousness persist for a long time, make them experience the fun of innovation and stimulate their higher learning enthusiasm. Students in a high state of innovation for a long time, it will sprout the desire to learn, and all kinds of potential will be able to play, As long as we make the best use, driven by desire to study, the overall strength of the students will be more prominent.

In addition, we should carry out the overall optimization of teaching reform in the experimental study, we take experimental schools in basic education, experimental areas, or experimental schools in higher education as a unit, based on the national training program and the national educational technology standards, to teaching design as the core, focus on curriculum design, to information technology as a means, it comprehensively improves the systematic research and practice of educational performance. Education modernization is not only an inevitable requirement of China’s economic and social development, but also a sign of the progress of human civilization and the development trend of contemporary education. Give full play to the function of existing equipment, mainly to action research, combined with the teaching and teaching practice, based on teaching, classroom teaching as the main channel, combined with the curriculum reform, integrate information technology with various disciplines, try our best to complemented the advantages of traditional teaching model and information technology model.

5. Conclusion
To sum up, teaching is both science and art. Teaching is the center of school work, Classroom teaching is the main form of teaching activities, is the basic part of undergraduate teaching activities. From the height of life, to the quality of human education as a goal, with a dynamic view of the concept of classroom teaching, to study the factors that affect the classroom teaching process and their relationship and interacting ways, study the classroom teaching contains the tremendous vitality of teachers and students, only by developing the potential of this kind of life can we truly achieve education to "people-oriented". In teaching practice, teachers should be good at learning Chinese and foreign education theory, research teaching practice, student-oriented, to provide students with rich information resources, flexible and diverse teaching methods, creating a relaxed and harmonious teaching environment, in order to play the students in learning activities in the initiative, so that students learn to become effective learning.

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7. References


