

Brief Discussing of Teaching Method about Analytic Geometry

Wang Yutian

Abstract and Introduction--With the deepening of the reform of college curriculum, we set a course to train application ability as the goal, to define the necessary basic knowledge according to professional needs, and we rely on the professional system as the basis, these are helpful for students to master mathematics and practical skills.

Analytic Geometry is an integral part of mathematics, the basic idea is to use algebraic methods to solve geometry problems. We put the vector as a tool, we use the coordinates to present the points, we express space curves and surfaces with the equations, we discuss the formation of space curves and surfaces, natures of the graphics, and the relationship between the graphics. These above are the main content of Analytic Geometry. Teaching methods and assessment methods are constantly adjusted since I have been on this course. In this paper, combined with my own practice, teaching methods will be discussed to look forward to exploring better teaching methods.

I. SEVERAL TEACHING METHODS

1.1 Traditional teaching method

Because mathematics is strong theoretical and logical strict disciplines, adopt the traditional teaching methods can fully demonstrate the reasoning process of the mathematics teaching, so traditional teaching method is an very important way to mathematics teaching. Analytic geometry is one of the three basic courses of mathematics, traditional teaching method is still throughout the main method. This method is mainly used in teaching concepts, definitions, and the proof of the theorems.

1.2 Demonstration teaching method

Demonstration teaching method is mainly used for recitation teaching, the teachers using the typical examples in recitation to demonstrate, in order to fully arouse the enthusiasm of the students.

For example, in the part of line and plane equations, there are often more than one solution, we need to ask questions in the process of typical example demonstration from time to time, strengthen student's understanding of important concepts and theorems, and encourage students to constantly think about the problems, analysis the method to solve the problem. We cultivate students' ability of multi-angle and multi-level thinking, thus motivate the students' inner potential, cultivate

the students' learning initiative, and the ability to use knowledge to solve practical problems.

1.3 Research teaching method

Research type teaching method emphasizes the "research" and "innovation". In today's society, innovative talents are more and more needed. And the effective ways to improve students' innovation ability is that, we must first pay attention to the classroom teaching. We carry out research teaching activities, in the process of the activities, the generation, development, formation of the mathematical theorems will be mentioned again. According to the content, we will ask some questions for students to study.

For example, the position of line and plane in analytic geometry and the rank of vectors in higher algebra have a close relationship. We let the students to discuss and explore actively, allow students to use their spare time to access to information, and write a short essay, let students experience the process of scientific research, cultivate students' exploring consciousness, improve the quality of scientific research and innovation ability of students.

1.4 Experimental teaching method

In the teaching process of analytic geometry, we need to study various curves and surfaces and other geometric shapes. In order to let students understand their formation process, we make dynamic graphics based on geometric sketchpad platform, and present the formation process of geometric shapes through the dynamic demonstration. Appropriate arrangements on lab classes, so that students can draw graphics by means of the geometer's sketchpad by themselves. Then we can stimulate students' desire to explore, guide students to find problems, and cultivate students' creative thinking and improve their exploration capability.

CONCLUSION

In a word, to build efficient class is the key and fundamental requirement of deepening the curriculum reform and cultivate innovative talents, analytic geometry teaching should also follow this principle. Teachers should earnestly study, actively explore and in-depth research in teaching practice, and we should also constantly update our teaching ideas to improve the effectiveness of teaching.

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Wang Yutian, School of Science, Shandong University of Technology, Zibo, 255049, People's Republic of China

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