

The Measures of Cultivating Students' Mathematics Application Ability in College Mathematics Teaching

Jie Wu

Chongqing Creation Vocational College, Yongchuan, Chongqing 402160, China

Abstract: *Under the background of the new situation, the comprehensive ability of advocating quality-oriented education and talents cultivation, puts forward higher requirements on college students, the mathematics as a compulsory course in university, its status is self-evident, it can effectively promote students' thinking ability, innovation ability, the progress of the ability to solve the problem, then, still need professional teachers attaches great importance to the application ability training, as education the main line, To improve the traditional teaching malpractice, create a good teaching environment. This paper takes mathematics application ability as the theme, discusses the existing situation and concrete solutions, hoping to provide opinions and suggestions for the education industry.*

Keywords: University; Mathematics Teaching; Application Ability; Training Measures.

1. INTRODUCTION

Nowadays, with the diversified development of society, colleges and universities as talent supply bases, it is necessary to cultivate students' mathematical application ability, and mathematics exists in every corner of life, has a huge impact on future life and employment. In fact, due to the strong resistance of students and the single classroom form, it is difficult for the course to play a role. Therefore, teachers are required to explore all aspects of problems, strengthen communication with students, and solve problems in practice, so as to improve their application ability and lay a foundation for future employment and life.

2. CORRELATION ANALYSIS OF MATHEMATICAL APPLICATION ABILITY

As the name implies, mathematics application ability refers to: students have advanced mathematics thought, can use the knowledge to solve problems in life, the "problem" includes many aspects, such as: life, scientific research, production and so on. Or from the perspective of cognitive psychology, the so-called application ability is the process of using knowledge to achieve a certain thinking change, which can also be understood as the stage of transferring mathematical knowledge to target state and behavior state. To be specific, the cultivation of mathematical application ability cannot be accomplished overnight, and requires the slow guidance of teachers, so as to promote the growth of students' abstract theory, modeling ability and reasoning ability, and to use what they have learned to solve practical problems. In addition, mathematics is abstract, involving both quantity and figure, which can be connected with real life to help students form the habit of thinking transformation and lay the foundation for future employment. Finally, mathematical modeling is an important part of mathematics teaching in colleges and universities, and teachers should attach great importance to it as the main teaching method to guide students to study efficiently.

3. THE PRESENT SITUATION OF CULTIVATING STUDENTS' MATHEMATICS APPLICATION ABILITY IN MATHEMATICS TEACHING IN COLLEGES AND UNIVERSITIES

Under the traditional teaching mode, college mathematics courses mainly focus on theoretical explanation, focusing on mastering different formulas, cultivating students' rigorous and objective learning attitude, seriously ignoring the importance of application ability. At this point, most colleges and universities have reflected, and emphasize the performance of students, such as exams, homework surface, it can be said that this concept hinders the common progress of students and colleges. In addition, college students will soon face the society, its academic pressure, psychological pressure is huge, simply speaking, the time is tight, the task is heavy, need to deal with the examination of various subjects in the major, so leave mathematics learning time is not much, and even some

students' attitude is perfunctory, opportunistic, do not understand the essence of learning mathematics.

The low mathematical application ability of college students can be divided into the following reasons, such as: (1) problems in the teaching materials, because there are many theoretical explanations in the teaching materials, lack of practical application activities, teachers and students along the main line of the teaching materials to perform their own duties, as time goes by, the application ability is greatly reduced, and its importance is ignored. (2) the teacher force is weak. In fact, the quality of teachers will directly affect the classroom and students. If teachers do not have mathematical application ability, they will not be able to guide the class well, thus hindering the later learning process. (3) the mathematical ability to calculate confused with application ability, for example, during the learning mathematics knowledge, students prefer to use calculator to calculate the answer, it is to culture the ability to apply direct impact of the process, neither exercise ability, also did not play a role of mathematics, mathematical modeling, for one, the student to the stranger, and not real train their application ability.

4. MEASURES TO CULTIVATE STUDENTS' MATHEMATICAL APPLICATION ABILITY IN COLLEGE MATHEMATICS TEACHING

4.1 Help students realize the applicability of mathematics

Objectively speaking, the premise of cultivating mathematics application ability is that students have application consciousness, so as to effectively carry out the later work. At present, college students' awareness of this aspect is scarce. Even though mathematics is a compulsory course and a compulsory subject, it still fails to attract students' attention. In addition, as the subject is dull and obscure, students generally have low interest and it is difficult to relate to real life. Therefore, the following work should begin with students cultivate consciousness, help students to develop good habits in virtually, using reverse, diversification of situational teaching classroom, micro class teaching pattern, mobilize interest groups, and combined with appropriate life cases, to deepen the student impression, reduce the distance with mathematical disciplines, believe that in this mode, will also be able to analyze and solve problems in time, Improve its application capability.

4.2 Adopt a variety of teaching modes

Under the background of information age, it greatly facilitates people's life. It can also be introduced into mathematics teaching activities. On the one hand, multimedia technology teaching can be added to transform abstract theoretical knowledge in teaching materials to help students intuitively see the essence and master the meaning of formulas, laying a foundation for later applied learning. For example, when learning indefinite integral and surface integral, the teaching materials explain them too abstract, at this time, it is difficult for students to see the essence through the phenomenon. With the help of multimedia animation transformation, the definition and concept are directly displayed, which can arouse students' enthusiasm for exploration and gradually develop good application ability. On the other hand, mathematics should not be limited to the classroom, but should properly integrate daily life and collect common themes in life, so as to better enrich the classroom content, link the perspective of mathematics and life, and explain the relevant content, so as to experience a sense of victory and pride, and lay a foundation for future learning. In addition, mathematics discipline does not exist independently, and it has some intersection with other majors and disciplines. Therefore, teachers should do a good job in discipline penetration, help students build knowledge system across disciplines, so as to improve their mathematical application ability.

4.3 Combination of teaching and practice

As we all know, the purpose of learning is not simply to learn knowledge, but to help students to apply what they have learned, improve their connotation, and cultivate their innovation ability, practical ability, higher service to the society, to achieve personal value. Therefore, during mathematics teaching, we should attach importance to the combination of theory and practice and complete the transformation of life. As mentioned above, nowadays mathematics teaching in colleges and universities is mainly based on theory, ignoring the cultivation of practical ability and application ability. In addition, mathematical theories are difficult to understand and teaching plans lack pertinence, which aggravate students' fear and resistance. Next, the teaching should be appropriately combined with practical activities, contact with life, so as to stimulate students' interest and lay a foundation for the cultivation of application ability.

4.4 Optimization of curriculum

During the period of mathematics teaching in colleges and universities, we should pay attention to the position of students as the subject, improve the traditional teaching mode, emphasize the cultivation of thinking ability and application ability, or open the school-based teaching material mode to help students better contact mathematics subject. For example, when learning "differential of one variable function", we can add Taylor's formula to explain assimilation points and guide students to pay attention to the concept of reciprocal. This mode can simplify teaching, improve learning efficiency and cultivate its application ability insubtly. Moreover, teachers make reasonable use of information technology, and some abstract knowledge points can be expressed through text, video and video, so as to deepen students' memory and realize in-depth exploration.

5. CONCLUSION

To sum up, the current as the key period of market economy, college students should have mathematical application ability, can better to join the society, contribute to the development of the industry and also has made the related reform of colleges and universities, attaches great importance to the application ability, practical ability and comprehensive ability training, equipped with advanced teaching resources and equipment, to create a good learning space, help students to progress quickly.

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