

Analysis and Research on Higher Mathematics Teaching Methods Based on the Background of Innovation and Entrepreneurship Education

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Abstract: In recent years, the integration of innovation and entrepreneurship and professional education has made rapid progress in colleges and universities. The greatest change for teachers and students is the change of educational administration and the construction of teaching platforms, as well as the transformation of student affairs. In order to meet the needs of this society, advanced mathematics has also begun bold reforms. On the basis of earnestly analyzing the characteristics of innovation and entrepreneurship education, combined with China's own teaching practice, this paper studies the problems existing in traditional higher mathematics innovation education, and analyzes why innovative education should support entrepreneurship education in higher mathematics teaching, proposes a new model of entrepreneurship education in higher mathematics innovation, and promotes the development of advanced mathematics teaching.

1. Introduction

With the social trend of innovation and entrepreneurship development, universities should strengthen their emphasis on innovation and entrepreneurship education, especially in other disciplines, and should also innovate teaching methods. Higher mathematics teaching is no exception. Combining with the development of current innovation and entrepreneurship education, we can find that although there are certain innovations in higher mathematics teaching methods, there are still certain constraints and restrictions, which are not conducive to cultivating students' innovative ability and entrepreneurial ability. This requires higher education to strengthen research and innovation and entrepreneurship education. The teaching methods of higher mathematics can effectively improve students' ability of innovation and entrepreneurship, and lay a more solid foundation for the development of higher education in China. Based on the current teaching situation of higher mathematics, this thesis analyzes some problems existing in the teaching, and puts forward corresponding countermeasures for these problems, so that it can better provide some new teaching methods for some colleges and universities.

2. Advanced Mathematics

With the social trend of innovation and entrepreneurship development, universities should strengthen their emphasis on innovation and entrepreneurship education, especially in other disciplines, and should also innovate teaching methods. Higher mathematics teaching is no exception. Combining with the development of current innovation and entrepreneurship education, we can find that although there are certain innovations in higher mathematics teaching methods, there are still certain constraints and restrictions, which is not conducive to cultivating students' innovative ability and entrepreneurial ability. This requires higher education to strengthen research and innovation and entrepreneurship education. The teaching methods of higher mathematics can effectively improve students' ability of innovation and entrepreneurship, and lay a more solid foundation for the development of higher education in China. Based on the current teaching

situation of higher mathematics, this thesis analyzes some problems existing in the teaching, and puts forward corresponding countermeasures for these problems, so that it can better provide some new teaching methods for some colleges and universities.

3. The Important Role and Significance of the Integration of Higher Mathematics Teaching and Innovation and Entrepreneurship Education

The reason why China vigorously advocates innovation and entrepreneurship is because it is of great practical significance to carry out the integration of higher mathematics teaching and innovation and entrepreneurship education. Specifically, it is manifested in the following aspects:

3.1 To improve Students' Ability to Innovate.

Innovation is a source of national progress and an inexhaustible driving force. Therefore, it is very important to cultivate students' innovative ability. Especially in the new situation of innovation and entrepreneurship development, only by changing the teaching methods of higher mathematics and cultivating students' innovative ability. Can adapt to the important historical trend of China's innovation and entrepreneurship development. Therefore, through the effective integration of innovative entrepreneurship and advanced mathematics teaching methods, students can cultivate their innovative ability, divergent students' thinking, cultivate students' logical ability and analytical ability, and finally lay a solid foundation for cultivating students' true innovation and entrepreneurial ability.

3.2 To Make Our Talents More Practical and Achieve Employment Smoothly.

With the increasingly fierce market economy in China, people must improve their practical ability and entrepreneurial ability if they want to gain a foothold in the fierce job search. Therefore, by integrating the teaching methods of higher mathematics with the innovation and entrepreneurship education, students can not only improve their students' Practical ability, more importantly, is to cultivate students' comprehensive ability, so that students can smoothly adapt to social competition, give full play to their subjective initiative in the increasingly fierce competition, and use their own mathematical knowledge to successfully employment.

3.3 The Overall Quality of Training of Students.

Under the traditional teaching methods, many "high-scoring and low-energy" talents are cultivated, so that although students have high scores, they have a good grasp of subject knowledge, but they lack comprehensive quality, especially the lack of adaptation to society and social development. ability. For example, most of the textbooks in China are based on concepts and theories, and they are not applied to the actual social life. Some teachers are difficult to get rid of the old and old-fashioned teaching mode, and they mainly focus on "teaching" and neglect the students' "learning". Due to the constraints of China's economic conditions, the teaching methods cannot keep up with the pace of the times. Higher education aims to cultivate comprehensive quality talents with all-round development of morality, intelligence, body, beauty and labor. However, the problems faced in education have seriously hindered the development of education. To solve this problem, we must make higher mathematics education as soon as possible. The concept of innovation and entrepreneurship education is combined to stimulate students' subjective initiative and creativity, and to play their main role in learning.

4. Problems in Traditional Higher Mathematics Teaching

4.1 Relying on Multimedia Technology.

Nowadays, the development of technology is currently defensive. However, the development of technology brings about the high dependence of teachers on technology. Teachers are no longer taught in the way of explaining on blackboard with chalk, but choose to use multimedia information technology, before playing the class to do the PPT, and PPT content on simply to explain, or even

directly read the text on the PPT. In the eyes of teachers, this practice is undoubtedly efficient, saving time and enabling students to learn more. However, they have neglected a very important question, that is, the ability of students to accept. For simpler knowledge, this is of course a time-saving and effective method. However, the characteristics of higher mathematics are difficult to learn, knowledge points. Explaining the reduction in time means leaving the student with a reduced buffer time to understand the knowledge point, and the student cannot digest the understanding in the classroom. The study of advanced mathematics is to some extent connected before and after. Sometimes there will be cases where you can't keep up with less than one lesson. Over time, students will have the phenomenon that attention cannot be concentrated in the classroom. The interest in classroom learning will be lost, and the subjective initiative of students learning high numbers will also be reduced, making the teaching situation of higher mathematics worry.

4.2 Students' lack of Motivation to Learn.

After attending the university, the students did not have the pressure to go to school, and the teacher assessment was no longer linked to the student's grades. As a result, most of the teachers' teaching lacked vividness and interaction with the students. The teachers were only prepared according to the prior preparation. The courseware will explain the content of the course arrangement to the students according to the time of the students. The students passively accept the learning in a immersive manner. This way naturally cannot motivate the students to learn, nor can they expand the students' innovative thinking. It is also impossible to cultivate students' innovative and entrepreneurial abilities. At the same time, most institutions of higher learning offer higher mathematics as a public foundation course, which is taught in a large classroom. There are many students in the classroom. Teachers can't teach students in accordance with their aptitude, which brings limitations to the heuristic teaching in the context of innovation and entrepreneurship. Therefore, we must combine the educational concept of innovation and entrepreneurship with the education of higher mathematics to explore the advanced mathematics teaching methods suitable for cultivating students.

4.3 The lack of Attention to the Cultivation of Students' Professional Ability.

At present, the rapid development of society has also enabled China's higher education to develop well. In the context of this era, society's demand for talent in higher education institutions has become larger and larger. At this time, in order to meet this demand, and in order to allow our higher education institutions to send more talents to China, in the process of teaching higher mathematics, we must focus on the training of college students in China. They must be trained in their professional ability and entrepreneurial ability. For those students with high professional and entrepreneurial abilities, in the whole process of teaching, students should be strengthened in these aspects so that students can have enough ability to complete their own work when they are looking for work in the future jobs. However, so far, China has only paid more attention to the relevant theoretical knowledge of students, and has not paid attention to the cultivation of students' professional ability. This has caused students to have shortcomings in terms of professional ability. Therefore, it is very important to pay attention to the cultivation of students' professional ability.

5. Analysis and Research on Higher Mathematics Teaching Methods under Innovation and Entrepreneurship Education

In order to adapt to the needs of society and the development of the times, and to fully innovate the importance of entrepreneurship education in the application of higher mathematics teaching methods, we must strive to find effective ways to strengthen the application of innovation and entrepreneurship education in higher mathematics teaching methods. Specifically, the following can be adopted teaching method:

5.1 To Change the Traditional Concept of Teaching and innovate Teaching Mode.

In the traditional higher mathematics teaching process, students' mathematics ability is often improved through indoctrinated teaching methods and sea tactics. However, in the context of the educational environment of innovation and entrepreneurship, the traditional teaching mode should be changed to cultivate students' subjective Motivation and the creative ability of students as an important teaching goal should actively guide students to fully exert their subjective initiative and expand their thinking ability in order to effectively cultivate students' innovative ability so that they can adapt to China's high technology. Develop the requirements of the information age, improve students' interest in learning, and strengthen students' learning methods.

5.2 Pay More Attention to the Practicality of Higher Mathematics Teaching Methods.

According to the current development of education, some young teachers in colleges and universities attach great importance to modern education, but they do not care about classroom quality in classroom teaching, so the effect of teaching is not very good. In the process of teaching, teachers should clearly understand the significance of modern technology for the whole classroom. If used improperly, it will affect the quality and effect of higher mathematics. When perfecting the teaching method, we should focus on the applicability of the teaching method. While letting the students learn the knowledge, we must also focus on cultivating students' thinking ability. At the same time, teaching practice should be used in practice to prevent phenomena such as attaching importance to theory and ignoring the cultivation of students' thinking ability. It is necessary to continuously reform and innovate in teaching concepts. In reform and innovation, teachers should focus on cultivating students' thinking ability and use the whole educational concept in teaching, so as to cultivate some high-quality talents. For example, when a teacher teaches double points, the teacher can put out the points and then explain them through the collection. The teacher gives the students a tendency to learn to draw the points, so that the students can better master the ability and enhance the learning ability. It is necessary to enable students to maintain this interest in learning in the process of learning, thereby improving the quality of teaching.

5.3 To establish Higher Mathematics Academic Community.

The long-term and effective development of higher mathematics teaching to enhance the innovative ability of college students is due to the operation of long-term strategies. Establishing and improving the management system of academic societies of advanced mathematics. Under the guidance of the professional instructors, it combines the overall development goal of the school, the training strategy of the specific talents of the college, the establishment of the management constitution of the academic community, the determination of the work goal of the academic community, and the development of the academic community. We should strengthen the incentive mechanism for instructors and students to participate in the activities of academic societies in higher mathematics. Mobilize the enthusiasm of teachers and students, stimulate students' motivation to participate in academic societies, and promote the improvement and development of discipline construction. With the study of the auxiliary function of the college students' growth guidance room to the higher mathematics academic community, it combines the long effect mechanism of the higher mathematics academic community in the promotion of College Students' innovation ability and the establishment and improvement of the college students' growth navigation mechanism, so as to improve the comprehensive quality of the young college students.

6. Conclusion

In order to improve students' ability of innovation and entrepreneurship, various schools have intensified their education of innovation and entrepreneurship. It is undeniable that strengthening innovation and entrepreneurship education in higher mathematics teaching is of great significance and role. Through the use of innovative and entrepreneurial education in higher mathematics teaching methods, the students' innovation and entrepreneurial ability can be effectively improved,

and more innovative talents can be trained. Therefore, in order to strengthen the application of higher mathematics teaching methods under the innovation and entrepreneurship education, we should innovate the teaching mode, change the present situation of the development of teaching, and strengthen the study of mathematics in the teaching. In addition, it is necessary to change the teaching concept, improve the students' consciousness of innovation and entrepreneurship, and finally realize the higher level of innovation and entrepreneurship education. Improve the level of mathematics teaching, and help students establish new concepts of innovation and entrepreneurship, and realize the development of innovation and entrepreneurship.

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