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How to Raise the Quality of Higher Mathematics Teaching in the Economics and Management Disciplines Under Idea of General Education

HAO Shun-li, Liu Zhen-cong
Beijing International Studies University, Beijing, China

Combined with the practice of teaching and research, this paper first discusses the meaning, characteristics, and functions of general education, and then summarizes the current problems of higher mathematics teaching in the economics and management disciplines of Chinese universities. Finally, it proposes some corresponding measures to raise the quality of higher mathematics teaching in the economics and management disciplines under the idea of general education.

Keywords: the idea of general education, higher mathematics teaching, economics and management disciplines, educational psychology, higher educational psychology

Introduction

In the new era of socialism with Chinese characteristics, education needs new development. The report of the 19th National Congress of the Communist Party of China puts forward the idea of realizing the connotative development of higher education. However, at present, there are still many problems in Chinese education. The report of the 19th National Congress of the Communist Party of China points out that the masses are facing many difficulties in employment, education, medical treatment, housing, and pension. As far as higher education is concerned, China's higher education is not good enough at cultivating an interest in learning, curiosity, imagination, and critical thinking of students. It cannot fully meet the needs of cultivating all-round-developed persons and cannot fully adapt to the development of economy, science and technology, and society. Qian (2011), a former dean of the School of Economics and Management of Tsinghua University, said that a considerable number of university graduates currently lack the qualities they deserve in the following aspects: honesty, credibility, integrity, tolerance, and other personal qualities; ideal, ambition, responsibility, and other life goals; ability to analyze and solve problems; ability to communicate and express,

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HAO Shun-li, Ph.D., associate professor, Department of Basic Sciences, Beijing International Studies University, Beijing, China.

Liu Zhen-cong, Ph.D., associate professor, School of English Language, Literature and Culture, Beijing International Studies University, Beijing, China.

teamwork and leadership; humanistic spirit, scientific spirit, critical thinking, independent thinking ability, etc. General education is needed to solve these problems. The undergraduates of American universities (including Ivy League schools) receive mainly general education in the first one to two years. They are influenced and infiltrated by different disciplines. They begin to receive professional education in the second two to three years. They choose their future careers according to their interests. Harvard University has always attached great importance to general education and led the curriculum of general education in the United States. Educator Levin, a former president of Yale University, said: "Yale is committed to the cultivation of leaders. The core of undergraduate education is general education. It is to cultivate students' ability to think critically and independently, and lay the foundation for lifelong learning". Hutchins, a former president of the University of Chicago, said that we can never run a university well without general education. Therefore, it is very important to establish the idea of general education.

Higher mathematics, as a basic course of general education, has strong systematicness, high abstraction, and tight logic. In the ancient natural sciences of China, there was a general lack of analytic demonstration by means of the empirical method and logical reasoning. By studying of higher mathematics, students could be improved in this respect. Not only most of the concepts and theorems of higher mathematics have their prototypes and backgrounds in the real world, but also the application of higher mathematics has penetrated into all aspects nowadays. In the knowledge structure of contemporary university students, higher mathematics has become an indispensable part. Li (2010), an academician of the Chinese Academy of Sciences, pointed out that the fundamental purpose of the reform of mathematics teaching is to make students understand more about the spiritual essence and thinking methods of mathematics while imparting mathematics knowledge and methods through mathematics teaching, so that they can consciously accept the influence of mathematics culture, and truly understand mathematics by analogy, even through integration, become smarter, wiser, and have more development momentum, potential, and stamina, which will last a lifetime. Higher mathematics teaching should focus on the healthy growth and all-round development of students. While increasing their knowledge, it should stimulate their inspiration and imagination, arouse their enthusiasm, initiative, and creativity in learning, improve their quality, cultivate their innovative spirit and the ability to independently discover, analyze and solve problems, so that they can discover and develop their potential in all aspects. In order to meet the needs of economic, technological, and social development, they should consciously use the knowledge, skills, methods, thinking, and viewpoints of higher mathematics to solve practical problems in their work, study, and life in the future. Therefore, it is very important to raise the teaching quality of higher mathematics.

Most of the Chinese literature on general education is about general education in general sense, and the literature specializing in studying higher mathematics teaching of economics and management disciplines under the idea of general education (Zhao & Shen, 2015, but this paper focuses on higher vocational colleges) is rare; under the idea of general education, there are fewer pieces literature on the research of higher mathematics teaching in the economics and management disciplines of Chinese universities on the basis of a comprehensive analysis and summary of the problems existing in higher mathematics teaching in these disciplines. At present, in the teaching in the economics and management disciplines of Chinese universities, more attention is paid to professional education and less to general education. Qian (2011) said that general education is not enough at

present. Therefore, the research and practice in China on raising the quality of higher mathematics teaching in the economics and management disciplines under the idea of general education are far from enough. Combining with the author's real experience in teaching and research, this paper first thoroughly studies the meaning, characteristics, and functions of general education, then comprehensively analyses and summarizes the problems existing in higher mathematics teaching in the economics and management disciplines of Chinese universities, and finally studies how to raise the quality of higher mathematics teaching in these disciplines under the idea of general education.

The Meaning, Characteristics, and Functions of General Education

In 1829, Professor Packard first used the term "general education" to identify common disciplines in the North American Review (Levine, 1988). In 1945, the report General Education in Free Society defined general education as "non-professional, non-instrumental" basic education, with the goal of cultivating complete people. The goal of general education in the field of higher education is to enable the educated not only to acquire the skills but also to possess enough culture, common sense of life, and correct moral and value orientation that a sound professional and social person must possess. The core of general education is the spirit of freedom, the responsibility of citizens and lofty aspirations. Since 1980, some universities in China have only begun to explore general education. Qian (2011) believes that general education is a "trinity", which integrates value shaping, ability training, and human core knowledge acquisition into one education system. In fact, general education serves students' whole life and cultivates them to become a real "person".

General education is a kind of educational thought and system, cultivation idea and mode which was put forward on the basis of understanding the essence of human and society. It means that all university students should receive the education about common contents through studying some common courses in humanities, social sciences, and natural sciences, and use different modes of understanding to understand phenomena and acquire knowledge in order to broaden their horizons, understand principles, knowledge, and methods related to life and society, and have the ability to adapt to society. In fact, the task of general education is to cultivate students' good social consciousness and communication ability. Through academic edification, students can develop the spirit of science and civilization and have rational power. Under the idea of general education, students need to comprehensively understand the general situation of human knowledge, rationally choose or form their own professional orientation on the basis of basic knowledge and educational experience, and form a broad and solid professional basis and a reasonable knowledge and ability structure through a thorough way of learning, while recognizing and understanding the importance subjects of contemporary society, and developing comprehensive personality quality and broad knowledge horizon (Chen, 2006).

General education helps students understand life and social problems, foster the spirit of honesty, love, and service, learn to adhere to truth, love life and bear pressure, pay attention to the fate of the country and national development, and promote the cultivation of professional ability. It is indispensable for cultivating high-level talents with all-round development in contemporary society. A complete general education must include the elements of science education. Higher mathematics, as one of the core courses of general education in universities, cultivates students' logical thinking ability and the ability of comprehensive application of mathematical knowledge to solve practical problems by guiding students to think rationally, and provides

students with necessary mathematical literacy and skills for their future professional knowledge learning and career development.

The economics and management disciplines of Chinese universities should pay attention to the implementation of comprehensive general education, and build a general education platform with the core of cultivating people of all-round development.

The Problems of Higher Mathematics Teaching in the Economics and Management Disciplines of Chinese Universities

There are some good experiences in higher mathematics teaching in the economics and management disciplines of Chinese universities, but there are still some problems below.

The Enthusiasm of Teachers in Teaching and Students in Learning Is Not Very High

In terms of resource allocation, hours allowance, and educational reform project, some Chinese universities do not attach enough importance to the higher mathematics courses with the heavy workload, difficult teaching, and wide influence, and lack sufficient incentives. Therefore, the enthusiasm of teachers in higher mathematics class is not very high. On the other hand, many students are not very active in learning higher mathematics. Some students think that higher mathematics is only a supplement to other professional courses and are unwilling to learn well; some students give up directly because they do not understand the most basic and important definition of limit in higher mathematics; after a period of hard study, some students have not mastered certain knowledge points, and gradually become to pass the exam and get credit for the purpose.

Teachers Tend to Attach More Importance to Research Than to Teaching or More Importance to Teaching Than to Research

Some teachers of higher mathematics tend to attach more importance to research than to teaching or vise versa, and fail to clarify the relationship between teaching and research.

Teachers Do Not Have a Broad Knowledge Structure

Most of the teachers of higher mathematics have a solid mathematical foundation, but they know little about the knowledge of economics and management. They cannot combine higher mathematics and some important problems of economics and management to stimulate students' interest in learning.

The Teaching Content Is Obsolete and the Teaching Methods and Means Are Not Very Rich and Effective

The content of higher mathematics teaching in many Chinese universities is relatively fixed; the teaching methods and means are not very rich and effective; moral education and quality education are not penetrated into teaching; the cultivation of students' comprehensive quality is neglected; and the modern educational technology is not properly integrated. The evaluation criterion of students' ability is still mainly the level of achievement.

There Are Many Difficulties in Large Class Teaching, and Teachers Ignore the Individual Differences of Students

At present, higher mathematics is basically taught in large classes in schools of economics and management of Chinese universities. Due to the large number of students and different professional

backgrounds, it is difficult to use a mixed teaching method, case analysis and discussion, team demonstration, and so on. In teaching organization, the efficiency of organizing diversified teaching activities is not high. In addition, due to the unbalanced development of education in China, the individual mathematics foundation and learning interest of students in schools of economics and management of Chinese universities are different. Teachers often fail to pay enough attention to these and teach students in accordance with their aptitude.

Students' Learning Habits Are Not Good, and Their Learning Methods and Abilities Are Insufficient

Many university students in China do not have good learning habits, scientific learning methods, and higher learning ability. The elementary mathematics knowledge is relatively easy and has sufficient practice and review time; the higher mathematics class has a large capacity, large span, depth, breadth and difficulty, strong coherence, and less teaching time, not too much time to review and summarize. After-class review and summary are mainly completed by students themselves. Because higher mathematics is offered in freshman year, many university students are affected by the study habits formed in the past three years in middle school and are difficult to adapt to the speed of university teaching. The learning of higher mathematics is still mainly by rote learning, and the learning methods and abilities are insufficient.

The Curriculum Arrangement Emphasizes Specialty Over Mathematics and Theory Over Application

The curriculum of schools of economics and management in Chinese universities lays stress on professional courses, and the time of higher mathematics class is compressed. More content and fewer class hours make it difficult to carry out some key contents in the teaching process, and even delete some important courses, such as linear programming, which makes the teaching of some follow-up professional courses (such as econometrics, operation of securities investment funds, etc.) unable to carry out effectively, seriously affecting the teaching effect of these courses. In addition, the teaching of higher mathematics in economics and management disciplines of Chinese universities has overemphasized theoretical knowledge learning and the integrity of knowledge structure but neglected its instrumentality, especially the importance of mathematics in solving economics and management problems. This teaching method has caused the disconnection between higher mathematics teaching and other professional teachings, and the deviation of teaching objectives.

The above problems lead to the lower quality of higher mathematics teaching in economics and management disciplines of Chinese universities. In the long run, it is bound to affect the students' study of follow-up relevant professional courses, and then affect the overall development of students in the future.

Measures to Raise the Quality of Higher Mathematics Teaching in the Economics and Management Disciplines Under the Idea of General Education

General education can cultivate university students' comprehensive quality and innovative thinking. To implement general education in economics and management disciplines, we should not only have innovative teachers but also explore a general education mode suitable for the characteristics of economics and management disciplines of Chinese universities. Through infiltrating the idea of general education in higher mathematics teaching, we can arouse students' interest and curiosity, strengthen students' will and determination to pursue truth, and devote themselves to science, then strengthening the cultivation of students' quality, attitude, emotion, and value. Specifically, in view of the problems in the second part, under the idea of

general education, we can effectively carry out higher mathematics teaching in economic and management disciplines through the following measures.

Enhancing the Enthusiasm of Teaching and Learning

On the one hand, the higher mathematics course in the schools of economics and management in Chinese universities should be paid enough attention. In the aspects of resource allocation, hours allowance, and educational reform project, the higher mathematics teachers should be given appropriate care in order to fully mobilize their enthusiasm. On the other hand, it is the responsibility of higher mathematics teachers to make students realize the beauty and importance of higher mathematics so as to enhance their enthusiasm for learning higher mathematics.

Achieving Mutual Benefit Between Teaching and Scientific Research

Teaching and scientific research are unified, which are contradictory and mutually reinforcing. Teaching is a necessary condition for scientific research, and scientific research is a sufficient condition for teaching. Teaching can regulate and promote scientific research. In a self-report Fefferman said: “When research is going badly, it’s pleasing to think that I’m doing something useful by not giving my freshmen a hard time”. Yau (2010) believes that teaching can not only support scientific research but also bring forth new ideas in the process of getting along with young people. To do well in teaching, we must also do well in scientific research. Because scientific development is extremely rapid, only those who insist on scientific research can truly understand the spirit of innovation and cultivate people with the spirit of innovation. Generally speaking, people who do scientific research have a deeper understanding of some basic concepts in higher mathematics than those who do not do scientific research, because they have their own views. At the same time, teachers engaged in scientific research activities can broaden their horizons and understand the development of their professional fields and problems in their development, and how to solve these problems, so as to enrich the content of the profession and make it develop continuously. In addition, when teachers engage in scientific research activities, their scientific research methods, innovative spirit, and personality charm will influence students imperceptibly and promote students’ all-round development. Practice also proves that teachers’ scientific research is a reliable guarantee to raise the quality of teaching.

Widening the Knowledge Structure of Teachers

Every higher mathematics teacher should widen his knowledge structure, and stimulate students’ interest in learning higher mathematics through some important problems of economics and management majors.

Adjusting Teaching Contents, Improving Teaching Methods, and Changing Teaching Instruments

Teachers should incorporate the viewpoints, ideas, and methods of mathematics frontier into higher mathematics teaching, adjust the teaching contents according to the teaching objects, delete the less used contents and relatively old exercises in reality, and add some contents needed for the development of contemporary economy, science and technology and society.

By improving teaching methods and changing teaching instruments, students’ interest and curiosity can be aroused. Specific efforts can be made in the following eight aspects:

Promoting communication and cooperation between teachers and students and between students. Communication between teachers and students and between students is conducive to students’ mastery of

knowledge, the cultivation of their thinking, and the improvement of their ability. The teaching process should be based on the interaction between teachers and students, carried out in a positive, harmonious, and pleasant atmosphere, and completed in the process of inspiration, communication, and discussion. Teachers should take advantage of various opportunities and use various forms to communicate with students the methods of learning mathematics, mathematical ideas, and so on, and to collect all kinds of difficulties encountered by students in learning mathematics and seek solutions. In addition, in the teaching of higher mathematics, we should persist in starting from problems and pay attention to cultivating students' ability to ask questions. Putting forward problems scientifically is an important part of scientific discovery, which requires insight and creativity. Cantor, a founder of set theory, said that the art of asking questions is more important than the art of answering them in the field of mathematics.

Promoting students to accept the edification consciously by introducing excellent mathematics culture. Professor Gu of Nankai University believes that "in a narrow sense, mathematical culture refers to mathematical ideas, spirits, methods, viewpoints, and languages, and their formation and development; in a broad sense, besides the content in the narrow sense, mathematical culture also includes mathematicians, mathematical history, mathematical beauty, mathematical education, the humanistic elements in mathematical development and the relationship between mathematics and various cultures". Teachers should make use of appropriate opportunities and effective methods to make students consciously accept the edification of excellent mathematics culture. Teachers should let students understand that behind the definitions, theorems, and formulas in textbooks, there are often stories about mathematicians and mathematical discoveries; the knowledge in textbooks, which is systematic, logical, and accurate, has been scattered, disordered, contradictory, and even erroneous; mathematics comes from the real world and is also applied to the real world. In the process of mathematics teaching, teachers can help students understand the formation process of mathematical thoughts by introducing the origin and background of mathematical concepts; stimulate students' interest and curiosity by introducing anecdotes of mathematicians; embody the role of mathematics by introducing its application in today's society and its relationship with other disciplines and fields; and guide students to put forward hypotheses, demonstrate and form opinions by introducing relevant mathematical philosophy. In mathematics teaching, the author pays great attention to explaining the background, structure, and application of knowledge in order to stimulate learning interest and reduce learning difficulty.

Integrating the thought and method of mathematical modeling. In higher mathematics teaching, we should pay attention to the gradual way and skillfully integrate the thought and method of mathematical modeling, so as to cultivate students' ability to transform practical problems into mathematical ones. Students who participate in mathematical modeling are faced with practical problems. There are no ready-made methods and solving formulas in their knowledge system. They can experience the process of discovery and creation of mathematics, exercise their ability to apply mathematical theory to practical problems, cultivate their innovative consciousness, ability, and spirit, and acquire valuable experience which cannot be obtained in books and classes. In practice, the author makes efforts from the following aspects. Firstly, when explaining the classical theory of higher mathematics, the idea and method of mathematical modeling are integrated into it. Combined with the cases encountered in life, study, and work, let students understand the preliminary knowledge of mathematical modeling and master the basic idea of modeling. Secondly, it is suggested that the

elective course of mathematical modeling should be offered in the economics and management disciplines of the university where I am located, and the activities of mathematical modeling societies should be carried out, and excellent students should be selected to form mathematical modeling teams to cultivate students' ability to use mathematical tools to solve practical problems. Finally, we hold lectures on mathematical modeling, conduct pre-competition guidance and warm-up competitions, and select some excellent students to participate in the competitions. Through these practices, students can intuitively and profoundly feel the role of mathematics, and also cultivate their scientific research ability and team cooperation ability.

Improving the efficiency of classroom teaching. The class hours of higher mathematics in the schools of economics and management in Chinese universities are generally compressed. The author's countermeasure is to adopt better logical order and method of solving the problem than the textbook, highlight the important and difficult points, give concise lectures, and clearly list the contents that students need to prepare for the next class at the end of the class. Of course, the premise is that teachers should constantly improve their knowledge level and teaching ability, study teaching materials, students, and classes carefully before class, and prepare lessons carefully.

Developing students' mathematical intuition and mathematical aesthetic ability. Mathematical intuition refers to the form of thinking that uses empirical observation, knowledge blocks, and intuitive feeling of image to analyze current problems acutely and quickly find the direction or way to solve them (Hao, 2015). By guiding students to form their own mathematical knowledge system and use mathematical thinking methods flexibly, training students to have keen observation and rich imagination, encouraging students to make mathematical guesses, prompting students to pay attention to the ability of combining numbers and shapes and the intuition of mathematical language, and leaving students time and space of using mathematical intuition, we can develop students' mathematical intuition in university mathematics teaching. Mathematical beauty is presented in mathematical theory by the essential force of human free creation in a pleasant form through mathematical thinking, which is closely related to truth and goodness (Hao, 2016). We can develop students' mathematical aesthetic ability in university mathematics teaching by guiding students to improve their aesthetic and artistic accomplishment, consciously introducing the aesthetic factors associated with teaching content into classroom teaching, producing a sincere passion for education, mathematics, and students, and actively inducing students to participate in the creative practice of mathematics.

Guiding students to learn from mathematicians through research-based teaching. Research-based teaching is an important means to cultivate students' innovative ability and innovative talents. Higher mathematics should carry out research-based teaching and play a greater role in training innovative talents. In "Some Opinions on Further Strengthening Undergraduate Teaching Work in Colleges and Universities" Ministry of Education of the People's Republic of China puts forward that we should actively promote research-based teaching and improve the innovative ability of university students. In the process of teaching, students are guided to learn the way mathematicians study mathematics and restore the process of mathematical research and application so that students can experience the process of knowledge generation and application in a certain historical stage. Polya pointed out that

> for mathematicians who are actively engaged in research, mathematics may be like a guessing game: before you prove a mathematical theorem, you have to guess it, and before you know the details of the proof, you have to guess the dominant idea of the proof. (2001, p. 177)

In the history of mathematics, creative research discoveries often go through the process of "guessing-testing-correcting-confirming truth", and most of outstanding mathematicians have similar experiences. Hadamard, a French great mathematician, pointed out that "in mathematics, we are not afraid of mistakes, in fact, mistakes often occur, ..." (2008, p. 51) The history of mathematics enlightens us that great mathematicians often make more mistakes than ordinary people, but they are always correcting them, so in the final results, there is no trace of those mistakes. Therefore, students should be encouraged to try actively, not afraid of mistakes, and understand the real mathematical research through continuous error correction.

Applying the "original teaching method" to visualize abstract content. Higher mathematics is an abstract mathematic course. Many of its concepts, theorems, and so on have been highly generalized and abstracted, which makes it difficult for students to learn. The introduction of many concepts in traditional teaching divorces from the motivation and background of knowledge generation, which makes students feel unnatural. Thus teachers should implement the "original teaching method": When explaining the concepts, formulas, theorems, methods, and so on of higher mathematics, teachers should start from the sources, first clearly present students the motivation, background of introducing them and formation process of them, then abstract them, and follow the epistemological rules from shallow to deep, from exterior to interior and from division to combination, so as to mobilize students' positivity and initiative in learning higher mathematics. Teachers should combine abstract thinking with imagery thinking. By adding elements of imagery thinking to abstract concepts, theorems, and so on, and using real-life examples more often, students can understand more deeply and apply abstract content flexibly. As a result, they can no longer feel dull and profound in the process of learning higher mathematics.

Guiding students to realize positive transfer by making them realize the relevance and diversity of knowledge and thoughts. Teachers should analyze knowledge points in an all-round and multi-angle manner from infiltration of different disciplines, and try to make students ask meaningful questions. In the first lesson of higher mathematics, the author will introduce how to grasp the basic structure of the course from the two dimensions: the vertical connection of knowledge system and the horizontal connection of ideological and methodological system. In the future teaching, it is often emphasized that we should learn by comparison and association. Learning transfer refers to the influence of one kind of learning on another. According to the nature and result of transfer, it can be divided into positive transfer and negative one. Positive transfer is that one kind of learning may promote and facilitate another, while negative transfer is that one kind of learning interferes with and hinders another. Educational psychology points out that on the basis of fully understanding the law of transfer and its influencing factors, teachers should pay attention to creating and utilizing conditions and educational opportunities conducive to positive transfer in every teaching activity and in every formal and informal contact with students, so as to infiltrate the idea of "teaching for transfer" into every educational activity (Mo, 2007). Higher educational psychology advocates "teaching for transfer". The main purpose of learning is to use existing knowledge to analyze and solve problems encountered in future work, study, and life. According to the teaching experience, teachers should carefully analyze and extract the "cognitive steps" in the

teaching difficulties, so as to help students use the existing knowledge and experience to cross the steps, achieve positive transfer, and avoid negative transfer.

Using various teaching means and integrating modern educational technology. Because of the rigorous logic and more deduction of higher mathematics, it is difficult to teach the course profoundly and vividly. New teaching methods and techniques, such as mixed teaching, flipping classroom teaching, micro-lectures, massive open online courses, and mathematics experiment course, can enrich higher mathematics teaching, effectively enhance the capacity and intuition of the students, and greatly arouse students' interest and curiosity. Multimedia courseware can employ animation, image, sound, and text to stimulate and mobilize students' organs to process teaching content in various ways and vividly and interestingly display teaching content in front of students; it can combine content with geometric graphics organically, display geometric graphics and their changes; it can not only help students to understand abstract concepts and theories, enrich classroom teaching content, and stimulate students' interest in learning, but also cultivate students' practical ability, increase the quantity and quality of information transmission, enhance the expressive force, and realize the optimal combination of classes. Mathematical experiment integrates mathematical knowledge, modeling knowledge, and computer application. Mathematics experiment course should be added in the economics and management disciplines. With the help of mathematical software such as MATLAB and Mathematica, intuitive geometric figures should be made to solve the problems of matrix calculation, financial modeling and optimization. In addition, as there are many proofs and calculations in higher mathematics, blackboard writing is also indispensable. Therefore, we should integrate modern educational technology into higher mathematics teaching and combine various teaching means with modern educational technology.

Overcoming the Difficulties of Large Class Teaching and Paying Attention to Students' Individual Differences

There are many difficulties in large class teaching. In terms of teaching attitude, teachers need to devote more efforts to teaching so that their classroom can attract students; need to enjoy teaching from the heart; need to use their personality charm to inspire students, influence each student subtly in the speech and behavior, and transfer a kind of culture, temperament, and character while imparting knowledge. In terms of teaching content, teachers need to keep abreast of the development frontier of the subject under the main course, update their knowledge reserves and teaching content in time, guide students to think independently, and cultivate students' critical thinking. In addition, teachers should pay full attention to students' individual differences and teach students in accordance with their aptitude in teaching.

Guiding University Students to Cultivate Good Learning Habits, Applying Scientific Learning Methods, and Improving Learning Ability

Guiding university students to cultivate good habits of previewing before class, listening carefully in class, and reviewing after class. Mathematical thoughts and methods develop with the development of mathematics, and also promote the development of mathematics. Major progress in mathematics is often accompanied by the innovation of mathematical thoughts and methods. Therefore, in higher mathematics teaching, we should strengthen the infiltration of mathematical thoughts and methods through various ways,

guide students to use mathematical thoughts and methods to discover, analyze and solve problems consciously, cultivate students' innovative consciousness, innovative thinking, and innovative ability, and inspire students to discover mathematical tools and methods consciously. We can improve students' learning ability by guiding them to carry out research-based learning.

Stressing on Both Theory and Application in the Curriculum Laying

Higher mathematics teaching in the economics and management disciplines in Chinese universities should conform to the idea of general education, pay attention to the integrity of knowledge structure and the instrumentality of mathematics, and fully reflect the importance of mathematics in solving economic and management problems. Mathematics teaching in the economics and management disciplines should aim at application. In teaching, we can neither weaken the position and role of mathematics in economics and management disciplines education, nor exaggerate the role of mathematics and depart from the orientation and training objectives of education of schools of economics and management.

Reflecting on Teaching

Teaching reflection refers to teachers' re-understanding and re-thinking of educational and teaching practice so as to sum up experience and lessons and further improve the level of education and teaching. Teaching reflection includes the evaluation and summary of teachers for pre-teaching, middle-teaching, and post-teaching stages after the end of teaching practice. Insisting on teaching reflection plays a very important role in optimizing teaching effect, improving teaching level and teaching research ability, etc.

Results

Under the idea of general education, by enhancing the enthusiasm of teaching and learning, achieving mutual benefit between teaching and scientific research, widening the knowledge structure of teachers, adjusting teaching contents, improving teaching methods and changing teaching instrument, overcoming the difficulties of large class teaching and paying attention to students' individual differences, guiding university students to cultivate good learning habits, applying scientific learning methods and improving learning ability, stressing on both theory and application in the curriculum laying, reflecting on teaching, we can solve the problems in higher mathematics teaching of economics and management disciplines in Chinese universities and improve the teaching quality of higher mathematics of these disciplines.

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