Research and Practice of Moral Education in Higher Mathematics Teaching in the New Era

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This paper first analyses the reasons for the low effectiveness of moral education in the current higher mathematics teaching, and then puts forward the contents, methods, and approaches of integrating moral education into higher mathematics teaching in the new era on this basis, and finally finds out the points for attention in the integration of moral education in higher mathematics teaching in the new era. Theoretically, the moral education content is innovated. We should set up the moral education idea of students as the foundation and moral education as the first, establish the attainable goals of moral education in different stages and levels, excavate the moral education resources contained in the current real life and social hot spots, and pay attention to the inheritance and enlightenment of Chinese excellent traditional culture, especially the mathematical culture and history in moral education. In practice, the moral education methods are improved and the moral education approaches are broadened. Moral education methods should be close to reality and life, should adapt to students’ personality and hobbies, and should be diversified. Moral education can be carried out by improving the working mechanism of moral education management, publicity, and so on, strengthening the construction of moral education team and creating an atmosphere of full staff education.

Keywords: moral education, higher mathematics teaching, new era, moral education idea, moral education goal

Introduction

Moral education (in a broad sense) is a systematic activity process in which educators follow the law of moral character formation, according to the needs of certain society and educated people develop the qualities of ideology, politics, legal system and morality, etc. of the educated through internalization and externalization, and by using effective means, such as speech teaching and personal teaching (Lu & Wang, 1994; Wang, 2005). Moral education (in a broad sense) includes social moral education, community moral education, school moral education, family moral education, and so on. Moral education in a narrow sense refers to school moral education. School moral education refers to the educational activities in which educators exert influence of ideology, politics, morality, etc. on the educated in a purposeful, planned, and systematic way, according to certain social or class requirements, and make them form the moral character required by a certain society and class through their positive understanding, experience, and practice.

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The moral quality of college students is related to the future of the motherland and the hope of the nation. Moral education is the primary task of higher education and the soul of quality education for college students, which plays an important role in the overall development of college students. As an important part of higher education, higher mathematics teaching should carry out moral education in its own way. Colleges and universities are important places for students to master moral norms, fulfill their moral obligations, and form their moral qualities. College classroom is the main front for students to accept moral education. Teachers are the organizers and implementers of moral education. If teachers do not infiltrate moral education into the teaching process, teaching is only a means which lacks the main purpose. Because teachers are in direct contact with college students, teachers are indispensable to the moral education of college students, especially the teachers of higher mathematics. According to the characteristics of higher mathematics, we should promote the integration of moral education in higher mathematics teaching and give play to the moral education function of higher mathematics teaching. The CPC Central Committee and the State Council (1999) once pointed out that we should “further improve the ways and methods of moral education and incorporate moral education into the teaching of various disciplines”. With the rapid development of China’s economy, the talents needed by the society should not only have sufficient professional knowledge and skills, but also have good qualities, such as loving their jobs, being honest and trustworthy, and serving the society. Throughout the development process of moral education, the current moral education of college students has made remarkable achievements, and the mainstream of college students’ ideology is positive, healthy, and upward. However, with the changes of the situation at home and abroad in the new era, the rapid development of social economy and culture, and the wide application of various new media, all kinds of ideological trends and mainstream culture collide with each other, which not only enriches college students' thoughts, but also brings them negative effects. Many college students do not know how to choose their own values, world outlook and outlook on life, and new situations and new problems are emerging in moral education, which put forward higher requirements for all moral education workers. In our traditional teaching, there is a common phenomenon that we pay more attention to intellectual education than moral education and often only introduce knowledge and skills, which cannot adapt to the development of society. For example, higher mathematics teaching in the past mainly focused on the teaching of theoretical knowledge, the cultivation of thinking ability and the improvement of application ability, but ignored the moral education. As a public basic course for freshmen majoring in Science, Engineering, Economics and Management, and an elective course for college students in other majors, Higher Mathematics is mostly faced with freshmen. They are lack of social experience, and their values, world outlook and outlook on life are forming in the critical period. They will unconsciously imitate and learn the thoughts and behaviors of teachers, and have strong plasticity. Higher mathematics teachers should make better use of these advantages and integrate moral education into higher mathematics teaching, which will have a positive impact on college students and make them become talents that the society really needs. Therefore, the research and practice of moral education in higher mathematics teaching in the new era is of great significance.

In domestic literature on moral education in higher mathematics teaching, Zhu (1995) and Chen and Song (2015) discussed the ways of moral education in higher mathematics teaching; Wang (2012) explored the methods of moral education in higher mathematics teaching; Chen (2013) studied the necessity, methods, and precautions of moral education in higher mathematics teaching; Tong and Liu (2018) discussed the necessity, methods, and precautions of moral education in higher mathematics teaching consider the methods, examples, and programs of moral education in higher mathematics teaching. For higher vocational colleges, Liao (2011)
discussed the necessity, methods, and precautions of moral education in higher mathematics teaching; Wang, Li, and Jiang (2015) and Wu (2016) studied the methods, approaches, and precautions of moral education in higher mathematics teaching. These literatures mainly study the necessity, methods, approaches, examples, and precautions of moral education in higher mathematics teaching. They do not comprehensively analyse the real reasons for the low effectiveness of moral education in the current higher mathematics teaching. On the basis of careful and comprehensive analysis of the real reasons for the low effectiveness of moral education in the current higher mathematics teaching, there are few literatures to find out the content, methods, approaches, and precautions of moral education in higher mathematics teaching. In foreign countries, the United States is the first Western country to study moral education theory and become the birthplace of modern school moral education. Since the end of the 19th century, American school moral education has been widely and profoundly influenced by Dewey, a famous American educator and representative of pragmatism moral education. Dewey thought that “the essence of education is moral education” (Zhao & Wang, 1981, p. 406). From 1950 to 1980, in the United States, “moral cognitive theory” represented by Kohlberg, “value clarification theory” represented by Raths, “humanistic education concept” represented by Rogers (Louis, 2003), and other theories were formed successively. Other Western countries have also explored a series of moral education methods suitable for their own countries. Learning from the moral education methods of the United States, France, and the Confucianism of China, Japan has formed a set of moral education system suitable for itself. The most representative of moral education teaching with values as its main content is the “character education movement” in the United States in the 1990s. Lickona the main representative of character education, believes that “respect and responsibility” are the most important two points in moral education (Zhang, 2015, p. 3). In addition, many countries general pay attention to the reform of moral education classroom teaching, and the concept of “hidden curriculum” is proposed. Hidden curriculum refers to the education that educators all over the world, in order to achieve the goal of moral education, within the scope of teaching, through the unconscious and non-specific psychological reflection of the educated, organized, and planned in various ways enable them to obtain moral and emotional experience. Kohlberg said that moral educators must pay attention to the hidden curriculum, otherwise, the effect of moral education will not be achieved, hidden curriculum can be said to be a bridge to realize moral education (Zhang, 2002). A lot of researches have been done on moral education abroad, and many theoretical systems have been formed. Many theories are still the focus of research by experts and scholars. However, these studies are mostly in the basic stage, but few on the effectiveness of moral education. Moreover, with the coming of new era, the development of economy and the change of social environment, we cannot solve the new situation and new problems arising from moral education only relying on the original theory and experience. At present, there are some problems among college students, such as lack of integrity, serious individualism and money worship, and more campus violence. The stars of “Korean wave” and “Japanese wave” are popular, and the “little fresh meat” and “Internet celebrity” with low quality are imitated (Yu & Wen, 2019), and the effectiveness of moral education in higher mathematics teaching is not high. Therefore, the research and practice of moral education in higher mathematics teaching in the new era are not enough at home and abroad.

This paper first carefully and comprehensively analyses the real reasons for the low effectiveness of moral education in the current higher mathematics teaching, and then puts forward the contents, methods, and approaches of integrating moral education into higher mathematics teaching in the new era on this basis, and finally finds out the points for attention in the integration of moral education in higher mathematics teaching in the new era.
The Reasons for the Low Effectiveness of Moral Education in the Current Higher Mathematics Teaching

The effectiveness of moral education is influenced by the factors of politics, economy, culture, etc. in a certain period of time. After careful analysis, the reasons for the low effectiveness of moral education in the current higher mathematics teaching mainly include internal reasons and external reasons.

Internal Reasons

The internal reasons are that the atmosphere of moral education is not strong, the contents and methods of moral education are out of date, and there are problems in family education. With the changes of the times, the development of social economy and the arrival of the social transformation period, the moral atmosphere of college students has undergone great changes. Problems in college students, such as lack of honesty, gratitude, no respect for others, and poor sense of responsibility can be found everywhere. Many colleges and universities have not formed a perfect mechanism in the moral education work. Only part of the students’ staff and teachers of the two courses are engaged in moral education. The educational role of higher mathematics teachers has not been highlighted. Many higher mathematics teachers think that their job responsibility is to teach a good lesson and do a good job in scientific research. They only use teaching to impart theoretical knowledge, rather than impart the truth of life. They are not good at mining moral education elements in higher mathematics. This concept weakens the effect of education and greatly reduces the role of the main channel of classroom teaching in educating people. The role of campus culture in the construction of moral education atmosphere is not obvious enough, the recessive education role has not played out, only through some superficial propaganda, it is difficult to attract students’ attention and stimulate their interest.

The content of moral education is out of date. It does not fit in with the current hot issues, the national policy guidance, and life reality and the focus of attention of the students, and the attraction and appeal are not enough. At present, the goal of moral education in higher mathematics teaching is too idealistic. Teachers often overemphasize the highest level of morality. This kind of moral level is often divorced from the social reality and students’ life reality, which leads to many students’ resistance because they cannot reach it. The method of moral education is out of date. In the current moral education in colleges and universities, there is a widespread method of preaching and indoctrination, and students are in a passive state of acceptance.

With the rapid development of China’s society and economy, some families’ educational concepts have changed. The traditional concept of family education has been weakened. Some parents pay more attention to intellectual education than moral education. They are either too strict or too loose. They pay little attention the changes of children’s thoughts and psychology, the cultivation of sense of responsibility, etc. Some excellent traditional moral concepts in China, such as hard work, honesty and trustworthiness, and thrift and frugality are weakened in family education and even considered obsolete. Some bad ways of education still exist in family education, such as excessive love and care for children, taking care of all daily life of children, unconditional satisfaction of children’s requirements, lack of necessary rules and norms, to educate children in simple and crude way. Especially in the university stage, many parents relax their restrictions on their children, believing that it is enough to rely on the school’s control and students’ self-restraint. Due to the limitation of time and space, communication has become less. They do not realize that the university stage is a very critical stage for the formation of students’ world outlook, outlook on life and values. If there is no close match of family education and timely guidance of parents, it is easy for students to deviate.
External Reasons

External reasons are the impact of the era environment, the impact of social environment, and the challenge of new media. The emergence of economic globalization, political diversity, and cultural diversity has promoted the development of economy, political progress, and cultural prosperity in today’s society, but it has also brought great changes in people’s ideas and life styles, and various cultures have been constantly blended. In today’s era, the introduction of active social thoughts and some decadent values has a significant impact on students. Some students are wavering in their value choices. Their thoughts show a diversified development trend, showing the tendency of individualism, utilitarianism, and liberalism, lacking lofty ideals, social responsibility and civic awareness.

At present, China’s society is in the transition period, the social environment is complex and changeable, people’s ideas and life style are also undergoing great changes. Under the influence of the socialist market economic system, people pay more attention to efficiency and interests, and their self-awareness is constantly enhanced, which, to a certain extent, induces negative effects, such as extreme individualism, money worship, and hedonism. Young college students are extremely vulnerable to be affected. They focus too much on yourself and pursue personal interests, while weakening collective consciousness, which also makes traditional moral concepts suffer to the great challenge, some excellent traditional morality has been abandoned. At present, the effect of higher mathematics is mainly evaluated by students’ examination scores. Obviously, it is difficult to make an appropriate evaluation of the moral education effect of students, and the effect of moral education is also difficult to be tested. Most of the time, the evaluation criteria of employers are mainly based on the educational background and academic achievements of students, but seldom consider the moral character and moral level of students. Due to the different social environment and historical development, there is a huge conflict between foreign moral ethics and Chinese traditional moral ethics, which challenges the values of college students, and makes many students sometimes fall into a confused state, resulting in confusion in moral choice.

In the new era, the network, Wechat, Microblog, and other new media are widely used, which makes people’s contact increase, the means and ways to obtain information are more diversified, and the information is highly developed. The rich information has a profound impact on the moral concept of college students. The emergence of diversified values has a great impact on the life of most college students whose values are forming. It is easy for them to accept the wrong values without distinction. In addition, due to the numerous new media in today’s society, it is difficult for students to distinguish the true from the false and make a correct moral judgment. If there is no timely and appropriate guidance, it is difficult to improve the effectiveness of moral education in higher mathematics teaching.

The Contents, Methods, and Approaches of Integrating Moral Education into Higher Mathematics Teaching in the New Era

Based on the analysis of the first part, this paper puts forward in turn the contents, methods, and approaches of integrating moral education into higher mathematics teaching in the new era.

Innovating Moral Education Content

In the new era, we should keep pace with the times and actively innovate the moral education content, so as to deepen students’ moral understanding, enhance their ability of moral choice and judgment, and cultivate
their good moral behavior habits. We should set up the moral education idea of students as the foundation and moral education as the first, so that the content of moral education integrated into higher mathematics teaching in the new era is close to the students’ life reality, meet the practical needs of students, step into the heart of students, and enlighten students’ moral thinking. We should establish the attainable goals of moral education in different stages and levels. For example, for excellent students and student cadres, because they play an exemplary role among their classmates, their moral education goals can be appropriately improved, while for students with poor performance, their moral education goals can be appropriately lowered, so that they can start with basic personality cultivation and civic quality. We should make full use of the moral education resources around us in real life, and constantly excavate the moral education materials contained in the social hot spots. We should pay attention to the inheritance and enlightenment of Chinese excellent traditional culture, especially the mathematics culture and history in moral education, so that students can feel the charm of traditional culture, inherit the essence of traditional culture, and transform it into inner belief and external practical action. Teachers should influence students with full enthusiasm and rigorous academic attitude, cultivate students’ positive learning attitude and rigorous and realistic work style. Higher mathematics has a high degree of abstraction, strict logicality, etc. It can train students with strict logical thinking. It is helpful to cultivate scientific methodology, scientific attitude of being dedicated, adhering to truth and tracing to the source, and a scientific style of seeking truth from facts, being serious and meticulous. Therefore, in higher mathematics teaching, teachers should strengthen students’ training in this aspect according to different teaching contents. Teachers can introduce some mathematical culture, history, and so on to students in a timely and appropriate way according to the specific teaching contents, so as to let students understand the origin and background of knowledge generation, and the deeds and achievements of mathematicians at home and abroad, so as to stimulate students’ interest and enthusiasm in learning, as well as national self-esteem and pride; properly integrate patriotism education to students, and encourage students to establish lofty ideals of rejuvenating China and great ambition of devoting themselves to science; guide the students to study and use dialectics, cultivate their dialectical materialism, encourage they to discuss and exchange in learning, help each other, and cultivate their team spirit. In the first class of higher mathematics, we can briefly introduce Newton and Leibniz, the founders of calculus. In the later classes, let students gradually understand Cauchy, Rolle, Lagrange, Fermat, etc. The rigorous and realistic attitude and the tireless pursuit of truth of these mathematicians will influence students imperceptibly. When teaching trigonometric function, we can introduce to the students the contribution of mathematicians in our country to the calculation of Pi ($\pi$). When teaching the concept of limit, we can introduce to the students: calculus, the core of higher mathematics, was produced in the second half of the 17th century. As early as the Warring States period of the third century B.C., the ancient philosophical work “Chuang tzu · Under Heaven” in ancient China had a discussion on the idea of limit, such as “A stroke of one foot is taken half a day, and it will last forever”, the “cutting circle technique” initiated by Liu Hui in the Wei-Jin period of the third and fourth centuries, and the “Cavalieri’s principle” founded by Zu Chongzhi and his son in the southern and Northern Dynasties of the fifth and sixth centuries also contain the limit thought. When introducing the theorems of higher mathematics, it can be derived from the category of mathematics to social morality and social order. As a social person, one must abide by discipline and law and be a man of public morality and integrity. When teaching Taylor formula, we should emphasize confidence, patience, carefulness, and overcoming inertia. In this process, students realized that to become the talents needed by the society, they should not be afraid of difficulties and troubles, work steadfastly and conduct
themselves seriously. When teaching power series expansion, we can introduce Li Shanlan, a mathematician in Qing Dynasty of China, who founded the power series expansion of quadratic square root. He also studied the power series expansion of trigonometric function, anti-trigonometric function, logarithmic function, etc. Higher mathematics mainly studies variables. Many of its concepts, methods, and thoughts contain dialectical materialism. The three basic laws of dialectics, namely, the law of unity of opposites, the law of mutual change of quality and quantity and the law of negation of negation, are embodied in higher mathematics. Digging into the essence of the basic concepts in higher mathematics and introducing their dialectical relations properly will help students understand the concepts deeply, cultivate their dialectical thinking methods, and enable them to receive more vivid and concrete education of dialectical materialism. For example, the basic concepts of finite and infinite, convergence and divergence, continuity and discontinuity, straight line and curve, constant and variable, and, differential and integral embody the law of unity of opposites. They are not only the opposite of contradiction, but also interdependent and interrelated, and can be transformed into each other under certain conditions. There are qualitative differences between finite and infinite. In the properties of infinitesimal, the sum of finite infinitesimals and the sum of infinite infinitesimal are totally different. But we can not only find infinity by finite, but also express finite by infinity. There are differences between continuous and discontinuous (discrete), but they can also be transformed into each other. When we use the definition of definite integral to solve the limit of sequence of numbers, we transform the discrete case into the continuous one. In the element method of calculating definite integral, we use discrete quantity to approximate continuous one. After introducing the concept of limit, the straight line and curve are unified. The so-called differential of a quantity is to divide the quantity infinitely, so that it tends to disappear for the original quantity, that is, “breaking up the whole into parts”; on the contrary, integral is the infinite accumulation of differential, that is, “accumulating parts into a whole”. For another example, the area of a circle is calculated by taking the limit of the areas of inscribed regular polygons of the circle, which reflects the law of mutual change of quality and quantity. The viewpoint of movement is another basic viewpoint of materialist dialectics. In higher mathematics, the idea of dynamic variable is always permeated, and function is the concrete embodiment of this idea. Teachers should not only emphasize the ability of independent thinking and problem-solving, but should encourage students to communicate more, learn from each other and become a person with good team spirit.

**Improving Moral Education Methods**

With the change of the times, the development of society, and the change of the subject of moral education, the moral education methods should be improved constantly. We should adopt the moral education methods which are close to the reality, life, and students, and adapt to the students’ personality, hobbies and growth characteristics. We should design the moral education methods according to the new problems in the student group, the new focus of the students’ attention and the new hot spots in the society, and use the diversified moral education methods. In the teaching of higher mathematics, teachers should combine with the actual needs, according to the different characteristics of moral practice, emotional cultivation, model demonstration, reasoning and persuasion, mathematical culture and history analysis, group discussion, teaching, and other methods, choose to use these methods pertinently. They can also learn from foreign excellent moral education methods to improve the attractiveness and appeal of students and mobilize their enthusiasm and initiative, enhance the enthusiasm of students to participate. For example, when teaching the necessary conditions for the
extreme value of a function, the group discussion method is used to let the students discuss and study the characteristics of the tangent slope, and the conclusion that “the tangent line of the curve at the extreme point is parallel to the horizontal axis” is obtained. Through this process, students will realize that the relationship between individual goals and group goals is interdependent. Only when other members of the group are successful can they succeed. For another example, encouraging students to participate in mathematical modeling competition is also conducive to the cultivation of students’ team spirit.

Broadening Moral Education Approaches

The university should formulate a sound system and working mechanism of moral education management, publicity, etc. The university should take the university party committee as the leading core of moral education work, establish a leading group of moral education work headed by the university party committee to be responsible for the research and formulation of moral education work guidelines, tasks and overall planning, and form a system and working mechanism of moral education management, publicity, etc., which is under the unified leadership of the party committee, the joint efforts of the Party and the government, and the close cooperation and the joint promotion of the whole university. It is necessary to establish a systematic moral education system, clarify objectives, refine responsibilities, and widely promote it in the whole university to create a good atmosphere of education. We should guide all the staff to carry out the people-oriented moral education principle, formulate corresponding policies, such as preferential policies in the evaluation and appointment of professional titles, encourage more excellent teachers with noble morality, courage and ability to join the moral education team, let more people pay attention to and care about moral education, and truly realize “students as the foundation and moral education as the first”.

Moral education team is the organizational guarantee of moral education in colleges and universities. In addition to the related work of the university party committee, the moral education work in colleges and universities mainly depends on the moral education team. At present, the moral education workers are mainly the party and government cadres, teachers of “Two Courses”, counselors and class teachers. They often have several duties and heavy work tasks, so it is difficult to set aside special time and energy to carry out moral education for students. The party committee of the university should attach great importance to it, strengthen the organizational leadership, put moral education in the first place, take practical measures to cultivate a group of moral education workers with firm political direction, solid theoretical foundation, and dare to explore and innovate, so as to improve their professional level, so that the moral education team can truly become a guide for the healthy growth and all-round development of college students. The leadership of the school should pay appropriate attention to the moral education workers from all aspects, give appropriate preferential treatment and policies, improve the attraction of moral education posts, attract more teachers to join in, constantly enrich and expand the moral education team, and truly establish a high-level moral education team. At the same time, we should train the moral education workers in time, unify their thoughts, improve their understanding, and actively carry out academic research while mastering the theoretical knowledge of moral education, so as to make them truly become experts in the field of moral education, enhance the sense of belonging and mission, and improve the stability of the moral education team. We should let more teachers and workers participate in the moral education team, put the idea of all staff education and all-round education into all aspects of school teaching, management and service, and strive to form a good moral education atmosphere of full participation and joint management. Every word and action of the teacher has a strong demonstration effect and subtle
influence on students. Therefore, we must strengthen the ideological and professional ethics construction of college teachers, improve the moral cultivation and comprehensive quality of teachers, give full play to the role of teachers’ personality demonstration, establish the people-oriented service consciousness, and cultivate students’ attitude towards doing things by teachers’ personality demonstration, so that teachers can become the object of students’ worship and reliable friends, so as to achieve the goal of moral education of successfully transmitting scientific moral concepts and value standards.

**The Points for Attention in the Integration of Moral Education in Higher Mathematics Teaching in the New Era**

On the basis of the first two parts of the study, find out the points for attention in the integration of moral education in higher mathematics teaching in the new era.

**Teachers Should Grasp the Opportunity and Scale of Moral Education Well**

Teachers should grasp the opportunity and scale of moral education well, and should not insert unseasonably and stiffly some unnecessary moral education preaching to make moral education become a mere formality. Because the content of advanced mathematics is many and abstract, it is difficult for most students. If teachers spend too much time on moral education in the teaching process and ignore the teaching of the content of the course itself, it will not only fail to achieve the purpose of moral education for students, but also may have a negative effect, making students think that they do not need to grasp knowledge steadfastly. First of all, the content of moral education in higher mathematics teaching should not only be targeted and timely, but also adapt to the psychology of college students. Secondly, we should avoid vulgarization of moral education in higher mathematics teaching. Do not connect calculations and proofs in higher mathematics with morality superficially, labelling moral education with formalism; do not regard moral education content as mathematics knowledge to teach, causing students’ disgust and resistance; and do not just be keen on verifying the “No. 1 in the world” of ancient Chinese mathematics, but objectively introduce the knowledge of mathematical history.

**Teachers Should Use the Methods of Moral Education Well, Which Are Close to the Students’ Reality and Meet Students’ Needs**

First of all, moral education should not be “mechanically copied” in higher mathematics teaching. If teachers rigidly connect the concepts, theorems, and formulas in mathematics with the theories and viewpoints in moral education, it will not only fail to produce the expected effect, but also delay the main course, which will cause students’ disgust. Secondly, the moral education methods should be determined according to the characteristics of higher mathematics and the actual situation of college students. They should be flexible and diverse, but not subjective and arbitrary. Higher mathematics has the characteristics of strong logic, etc., which is helpful to cultivate scientific methods, attitudes, styles, and spirits. College students are already adults. Most of them have their own ideas and thinking mode. Teachers cannot expect to change their views by preaching, but use personal example or some vivid examples to influence students, let them feel and benefit from it.

**Teachers Should Constantly Improve Their Moral Cultivation, Teach More by Personal Example Than by Verbal Instruction, and Give Full Play to the Emotional Effect**

Teachers should be strict with themselves, constantly improve their professional quality, moral cultivation, and moral education level, and deal with theoretical knowledge strategically from a point of view of dialectical materialism in the teaching process. Teachers should adhere to the characteristics of rigorous and realistic
higher mathematics, seriously prepare for each class, carefully design blackboard writing, pay attention to the smooth and attractive expression, teach more by personal example than by verbal instruction, and influence students with their own personality charm. Teachers should establish a democratic, equal, and harmonious relationship between teachers and students, become good teachers and helpful friends of students, respect, understand, and care for students, be strict with students, help them patiently, and let students accept knowledge and understand the truth in a relaxed and pleasant atmosphere, and get enlightenment in emotional blending.

**Conclusion**

By innovating moral education content, improving moral education methods, and broadening moral education approaches in higher mathematics teaching, we can solve the problems arising from moral education in the current higher mathematics teaching and improve the effectiveness of moral education in the current higher mathematics teaching.

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