

Discussion on the Teaching Practice of Integrating Ideological and Political Elements into Higher Mathematics

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Abstract: The development of education is a process of continuous change, so colleges and universities should also continue to carry out curriculum reform. Nowadays, every curriculum in colleges and universities also integrates ideological and political elements into teaching design, and constantly studies how to better integrate the two, which is also an important stage of education development. Math teachers must pay attention to the ideological and political elements of the curriculum, and analyze its connotation in depth, especially the ideological and political elements contained in the curriculum. Based on this, they should innovate the teaching of the curriculum, promote the in-depth integration of the ideological and political elements and the teaching of the curriculum, and thus promote the continuous development of education.

Keywords: Ideological and Political Elements of Curriculum; Advanced Mathematics; Teaching Practice

1. Introduction

The integration of ideological and political education into various courses is conducive to the realization of the educational goal of teaching and educating people. The birth of the concept of curriculum ideology and politics has led a new direction for curriculum reform. In higher mathematics teaching, it can help its curriculum connotation to be sublimated. Teachers should cultivate students from a long-term perspective. On the one hand, they should pay attention to students' professional knowledge, on the other hand, they should devote their efforts to the cultivation of students' moral quality. Only by doing these well, can they cultivate excellent talents. Therefore, it is necessary to combine ideological and political education with higher mathematics teaching.

Combining ideological and political elements with professional courses can not only correct students' learning attitude, but also help them establish correct moral and values. Of course, it is also beneficial for students to learn advanced mathematics, exercise their logical thinking, and make their thinking more active, in order to promote the development of innovative thinking. With a correct outlook on life and dreams, students will have the courage to overcome difficulties, face difficulties and keep moving forward, and will also inject more vitality into the teaching of advanced mathematics, so that the advanced mathematics curriculum will have a better development in the integration of ideological and political elements and promote common progress.

2. Course ideological and political overview

The understanding of ideological and political education in the curriculum is to unify ideological and political literacy with professional courses, intersperse the study of ideological and political concepts in professional teaching, and subtly edify students, in order to help them grow healthily physically and mentally, and truly achieve teaching and educating people. It is relatively difficult to add ideological and political education to the curriculum teaching for mathematics, which pays more attention to logical thinking and abstract learning. Therefore, as a teacher of this course, it will be difficult and confused. However, as a college teacher, we must deeply realize that the educational concept is to constantly learn, achieve the important task of teaching and educating people through teaching practice, and constantly improve our ideological and political literacy. To integrate the ideological and political elements into the teaching curriculum perfectly is a huge

challenge for senior high school teachers. The path of reform is tortuous. This is a process of continuous innovation and exploration. Teachers must carefully examine each process of teaching and find innovation. In this educational reform, teachers should play a pioneering spirit and take the ideological and political curriculum as one of the teaching objectives. When teaching professional knowledge, teachers should also guide students with correct values, so that students can successfully solve their own problems, so as to stimulate their enthusiasm for learning, which is conducive to the patriotism rooted in their hearts, while students' learning ability and innovative thinking are constantly improved.

3. Feasibility analysis of integrating ideological and political elements into higher mathematics curriculum

Teachers should strive to refine the ideological and political elements contained in the curriculum when carrying out ideological and political education in the curriculum. When carrying out teaching activities, teachers should consciously carry out ideological and political education for students, so that they can also get moral edification when learning professional knowledge. This is also a new educational concept that educators are actively exploring now. As one of the public basic courses, advanced mathematics is a required course for every engineering student. It has a long learning time and covers a wide range. It also has certain advantages in the ideological and political aspects of the course. Farewell from the tense and boring middle school career and usher in the long-awaited college journey. They have entered another important stage of their lives before leaving their summer vacation. Leaving away from their hometown and entering a strange environment, the way of life has also undergone great changes. There is a lack of teachers' advice, little communication with teachers, and no longer cramming learning. This will make them difficult to adapt for a long time, and may even cause them to become anxious. Life is free and colorful. Immersed in a multicultural atmosphere, their state of mind is easily affected. Therefore, they must be guided and educated. The course of advanced mathematics is characterized by its strong logic, abstract and wide application. Dialectical thinking exists in many concepts, which can help students form good logical thinking, and can also provide educational materials for ideological and political courses. Therefore, it is feasible and significant to carry out ideological and political courses in the teaching of advanced mathematics.

4. Discussion on the teaching practice of ideological and political courses in higher mathematics

4.1 Ways to improve teachers' ideological and political literacy

Teachers should constantly learn ideological and political knowledge and improve their ideological and political awareness. Only in this way can they consciously integrate ideological and political elements into the curriculum teaching. Higher mathematics teachers should actively participate in the research of curriculum teaching, fully explore the philosophical elements contained in it, and integrate it with higher mathematics teaching. Teachers should also communicate with ideological and political teachers, keep learning and solve problems in teaching. Senior high school teachers are generally from science background, so it may be difficult to adapt to the new teaching thinking of integrating ideological and political elements into professional teaching, and they are still confused and lack of enthusiasm for the work. Therefore, teachers should realize the importance and necessity of curriculum ideological and political from the ideological perspective, fundamentally change their ideas, and improve their ideological and political literacy.

4.2 Discussing the teaching design of ideological and political courses

Each university usually has many experienced senior teachers, whose teaching level is very high, and the school will often hold some discipline exchange meetings. However, the meeting is more about the measures to improve the teaching quality, and rarely about the methods of integrating ideological and political elements into teaching. Therefore, the school can ask teachers to prepare lessons collectively, discuss the knowledge points that can integrate ideological and political elements in higher mathematics courses together, and do some relevant research, or invite relevant experts to guide us to discuss the teaching design of ideological and political elements in higher mathematics courses. The teaching design thus formed must be more conducive to the cultivation of students and the formation of correct values. In addition, mathematics

itself is learning for application, so we should pay attention to highlighting this feature. On the one hand, we should enable students to obtain professional knowledge, on the other hand, we should also strengthen their knowledge application ability, so we should pay attention to the cultivation of students' comprehensive quality, and give full play to the ideological and political education role of the course.

4.3 Making full use of allusions to stimulate students' interest

Cultivating students' strong interest can achieve twice the result with half the effort. There are many records about simple mathematical principles in Nine Chapters of Arithmetic. Later, Liu Hui strictly demonstrated many of the conclusions, and later, Yang Hui of the Song Dynasty also explained one of the typical problems. We can use these mathematical allusions to infect students and make them interested in learning advanced mathematics. Therefore, in classroom teaching, teachers should try to improve the enthusiasm of students' learning, so that students can form a correct outlook on life and a good emotional attitude in the process. Once students are full of passion for the learning of advanced mathematics, they will take the initiative to understand the relevant formulas and knowledge of the memory course, and the learning will also be full of fun.

5. Conclusion

To sum up, curriculum ideological and political education is the inevitable trend of curriculum reform. Teachers of senior high school must deeply understand the connotation of ideological and political education in the curriculum, fully understand the characteristics of senior high school curriculum, and constantly explore how to fully integrate ideological and political elements in it to achieve the teaching of students' professional knowledge, while also integrating ideological and political education, so as to achieve the purpose of teaching and educating people. Senior teachers should constantly improve their ideological and political literacy, so that they have excellent ideological and political level. In addition, the school should also organize teachers to discuss the teaching design of ideological and political courses in higher mathematics teaching, so as to brainstorm. Teachers can make full use of allusions to stimulate students' interest in teaching, which is conducive to the formation of students' good emotional attitude and the establishment of positive and correct values. Teachers should also keep pace with the times and make full use of information technology in teaching so that teaching can be completed with high quality and efficiency. Teachers should also keep in mind that students are the core of learning at all times, so students' active learning is the necessary prerequisite for the smooth progress of all links, and explain the knowledge to students in an easy-to-understand way to improve their enthusiasm for participation. Only in this way can we better integrate ideological and political education into higher mathematics teaching, and make students become qualified socialist builders.

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Fund Projects: Supported by the Hainan Natural Science Foundation (120RC663); The Key Research Project of Haikou University of Economics (HJKY (ZD) 19-02).