

The Hidden Moral Education in Teaching of “Automobile Application Engineering”

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Abstract. We carry out the “hidden moral education in class” to promote the students' overall development. The implicit moral education curriculum can expand the content of moral education to the maximum extent. College students' values, attitudes, beliefs and feelings are affected and promoted in a hidden, potential and penetrating way. There are some cases such as students copying homework, small mistakes in teaching materials to accomplish moral education in the teaching process of “Automobile Application Engineering”. With the celebrity examples the important meaning of dedication, honesty, trustworthiness and the spirit of science is expounded to students immediately in teaching process. The moral education of students is hidden in the course's multiple links. So the students can learn the theory of knowledge and moral education is completed at the same time. The moral outlook of the students has been greatly improved after the implementation of “Hidden moral education in class” plan.

1. Introduction

To further enhance the level of comprehensive education and to better promote the comprehensive development of students, growth and success, "sound personality, physical health, innovative thinking, comprehensive quality" of personnel training specifications were implemented in our school. Training firm and the quality of comprehensive, with innovative spirit and practical ability of high-quality application-oriented talents, implement the fundamental task of talent training, and the implementation of “Hidden Moral Education in Class” talent cultivation[1]. The so-called implicit moral education curriculum is through the education of the unconscious, nonspecific psychological reaction of the role of the transfer and infiltration of educational experience. The role of the hidden moral education curriculum has become more and more important[2]. Its biggest advantage is that its role is indirect and potential can avoid direct and significant moral education curriculum to students. Direct moral education curriculum may lead to the reverse psychology but the hidden curriculum has real "induced" characteristics[3].

2. The Importance of Class Hidden Moral Education

The construction of moral education courses in universities can't be separated from the form of implicit moral education. We must adhere to the organic unity of the explicit moral education curriculum and the hidden moral education curriculum as an organic together. This is because the hidden moral education curriculum has an important influence on the formation of the ideological and moral character, and it is a way to carry out moral education and personality education. This is very necessary to improve the current operating mechanism of moral education, and to promote the construction of moral education courses in universities[4]. From the perspective of education, the hidden moral education curriculum is mainly influenced by the indirect and implicit way. The effect of this kind of influence is hidden behind all kinds of explicit education or learning activities, and the hidden moral factors which are neglected in the campus cultural life and class collective life. Students are aware of the implied impact of various carriers in the unconscious.

3. The Qualities Teachers Should Possess

The moral accomplishment of the subject to carry out moral education includes two aspects: personal moral cultivation, teachers' professional ethics. The so-called moral subject of personal moral cultivation is refers to the teacher must have epigrams in the moral personality of the students. This requires teachers should set an example, strengthen moral cultivation, strict demands on themselves, to do an example for students.

The professional quality of the main body of moral education mainly includes professional level and cultural quality. The principle of the content and strategy of moral education has special, concrete and deep understanding. In addition to the "outside of the body", teachers should have enough knowledge of culture. A knowledgeable teacher tends to win the trust and affection of the students. Teachers' rich cultural knowledge not only can expand the students' spiritual world, but also stimulate their curiosity.

There are three education qualities of moral education teacher, such as educational beliefs, educational concepts and skills. Educational belief refers to that teachers should have the ability of individual education and the pursuit of education. The belief in the educational cause and the ability of the teachers in the individual education is called "educational efficacy" in psychology. Teachers should have "I will be able to teach students better" motivation and basic psychological premise. Educational beliefs include teachers' value orientation and firm belief in education. The subject of moral education must establish that "moral education can only be achieved through the self-construction of the subject". And the establishment of moral education must have relative truth and other basic educational beliefs[5].

4. The Method of Moral Education in Automobile Application Engineering

"Automobile Application Engineering" is an important professional course which contains rich content of moral education. The application of automotive engineering is rich in content and abundant literary allusion which is conducive to the cultivation of the core values of the socialist core values and scientific spirit. In order to stick to our core values and cultural position, it is very important to integrate the moral education into the teaching of the automobile. Moral elements are mined and extracted in professional courses and the teaching process to implement "class hidden moral education". The moral education is hidden in the classroom and students' patriotic, love the party, love the people, love the school is focused on[6]. Students' character and self-cultivation are strengthened through traditional culture conservation. The "class hidden moral education" guide the students to seek the truth and goodness and to develop persistent exploration of the scientific spirit.

Some cases such as students copying homework, small mistakes in teaching materials with the celebrity examples are selected to accomplish moral education in the teaching process of "Automobile Application Engineering". The moral education of students is hidden in the course's multiple links. So the students can learn the theory of knowledge and moral education is completed at the same time.

4.1 The Education of the Socialist Core Value

We found some students copy others' homework after explaining the first chapter's homework. In order to correct this phenomenon I explain to the students the meaning of dedication.

Learning is the bounden duty of a student[7]. To learn is a dedicated spirit and seriously independent completed homework is students' dedication to honesty and trustworthiness. Love is the love of their jobs, as to students are the love of learning and do homework carefully. Dedication is an important way to contribute to the service of society, is the fundamental survival of all walks of life. The students now, access to knowledge, to complete their studies of fundamental, after the formation of the dedication of the good morality for future work is helpful, and better serve the community can get a chance to get a promotion and a pay raise.

4.2 The Education of the Engineering Application

In the derivation of the braking distance, give students explain the importance of mathematics and other basic theoretical knowledge, raise the importance of students on the basis of knowledge learning.

Advanced mathematics learning calculus knowledge is used to calculate of brake distance. In the derivation of braking distance it can be seen that the velocity is obtained by the integral of the acceleration, and the distance is obtained by the integral of the speed[8]. Therefore, only the calculus can better solve the relevant problems of this course. This is the typical application of theoretical knowledge, and it is the embodiment of practical ability training. Students should pay attention to the course of study, respect for each course.

4.3 Rigorous Academic Spirit

Through the small mistakes appearing in the textbooks, lectures to students of science and rigorous academic spirit.

By writing a step by step derivation, and found the results are inconsistent in the textbooks. After re verification found that there is indeed a mistake in the textbook. Students are already three grade undergraduates, should have the ability to identify textbooks, reference books, small errors. Therefore, students should be skeptical in scholarly research. Especially there are some students will go graduate school with the spirit of suspicion. They should have a rigorous attitude so as to make innovative research work. Then I give an example of Shi Yigong. He summoned up the courage to point out the mistakes made by the lab director in the derivation of the formula of the second thermodynamics law. This experience in his research road gave him unlimited confidence. After this, his research colleagues see him will take the initiative to say hello, which makes him slowly with confidence. So far, this still has a great impact to him. He hopes students can ask why and do not simply accept some of the things that are used to. Students need to challenge the past and need to have critical thinking. And he said that "the establishment of critical thinking" is one of the three essential qualities of graduate students.

4.4 Team Spirit

"Team Spirit" actually contains two meanings: one is to communicate with others, the ability to communicate; two is the ability to work with others[9]. The teaching activities in the automobile application engineering also have the channel of training the ability of the team. Process can be arranged in a large operation in the curriculum, the task is automobile fuel economizing method research, then the score students, let the students to complete the job in groups. The team completes a job in this way. They will make the overall plan arrangement, material collection and content of the arrangement, until the team's defense is completed by all members. Team members need to communicate with each other, coordination, the structure of the plan, the content and the division of labor agreement, but also need to make efforts to make other students understand the content and knowledge. In with others cooperation, sharing the results, reciprocity and mutual assistance in the process, comprehensive training of communication skills and teamwork spirit, can realize the importance of team spirit. The moral education in the course is shown in Table 1.

Table 1 Effects of "Class Hidden Moral Education"

Teaching Sections	Methods	Effects
Phenomenon of plagiarism	On the spot	Dedication
Mistakes in teaching materials	Case law	Knowledge application
Calculation of braking distance	Case law	Scientific spirit
Group completion task	On the spot	Team spirit

As long as we always remember the teacher wears "imparting knowledge and educating people" the dual mission, and have a strong sense of urgency and a sense of the moral education[10]. We will find there are many useful cases can be introduced into the automotive application engineering teaching process. And it is the effective guidance of college students to have more respect for moral values and spiritual strength. And we can cultivate rich fruits of moral education to the socialist core values.

5. Conclusion

The party's educational policy was implemented comprehensively. Follow the laws of education and the law of growth of students we should promote the success of all students. Along with the carrying out of "Class Hidden Moral Education" the socialist core values and the Chinese excellent traditional culture were put into the whole process of school education and the moral education were put into the curriculum. This may let the classroom truly become education position of "preaching, tuition, doubts". And this will promote the comprehensive development of students who will growth successfully.

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7. References

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