

The Integration of Moral Education into Botany Teaching

Zhao Jinhui, Rhoda Tique

University of Baguio, Baguio 2600, Philippines

Keywords: Botany, Moral education, Approaches

Abstract: Moral education is becoming an important content of quality education. It is an important way for schools to carry out moral education to infiltrate moral education in inculcating discipline. This study takes botany as the breakthrough, fully excavates the moral education material, actively explores the hidden moral education construction in botany teaching, constructs the way to integrate moral education in botany teaching, and presents achieved good teaching effects, which lay a foundation for the practical exertion of the moral education function of botany course.

1. Introduction

Moral education is an important part of education. The highest purpose of education in people and the power of moral education is to determine what kind of people to cultivate. From the perspective of the emergence and development of the history of school education, the kind of people to cultivate is always the fundamental problem that education should solve. As high-level talents, college students bear the great responsibility of national construction and development. They should not only have higher professional and cultural qualities, but also have higher ideological and moral qualities. It is an effective way to strengthen moral education by strengthening the educational function of subject teaching and reasonably integrating moral education into subject teaching.

2. The Importance of Moral Education

Almost all countries in the world attach great importance to the moral education of citizens, especially young students, including patriotic education, political system and ethics education. With the development of moral education discipline and the modernization trend of education, it has become an important trend of current moral education to pay attention to and make full use of hidden moral education resources to promote the all-round development of students. Compared with the dominant ideological and political education in the classroom and indoctrination as the main means of the situation, the Recessive Ideological and political education way makes the educated receive education in the subtle influence, get the influence of the soul, the edification of sentiment and the Enlightenment of Philosophy, and then, achieve the purpose of education. The educated will unconsciously have a sense of identity with the content of education, which is easier for the educated to accept. It is objective and effective in the practice of Ideological and political teaching activities.

3. The Necessity of Moral Education into Botany Teaching

Moral education has increasingly become an important part of quality education. The infiltration of moral education into subject teaching is an important way for schools to carry out moral education. Taking botany as a breakthrough, it is of great significance to actively study the construction of hidden moral education in professional courses. Botany is an important professional basic course for Biology, Agriculture and Forestry majors. The number of students studying this course is large and has a great influence. It has an irreplaceable advantage and role to study how to integrate moral education elements into botany teaching.

There are abundant moral education materials in botany textbooks. Teachers should make full use of the moral education elements in the textbooks, give full play to the function of implicit moral education, run moral education through the teaching process of knowledge, and promote the improvement of students' Ideological and moral quality imperceptibly. As a compulsory subject in today's education, Biology itself contains materialism and dialectics. As a pillar discipline of Biology, Botany's teaching helps students form correct scientific outlook and values. The rigorous scientific attitude and systematic scientific thinking ability contained in Botany can play a positive role in the growth of students, which can not only improve the quality of life, but can also improve the quality of students' personalities-promoting the formation of their correct outlook in life, values and world view. In the process of teaching, moral education should be integrated purposefully and consciously to promote students' all-round development.

4. Research on the Current Situation of Moral Education into Botany Teaching

3.1 Research methods and tools. This survey adopts anonymous questionnaire, which is the most basic and widely used method. In order to carry out the investigation better, this study compiled the "Botany Course Questionnaire" based on consulting a large number of literature and combining with the actual situation of the school. The questionnaire mainly consists of two parts: Student Paper and Teacher Paper.

There are 16 questions, 15 multiple-choice questions and one open-ended question in the teacher's paper. The main contents of the survey are teachers' understanding of the content of moral education; teachers' analysis of moral education resources; teachers' emphasis on the content of moral education; teachers' application of moral education resources; and schools' emphasis on moral education from the perspective of teachers. There are 16 questions, 15 multiple-choice questions and one open-ended question in the student paper. The content of the questionnaire involves the investigation of students' interest in learning Botany courses; the emphasis of the school on moral education from the perspective of students; students' understanding of the content of moral education; and students' willingness to accept moral education and so on.

4.1 Research Objects. the Research Objects of This Survey Are Botany Teachers and Students Offering Botany Courses in Weifang Institute of Technology. There Are 12 Teachers and 216 Students.

4.1 Data Statistics and Analysis.

3.3.1 Data analysis of teacher's questionnaire. Through the survey, it can be seen that the surveyed teachers have a low degree of cognition of Moral Education penetration in Botany teaching, 52% of them stay in the level of simple understanding, and 32% of them know the subject Moral Education content very well. It shows that the investigated teachers have insufficient understanding of the subject Moral Education. Most teachers only pay attention to students' mastery of knowledge, but do not pay attention to the ideological and Moral Education of students in the

teaching process. Teachers' understanding of Moral Education content is not thorough enough, teachers cannot deeply understand all aspects of Moral Education content. The analysis and attention of Moral Education resources are not enough.

3.3.2 Data analysis of student papers. The attitude of students towards Botany affects the effect of Moral Education in Botany teaching. Through the survey, it can be seen that students have a positive attitude towards Botany. 81.9% of the students have a positive attitude towards learning Botany, and 50.9% of the students are satisfied with their achievements in Botany. 76.8% of the students can study Botany seriously. This shows that Botany can well mobilize the initiative of students, conducive to the infiltration of Moral Education in teaching.

The practical application of students' Moral Education content shows the students' moral level, and reflects the students' emotional attitude and values, as well as the situation of combining theory with practice. Six related questions are designed in the questionnaire. Through the survey, it can be seen that most students have high moral quality, but a small number of students have moral bias. For example, many students think that being rich and powerful gives a happy life, which leads to poor values and outlook in life; 30% of the students cannot correctly understand China's national conditions; 41.6% of the students put their own interests first when there is a conflict between personal interests and collective interests; only 46.3% of the students actively participate in environmental protection work, which shows that students' interest in learning the school's enthusiasm to carry out environmental protection work is not high. All these reflect the problems existing in the moral concept of contemporary students, which need correct guidance.

In order to better implement Moral Education, it is necessary to explore the way that students are willing to accept Moral Education. According to the survey, students are most willing to accept Moral Education teaching methods that include practical activities and extracurricular activities, which can lead students to like participating in Moral Education. Through practice, students can experience the significance of Moral Education content, which can deepen the understanding of Moral Education.

5. The Way to Integrate Moral Education into Botany Teaching.

Botany is a traditional subject, its content is closely related to people's production and life, and contains rich moral elements. Botany course includes Botany Theory, Botany Experiment and Botany Field Practice. This course will lead students from the classroom to the laboratory, and then, to the natural mountains where there are many knowledge points and practical opportunities for students to carry out Recessive Moral Education. The survey data also shows that students are willing to accept Moral Education in practice, so it has a unique advantage to integrate Moral Education into Botany Teaching.

5.1 Meticulously Design and Find the Right Entry Point.

The idea of Integrating Moral Education into professional courses has been put forward for many years, but it has not been widely implemented. The main reason lies in not finding a good entry point, the content of Moral Education is too rigid, but easy to cause students' disgust. Therefore, before the implementation of teaching and learning, people should find good Moral Education resources, carefully design, naturally integrate Moral Education according to the teaching content, and let students better understand what they have learned through examples, analogy and other methods.

4.1.1 Take natural resources as the starting point to cultivate students' ecological environment awareness, and establish the concept of harmonious development between human and nature. With the increasingly prominent environmental problems, how to deal with the relationship between man

and nature has become a problem that people must solve. One of the important aspects of environmental protection and harmonious development is to maintain the stability of the ecosystem. The more abundant species in an ecosystem are, the more favorable it is for the survival and development of each species. The systematic classification part of Botany will lead students to study systematically from algae to angiosperms, so that students can understand the life habits of various plants and their roles in nature. One should know how to protect plants better while knowing plant resources.

The correct treatment of the relationship between human and nature is the philosophical basis of ecological civilization, which plays a guiding role in the development of the whole ecological civilization. Therefore, the concept of harmonious development of human and nature should be carried through the whole process of Botany teaching, and the ecological environment awareness of students should be cultivated.

4.1.2 Take national specialty plants as the starting point to cultivate students' patriotic consciousness and national pride. Taking China as an example, China has abundant plant resources, and many plants are only produced in China, of which there are a large number of economic crops and ornamental flowers. Some samples include *Abies fabri*, *Metasequoia glyptostroboides*, *Ginkgo biloba*, *Eucommia ulmoides*, etc. During the lecture, students should be consciously asked to understand the distribution, habits and values of special-produced plants in China. On the basis of learning Botany knowledge, people should increase their understanding of the special plants in China, and cultivate their patriotic consciousness, national pride and the consciousness of protecting nature in the process of subtly changing.

4.1.3 Take the structure and phylogeny of plants as the starting point to cultivate students' dialectical materialism. The world is material and can be understood. This is the basic point of dialectical materialism. This point of view can be deeply understood by means of Botany's revelation of the law of life. Biology is a natural science, which provides abundant argumentation materials for dialectical materialism. Therefore, in the teaching, people should give full play to the ideological nature of the textbook, consciously use the dialectical materialist point of view to elaborate the teaching content, analyze and explain the basic knowledge of the subject, and elaborate the philosophical principles through the structure and systematic development process of plants, so that students can form dialectical views and methods while learning botany knowledge.

4.1.4 Take the poetry with plants as the breakthrough point, and integrate into the national excellent traditional culture. Take China as an example, Chinese ancient poetry is good at expressing feelings by means of things. This “thing” is often a plant, such as “picking chrysanthemums under the East fence, leisurely seeing the mountains in the South”, “moss flowers as small as rice, also learning peony in full bloom” and so on. When explaining related plants, adding ancient poetry can not only increase the interest of the classroom, but also lets students have a further understanding of the spirit behind plants. Another example is “the deer called softly, eat wild artemisia” in The Book of Songs, the artemisia is *Artemisia annua*, and Tu Youyou, who won the Nobel Prize in science for extracting artemisinin, also named from this poem. It is an interesting coincidence.

4.2 Improve teachers' moral quality, Moral Education permeates the whole process. The idea of infiltrating Moral Education into professional courses has been put forward for many years, but it has not been fully implemented. The main reason is that teachers focus on the teaching of professional knowledge and ignore Moral Education. There is no systematic teaching design, and it is not well-used when encountering Moral Education materials. Moreover, most of them are indoctrinated with theoretical knowledge. The rigid Moral Education makes students feel disgusted and does not achieve the expected effect. Therefore, in order to improve the moral quality and comprehensive quality of teachers, people should first internalize the moral elements into their own

things, so that they can naturally integrate them into the lectures, take students as the main body, and stimulate students to think and internalize them into their own spiritual products.

General Secretary Xi Jinping put forward that “all other courses should keep a good section of the canal and form a good responsibility field, so that all kinds of courses can work together with the ideological and political theory courses to form a synergy effect”. Once again, the importance of the Li De Shu people is emphasized. In this era of rapid development of science and technology and constant updating of knowledge, students' cultural knowledge may fall behind with the passage of time, while for the world outlook, outlook on life and values formed in the process of subtle influence will accompany them all their lives and become the philosophical bases of their lives. In this sense, “education is something that people can still retain after they forget all the knowledge instilled in schools.”. Teaching should not only impart knowledge, but should also impart Moral Education. Therefore, it is of great value and significance to strengthen the research of integrating Moral Education into professional teaching.

References

- [1] Cai Yandi, Hu Baozhong, Chang Ying, etc. *Reflections on the Implementation of Quality Education in Botany Teaching*[J]. *Higher Agricultural Education*, 2003(1):60-61.
- [2] Sui Yifan. *Significance and level of moral education in Colleges and universities* [J]. *Journal of Higher Education*. 1990, (03): 29-34.
- [3] Wang Rui. *Methodological Implications of British Implicit Moral Education for China Ideological and Political Education*[D]. Hefei: Hefei University of Technology. 2014.
- [4] Zhang Yanhong. *The Development and Utilization of Impilcit Moral Education Curriculum Resources*[J]. *Educational Theory and Practice*. 2011,31(2) :45-48.
- [5] Zhu Longyun. *The infiltration of moral education in Senior High School Biology Teaching*[J]. *Huaxia Teacher*, 2018(6):78.