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Teaching Design and Practice of the Core Curriculum of Quality Education in the New Media Environment-Taking the General Ecology Course as an Example

Yuan Li*, Chunmei Yu, Hong Li

School of Metallurgical and Ecological Engineering, University of Science & Technology Beijing, Beijing, 100083

Abstract: The rapid development of new media technology has enriched the content and methods of quality education. This paper selects typical cases related to the teaching of general ecology courses. By citing and analyzing new media materials, this paper excavates the patriotic elements contained in them, cultivates students' ability to analyze problems with professional knowledge, and puts forward practical paths for operation.

Keywords: New media; Quality education; Personnel training

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Quality education aims to meet the long-term development of the educatees and society, aims to improve the basic quality of all students in an all-round way, and aims to cultivate the attitude and ability of the educatees and promote their coordinated and comprehensive development of knowledge and skills in moral, intellectual and physical aspects^[1]. After years of practice and exploration, the development of quality education in China has become increasingly mature^[2]. Currently, the connotation of quality education for college students in the new era, which is widely proposed, refers to actively cultivating students' patriotic feelings, innovative spirit and practical ability based on the development requirements of the new era to enable students to receive comprehensive education that keeps up with the times and eventually become a builder and successor of socialism with all-round development.

New media is a new form of media that has developed based on digital technology,network technology,and mobile technology. Its characteristics of openness, convenience and real-time interaction are in line with the learning habits and needs of the new generation of college students, and it has gradually become one of the important ways for college students to recognize, communicate and obtain information. However, due to the low threshold for the production and release of new media and the imperfect content review system, the authenticity of their information is difficult to guarantee. Some misleading and provocative videos will also have a negative impact on students' value identification, moral cultivation and behavior cultivation [3,4]. In this environment, how to scientifically and reasonably use new media technology to improve the effect of quality education is an urgent problem to be solved. Based on years of experience in curriculum teaching reform, the author quotes and analyzes new media materials in the course of teaching, excavates the patriotic elements contained in them, cultivates students' ability to analyze problems with professional knowledge, and puts forward practical paths for operation.

1. Course Overview

General ecology is a new course derived from biology and environmental science. The course describes the interrelationship between organisms and the environment from four levels of study: individuals, populations, communities, and ecosystems. The content of the course is not only highly consistent with China's ecological civilization concept, sustainable development strategy and beautiful China construction and other national policies, but also closely related to global climate change, energy conservation and emission reduction and other current issues, which is suitable as a classic course that organically integrates classroom teaching with quality

education.

2. Typical Case Teaching

The theoretical system of ecology covers a wide range of coverage and inclusiveness. Although the media materials related to it are rich, the contents are extensive and scattered. Therefore, the selected teaching cases need to be compared and considered with the contents of the course chapters, so as to achieve the goal that the contents of quality education and classroom teaching can advance together and complement each other. In order to arouse students' patriotic feelings and improve students' rational analysis and problem-solving ability, this paper enumerates 3 typical teaching cases.

2.1 A vivid example of China's ecological civilization construction—carrying forward the Saihanba Spirit

Saihanba,located in Chengde City,Hebei Province,used to be a vast forest during the Liao and Jin Dynasties.However,due to wars,natural disasters and excessive farming and grazing activities,the forests in the area gradually disappeared and the land was seriously desertification. After the Party and the state made the decision to establish Saihanba Forest Farm in 1962, the builders of the forest farm successfully created millions of acres of artificial forest after several generations of hard work under the circumstances of extreme material scarcity, which is a great miracle of turning the wilderness into a forest, and the desert into an oasis. In 2017, the Chairman Xi Jinping made instructions on the deeds of the builders of Saihanba Forest Farm, "Carrying forward the spirit of Saihanba and persevering in promoting the construction of ecological civilization". Through the introduction of this case, students can realize the difficult process of vegetation community restoration and understand the importance of ecosystem protection. In addition, the tenacious will of forest farm builders to work hard and overcome difficulties will also stimulate students' patriotic enthusiasm and scientific spirit of courage to explore.

2.2 Use professional knowledge to distinguish misleading information-the relationship between vegetation restoration and water resources

Since the 18th National Congress of the Communist Party of China, China's ecological restoration work has made great achievements, but there are still voices questioning this on the internet. In 2019, the British magazine "Nature" published a headline on its official website saying that in the context of global warming, China's large-scale planting of trees in northwest China may exacerbate water shortage [5]. Teachers should guide students to make use of professional knowledge to distinguish the view. Firstly, through searching the original article, we found that the article is a news review rather than a scientific paper, so the article does not provide any data to support its views. Secondly, in the "Technical Guidelines for Afforestation and Greening in Dry Areas" issued by the State Forestry Administration in 2016, it was clearly required to "mainly build shrubs, combine trees, shrubs and grasses, and restrict the use of tree species with high water consumption for afforestation". However, the general emphasis on tree planting in the paper was obviously misleading information. Finally, it should be pointed out that regional water resources change is affected by land use, climate change and human activities, and their relationship is still in the stage of exploration. The case analysis process can cultivate students' ability of independent thinking and dialectical thinking, and promote students to form values and behaviors that pay attention to nature and cherish ecological resources.

2.3 Greenhouse gas emission reduction and China's"dual carbon"target

China will increase its national independent contribution, adopt stronger policies and measures, strive to peak carbon dioxide emissions by 2030, and strive to achieve carbon neutrality by 2060 Global climate change is one of the major challenges faced by the world today. Greenhouse gas emissions are considered to be an important cause of climate change. At present, China's total greenhouse gas emission has become the number one in the world, and Western developed countries have criticized our government for not being active enough in the action to curb climate change, and demanded a redistribution of global carbon emissions. In response to the view, academician Zhongli Ding pointed out in an interview with CCTV that their purpose is to suppress the growth space of developing countries. However, in order to realize China's concept of ecological civilization and sustainable development strategy, the President Xi Jinping announced at the General debate of the 75th United Nations General Assembly that'China will increase its national independent contribution, adopt more powerful policies and measures, strive to peak its carbon dioxide emissions before 2030, and strive to achieve'carbon neutrality'before 2060, and fully demonstrate the mission of a responsible major country. The case can help students understand the impact of greenhouse gases on global climate change and the national interest game behind the emission reduction plan, and encourage students to consciously assume the historical responsibility of ecological civilization construction.

3. Teaching Practice

3.1 Screening of new media materials

The new media materials quoted in the case teaching should come from mainstream media(such as the Education channel of CCTV), and their content should be closely related to the teaching content of ecology courses. Meanwhile, the length of video materials should be limited to 3-5 minutes.

3.2 Discussion-based teaching

The introduction of new media materials is conducive to creating an open and active classroom learning atmosphere, but the knowledge points are often scattered. At this time, it is necessary to dig out the content of the materials in the process of assigning tasks by teachers, searching materials by students, group discussion and summary and comment, so as to improve students' summary, sorting and presentation ability.

3.3 Practical ability training

Students majoring in ecology can cultivate their hands-on ability by designing relevant experiments. For example, students majoring in ecology at the University of Science and Technology Beijing are required to complete plant community survey and forest water conservation monitoring experiments during the summer internship period. Students majoring in non-ecology can be encouraged to learn about the ecological environment in different regions through field research during the summer social practice.

4. Conclusion

Under the environment of the wide application of new media technology, the quality education of college students is faced with the complicated situation of both opportunities and challenges. On the one hand, the varied content of new media leads to problems such as the proliferation of junk information and fragmented learning. On the other hand, new media enrich the ways of quality education, shorten the time of acquiring learning resources, and help stimulate students' thirst for knowledge and promote their all-round development. College educators should fully tap the advantages of new media's influence on public opinion, enrich the content and carrier of quality education, constantly improve students' comprehensive quality, and guide students to be advocates and practitioners of ecological civilization construction.

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