

Ideological and Political Elements Exploration in the Course of “Physical Geography”

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Abstract

“Physical Geography” is a course to study human beings and the environment, revealing the basic characteristics, formation mechanism and development laws of various physical geography elements, with rich ideological and political elements and high moral value, and is an important course to cultivate geographical professional interests and enhance national pride. By fully sorting out the ideological and political resources contained in the curriculum, deeply excavating the ideological and political elements, and reasonably designing the integration, this paper analyzed the dimensions of ideological and political education in the physical geography curriculum. Taking professional knowledge as the main line, the educational elements in five aspects were refined, namely, philosophical thinking, power of a big country, patriotism, strict science, and aesthetic education. This paper established the ideological and political element system of the curriculum, and achieved the moral education of the professional curriculum moisturizing and silent effect.

Keywords

Physical Geography, Curriculum Ideological and Political Education, Reform in Education, Establish Virtue and Cultivate People

1. Introduction

At present, the network makes the information that college students are exposed to vary from good to bad. In addition, the ability of college students to distinguish right from wrong is limited. The multiple values and even some bad information have brought certain impact on the world outlook, outlook on life and values of contemporary college students. In the current complex social environment with multiple values infiltrating, we should not only rely on the pure ideological and political courses to guide the value of college students, strengthen the

ideological and political construction of professional courses, improve the education system of professional courses, and realize the ideological and political curriculum with the help of professional course carriers, which has become the research focus of college curriculum reform [1] [2]. How to give full play to the advantages of various disciplines and put ideological and political education through the whole process of college curriculum teaching, so as to achieve the all-round goal of education, is the mission of contemporary college educators. Strengthening the ideological and political education of college students, helping them to establish correct values and become talents for the construction of a new socialist era, is not only the mission of the ideological and political curriculum, but also the important task of the professional curriculum.

Physical geography is a natural science that studies the spatial characteristics of the earth's surface environment, deduces the process of change and the laws of differentiation, and covers natural geographical elements such as landform, hydrology, climate, biology, soil, etc. [3]. Physical geography studies the earth system from a systematic and scientific perspective, with regional and systematic characteristics. Physical geography is one of the basic disciplines of geographical science, an interdisciplinary discipline of atmospheric science, biology, hydrology and geology, and also a link between geographical science and other disciplines.

As far as the teaching system is concerned, physical geography is the synthesis of courses such as Introduction to the Earth, General Geology, Meteorology and Climatology, Hydrology, Geomorphology and Soil Geography. It systematically expounds on the interaction mechanism and relationship of the earth's surface layer, as well as the interaction and interaction between human and the earth's surface natural environment [4]. With the global environmental change becoming the focus of researchers and the public, the importance of this course has been further highlighted. At the same time, as an eternal scientific proposition, the relationship between man and earth is related to the peace and contentment of human beings and the progress of social civilization, which makes physical geography a suitable educational reform course for ideological and political education.

As far as the curriculum attribute is concerned, physical geography belongs to the invisible curriculum of ideological and political education. The research object is physical geography, which is helpful to cultivate students' materialistic world outlook and methodology, as well as their ability to distinguish right from wrong, responsibility and feelings of family and country. The focus of ideological and political education in this course is to rely on the knowledge system of physical geography, dig deep into ideological and political education points, emphasize values through the teaching of knowledge, guide students to actively think, understand and practice the core socialist values, so as to maximize the educational function of professional courses and achieve the goal of moral education.

This paper takes the course of Physical Geography as the research object, fully

excavated and utilized the ideological and political education elements contained in the professional courses, explored the commonality and integration between the curriculum content and the ideological and political elements, scientifically designed the curriculum objectives, optimized and expanded the teaching content, solved the problem of the integration of the professional curriculum teaching and the ideological and political education.

2. The Dimension of Ideological and Political Education in the Course of “Physical Geography”

The curriculum ideological and political education should cultivate the “unity of knowledge and practice” talents who apply learning to practice, promote learning and learn from each other. The talents who combine knowledge and practice should have noble moral sentiment, practice “practice” and realize “Tao” by virtue of their real skills and personal performance, and make real personal contributions to the country and society. It should be the goal of ideological and political efforts to promote the comprehensive development, mutual promotion and mutual integration of such elements as moral, intellectual, physical, aesthetic and labor of geoscientists.

1) Take patriotism as the benchmark and build core values

The curriculum ideological and political education should closely focus on the fundamental task of moral education, integrate the socialist core values into talent cultivation, scientific research, social services, and cultural inheritance, take the Chinese Dream education practice as the theme, and take the “two courses” education and teaching as the resources, guide college students to cultivate their moral integrity, lead talents with moral integrity, and nurture talents with moral integrity, and teach college students to fulfill their social responsibilities, Promoting college students’ value orientation conforms to the core socialist values.

2) Taking love for family as the support point, highlighting the traditional virtues of the Chinese nation

Home style and family education are in the same line with social responsibility and the spiritual mission of earth science workers. We should design the educational carrier of home-school integration and home-state integration, such as the ideological and political content of civilized family, harmonious family, learning family, loving home, serving home and other topics, and effectively promote home style and family education and local accent into the campus and into the minds of geoscientists. We should guide young geoscientific talents to self-educate, self-manage, self-serve and self-construct, consciously combine with the practice of socialist core values, combine their own personality cultivation with concern for the fate of the country, and combine personal ideals with national dreams, personal dreams with geoscientific dreams, and personal values with national development.

3) With the love of learning as the starting point, enhance the sense of mission of “learning for the country”

Teach students to abandon the traditional single concept of learning for fami-

ly glory and personal reputation, change to the concept of “learning for the country” as soon as possible, strengthen the combination of national goal orientation and personal interest drive, enhance the value and significance of college students’ love for learning geoscience, and fully realize that geoscience knowledge is an important foundation of geoscience culture.

4) With the purpose of loving the people, shape the consciousness of geoscientists serving the people

The curriculum ideological and political education should guide students majoring in geosciences with unique earth science and cultural content and patriotic and patriotic academic feelings, integrate ideological and political education resources and reasonable curriculum design into the university classroom, improve students’ professional interest and professional confidence, form an open mind that is brave to accept new ideas and eager to pursue the academic frontier, enhance curiosity and initiative to seek new solutions, and through the edification of major geosciences, Help students to establish a generous and open-minded way of dealing with people, and shape the awareness of geoscientists serving the people.

3. The Excavation of Ideological and Political Elements in the Course of “Physical Geography”

The course “Physical Geography” plays an important role in cultivating geographical science talents. It is a necessary professional quality for students to engage in geographical science research. It should not only have solid professional knowledge, but also have good professional ethics and correct value orientation [5]. According to the main content and teaching objectives of the course “Physical Geography”, the “ideological and political elements” contained in the textbook are excavated and analyzed, and the ideological and political points of the course are summarized, which are mainly reflected in five aspects: philosophical thinking elements, power elements, patriotic feelings elements, rigorous scientific elements, and aesthetic literacy elements.

3.1. Elements of Philosophical Thinking

The characteristics, formation mechanism and development law of natural geographical elements all contain philosophical thinking elements. In the process of teaching, we should focus on the evolution of the relationship between man and nature, the importance of harmonious coexistence between man and nature, and highlight the concept of sustainable development. How China should respond to the harmonious development of human-land relations can be the topic of group discussion. Philosophical thinking elements are also reflected in the evolution of animals and plants, plate movement and other chapters. Darwin’s theory of biological evolution is the theory of gradual change, but there are also mutations or stagnation in biological evolution. How to explain the mutations and stagnation in the process of biological evolution leads to Gould’s theory of point-break balance, and draws the conclusion that biological evolution, like the development

law of things, has the law of spiral rise. In addition, there are many problems in physical geography that cannot be explained clearly at present [6], which also leads to the contradictions and multi-solutions commonly existing in physical geography. For example, the formation of minerals is a process from disorder to order, but this is not consistent with the second law of thermodynamics, but it can also occur locally according to the synergy theory.

3.2. Elements of Great Power

In the course of “Physical Geography”, the element of power of great powers runs through it, such as resource exploration, geological engineering and other chapters. China has made historic breakthroughs in a series of major national geological engineering projects, such as the construction of the Qinghai-Tibet Railway, the Three Gorges Dam, and the West-East Gas Pipeline Project. During the construction of the West-East Gas Pipeline, it is necessary to consider whether the fault geological activities along the route will affect the pipeline. During the construction of Qinghai-Tibet Railway, the problem of perennial frozen soil in the west must be solved, otherwise the construction of Qinghai-Tibet Railway will not be completed. The early site selection of the Three Gorges Dam must consider the stability of geological conditions and the impermeable layer of the dam foundation. These major engineering projects all need professional knowledge to pave the way. At the same time, breakthroughs in major projects also reflect the strength of the country and also symbolize the strength of a big country. In the chapter of geological structure, the discovery of Daqing Oilfield is taken as a case to introduce the deeds of “Iron Man” Wang Jinxi. He led the 1205 drilling crew to open the first oil well in the Daqing Oil Field Oil Battle, and set the world drilling record of 100,000 meters per year, showing the spirit of oil workers, making China completely shake off the “oil shortage theory”. Wang Jinxi’s “Iron Man Spirit”, “Daqing Spirit”, and the heroic words of “go ahead with conditions and create conditions without conditions” have all become the precious wealth of China’s socialist construction.

3.3. Patriotic Elements

In the explanation of knowledge points such as biosphere system and biodiversity, we can permeate patriotic feelings and political elements. For example, by watching the video of rare animals and plants in China, we can get to know the rare animals and plants in China, so as to understand the natural environment characteristics of China’s vast territory, complex terrain and diverse climate. In the earthquake section, we can explain the mechanism of earthquake formation and the main earthquake zones in China by analyzing several major earthquakes since the founding of the People’s Republic of China, such as the Tangshan earthquake and the Wenchuan earthquake. Through playing some films or news videos, students can feel the heartache of the earthquake, as well as the warm pictures and heroic deeds that shook the people of the whole country after each earthquake. At that moment, the people of the whole country stood together to

help each other and united as one. The whole army moved according to the order, acted in reverse, put life first, and ran against time, launched a life-and-death rescue, staged a silent love, which is the strength of China. Take Jiao Zuhui, the Wenchuan earthquake survivor, as a typical case of ideological and political affairs, which is grateful for returning to society. The main purpose is to guide students to always be grateful and use their professional knowledge to actively return to society through Jiao Zuhui's deeds, help students not be afraid of challenges in the face of disasters. China's determination and will to fight against disasters guide students to feel patriotic feelings and establish patriotic enthusiasm.

3.4. Strict Scientific Elements

In the rock geomorphology system, take Xu Xiake, who travels thousands of miles, as the case of ideological and political thinking. Through reading the fragments of "Xu Xiake's Travels" and relevant documents after class, understand Xu Xiake's unique discoveries and outstanding contributions in the field of physical geography, and summarize his academic thoughts in the way of classroom discussion, and experience Xu Xiake's down-to-earth scientific attitude and dedication to the cause. "Landform process" mainly includes two core contents: dynamic geomorphology system and rock geomorphology system [7]. After systematically learning the relevant knowledge points of karst geomorphology and Danxia geomorphology, students can more intuitively perceive Xu Xiake's contribution to the field of geomorphology.

The chapter on the determination of the age of the earth can also feel the power of scientific spirit. Human beings have been exploring the age of the earth. Darwin calculated the age of the earth by measuring the sedimentation rate, Kelvin by calculating the thermodynamics, and Hutton by observing the unconformity surface. After that, Madame Curie discovered the radioactive elements, and Holmes determined to determine the age of minerals by U-Pb method, so that the age of the earth can be accurately calculated.

3.5. Elements of Aesthetic Education

It is also one of the ideological and political objectives of the course to improve students' aesthetic quality [8]. In the geomorphology section, starting from the classic landforms on the earth, such as red beds and Danxia landforms, mountain glacial landforms, aeolian landforms, volcanic landforms, karst landforms, coastal landforms, etc., taking the exquisite geoscientific landforms photos as the main line, we will teach students the geoscientific knowledge, explain the definition and causes of landforms, and let students appreciate and feel the beauty of nature while learning the definition and causes of classic landforms, Improve students' ability to discover and appreciate the beauty of nature, make them know its beauty and know its beauty better, and enhance students' awareness and awareness of consciously protecting the earth's home and the world's natural heritage. In the Minerals section, while explaining the relevant knowledge of minerals to

the students, appreciate the natural exquisite minerals and feel the uncanny workmanship of nature. The addition of these aesthetic education resources can not only deepen the study of professional knowledge, but also greatly improve students' aesthetic education quality and inspire students' awe of nature.

4. Evaluation of Ideological and Political Effects of the Course

During the teaching process of the course, we should follow the ideological and political objectives of the course, pay attention to the integration of ideological and political elements of the course, skillfully design the connection points and integration methods, and improve the teaching design of the course. From the result, the expected effect of ideological and political teaching has been basically achieved. At each summary, most of the students put forward the key points that are consistent with the key points of the curriculum ideological and political teaching design, and some students can carry out in-depth development on the basis of the key points. In order to further test the results of the ideological and political education of the course, after the end of the course, the teachers collected opinions on the teaching reform of the course, and understood the learning effect and personal experience of students from the aspects of teaching content, teaching methods, professional cognition and discipline literacy, and got good feedback. The results showed that 94% of the students agreed with the teaching method of combining ideological and political content with professional knowledge, and believe that the mapping and integration of ideological and political teaching content with curriculum chapters can mobilize learning enthusiasm, make the curriculum teaching novel and interesting, not only learn professional knowledge, but also accept moral and ideological education.

5. Conclusion

The course of "natural geography" is closely related to the living environment of human beings. It is necessary to excavate the ideological and political education elements of the course and integrate the ideological and political education elements into the teaching of physical geography knowledge. The ideological and political teaching practice of the course also shows that the physical geography course contains rich ideological and political education elements. Through in-depth exploration of the ideological and political elements, students are easier to accept and understand the physical geography knowledge and the elements contained in it, such as philosophical thinking, great power, patriotism, scientific spirit, aesthetic literacy, and so on. The students' learning initiative is improved, the learning effect is significant, and the sense of professional responsibility and national pride is enhanced for the study and synthesis of subsequent professional courses.

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Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Ma, Q.F., Bering, A. and Yang, J.B. (2022) Research and Practice of Curriculum Ideological and Political Education System under the Background of First-Class Majors. *Education and Teaching Forum*, No. 35, 109-112.
- [2] Hu, D.Q. (2022) Exploration and Practice of Ideological and Political Teaching in Geological Specialty Courses—Taking “Mineral Petrology” as an Example. *Teacher*, No. 23, 108-110.
- [3] Liu, Z., Tan, S.C., He, X.H. and Tang, M. (2022) Thinking on the Integration of “Four Self-Confidence” Ideological and Political Elements in the Course of “Geology Foundation”. *Journal of University Geology*, **28**, 302-305.
- [4] Fan, C.H., Yang, X.Y., Wang, H.Z., Zhou, Y. and Fan, X.Y. (2022) Exploring the Path of Ideological and Political Implementation of Geoscience Professional Courses—Taking the General Geology Course of Southwest Petroleum University as an Example. *Journal of Higher Education*, **8**, 170-173.
- [5] Li, X.M. (2021) Construction of “Crystallography and Mineralogy” Course Teaching System Integrating Ideological and Political Education Elements of the Course. *China Geological Education*, **30**, 46-50.
- [6] Qiu, M.L. and Li, T. (2020) Research on the Teaching Reform of Integrating “Curriculum Ideological and Political” into Physical Geography Field Practice. *Science and Education Guide (the Second Ten-Day Issue)*, No. 36, 80-81.
- [7] He, T.H., Li, L.T. and Chen, C. (2003) Changes in the Textbook System of Physical Geography and Curriculum Teaching Reform. *Higher Science Education*, No. 5, 36-39.
- [8] Liu, C., Huang, Y.J., Wu, Q., Guo, Y.L. and Hu, S.Q. (2022) A Preliminary Exploration of Curriculum Ideological and Political Teaching in the Course of Speech and Eloquence. *Open Access Library Journal*, **9**, e8824.
<https://doi.org/10.4236/oalib.1108824>