

Analysis on the Core Quality and Educational Value of Geography

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Abstract : This paper systematically expounds the connotation and constituent elements of geographical core literacy, and summarizes the components of geographical core literacy. This paper systematically expounds the educational value of geography from four aspects: scientific value, aesthetic value, ecological value and social value. Finally, it makes an in-depth analysis of the relationship between the core literacy and educational value of geography from three aspects.

Keywords : Geography; Core Literacy; Educational Value

Literacy education is the mainstream trend and hot research topic of the development of international education in the 21st century. China also closely follows the general trend of international education development, constantly adjusts and optimizes the talent training mode, and defines the goal and direction of talent training. In 2014, the Ministry of Education issued the opinions on comprehensively deepening curriculum reform and implementing the fundamental task of building morality and cultivating people, which clearly put forward the importance of implementing core literacy in curriculum reform.

In the new round of geography curriculum reform, the cultivation of students' core literacy has been raised to a new height. The research on geography core literacy has also become a hot topic for experts and scholars. Clarifying the relationship between the cultivation of geography core literacy and educational value is helpful to further understand the direction of discipline development and grasp the dynamics of discipline development. It is more conducive to the implementation of the educational value of core literacy.

1. The connotation and composition of geographical core literacy

At the end of the 20th century, the organization for economic cooperation and development (OECD) launched the project of "research on the concept definition and theoretical basis of literacy", which opened a precedent for the research on literacy. Geographical core literacy refers to the ability of students to understand and transform nature through the study of geographical knowledge and its accompanying relatively stable psychological character. The core quality of geography discipline refers to the ability of learning geography knowledge gradually developed by students after continuously learning geography knowledge. It is the comprehensive expression of geography knowledge, geography discipline ability, emotional attitude and values. All students should have this ability, which is reflected in their actions in the process of geography learning; The psychological changes of learners in the process of geography learning and the cultural cultivation and moral quality achieved by students through geography learning.

The constituent elements of geographical core literacy include: geographical knowledge, geographical ability, geographical attitude and geographical emotion. Each element affects and connects with each other to form a unified whole (see the figure below). According to the discipline characteristics and research direction of geography, the core literacy of geography includes three parts: geographic science literacy, geographic humanities literacy and geographic technology literacy.

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1.1 Geographical science literacy

Geographic science literacy refers to the parts that learners acquire geographic science knowledge, geographic science ability, geographic science methods and geographic science awareness and quality through long-term learning and practice of geographic related knowledge. Geographical scientific literacy not only has the common characteristics of other scientific literacy, but also has the unique characteristics of geography. It pays more attention to the location characteristics and the comparative analysis between different regions. In terms of research methods, it pays attention to field observation, sampling and experiment, as well as the induction and summary of natural laws.

1.2 Geographical humanistic quality

Geographical humanistic literacy focuses on the analysis of the spatial characteristics of humanistic phenomena and the relationship between man and earth in the process of geographical research, reveals the response of human social production activities to the natural environment, and plays a positive role in solving the harmonious unity between man and nature and coordinating the relationship between man and earth in the process of development. Specifically, it includes the development and migration of population, nationality and folk customs, industrial and agricultural development and location factors, settlements and urban landscape, and other geographical contents.

1.3 Geographic technology literacy

Geographic technology literacy includes not only the physical and chemical experimental methods contained in traditional geographic technology literacy, but also the professional and technical capabilities emerging in the geographic industry, including geographic technology knowledge and geographic technology capability. Among the geographic technology knowledge, the most prominent is the 3S technology, which has the widest development and application prospects in recent years, that is, geographic information system (GIS), global positioning system (GPS) and remote sensing (RS). They are based on the basic knowledge of traditional cartographic theory and combined with the earth observation technology of man-made satellites. Therefore, (3S Technology) involves a wide range of knowledge fields, including geography, computer, meteorology, physics and other disciplines, it belongs to the cross integration field of multi-disciplinary and multi-faceted knowledge.

2. Educational value of geography

There are commonalities in the educational value between geography and other disciplines, but due to the special knowledge system and research methods of geography, there are individual characteristics in the educational value. The educational value of geography fully reflects the educational goal of “all-round education” and helps to implement the fundamental task of “Building Morality and cultivating people”.

2.1 Scientific value

As a discipline, geography has its scientific value. In the process of the development of geography, it has the value of educating people by cultivating geographical talents with its educational function. The relationship between the scientific value and educational value of geography is the relationship between subject and object. In essence, the scientific value of geography takes scientific knowledge as the carrier and human needs and development as the subject; The object is the knowledge system of geography, which aims to meet the needs of the subject's self-development.

Although there are two aspects of subject and object in the scientific value and educational value of geography, they are interrelated and interdependent in the process of development. The innovation, improvement and development of the knowledge system of geography need a group of geographic science talents who love their posts and work hard, dare to explore and innovate boldly. At the same time, the development of geographic science education has trained a group of excellent geographic science talents, which promotes the innovation and development of geographic science knowledge system. The teaching content of geography comes from the practice of geography science. The continuous innovation and development of geography science in practice promote the inheritance and continuation of the teaching content of geography. Therefore, the scientific value of geography is the basis of the educational value of geography.

2.2 Aesthetic value

Aesthetic value refers to an attribute of the object's feeling of beauty caused by the subject's mind. German geographer Hettner once said: “in addition to theoretical geography, there is also an aesthetic geography” which contains a large number of aesthetic elements in geography. The aesthetic value of geographical science includes four parts: rhythm beauty, harmony beauty, space-time beauty and cultural beauty. Rhythmic beauty refers to the differences of geographical phenomena and geographical landscapes with the change of latitude and zonality. People living in different regions can have different feelings of beauty; Harmonious beauty refers

to the harmonious symbiosis between various systems in the circulation of geographical things and geographical ecosystems. For example, human survival is inseparable from water, plant growth is inseparable from sunshine and other geographical phenomena; The beauty of time and space refers to the beauty generated by time and space. For example, temperature, precipitation and phenology show a certain periodicity with the changes of the four seasons, or day and night with the rotation of the earth; Under the action of the peculiar landform and the external force, the external force produces the internal force; The beauty of culture is mainly reflected in the fact that the literati repose their personal feelings through the description of geographical things, thus leaving a wealth of literary works, which is a part of Chinese traditional culture. The cultivation of aesthetic value is helpful to realize the goal of emotional attitude and values in geography teaching and cultivate people's interest.

2.3 Ecological value

Any discipline has its specific research objects, the most basic categories and the corresponding discipline system composed of these categories. Geography also studies the relationship between human beings and geographical environment, the integrity and correlation between life system and geographical system, the purpose of system behavior, as well as the interaction, interconnection mechanism, regulation methods and ways, so as to seek the best structural state and improve production efficiency; It is also necessary to consider coordinating the internal links of the system to improve and protect the environment for human survival. In recent years, mankind's blind development and utilization of the geographical environment has disturbed and destroyed the natural balance and cycle of the ecosystem to a greater and greater extent. The attention and research on this issue has made modern geography "ecological". The research in this field of geography is conducive to the in-depth analysis of the evolution of ecology and the mechanism of human action. It can provide a practical way for human beings to reasonably develop and utilize the geographical environment and provide information basis.

2.4 Social value

All the problems of geography research are the urgent needs of current geographers and the public. Geography can further strengthen its contribution to society through prediction, planning, decision-making and optimizing the future, such as industrial optimization and upgrading, population health, industrial layout, optimizing energy structure, improving ecological environment, comprehensive development and utilization of resources sustainable development is closely related to geography. Through this series of research, it covers all aspects of human life. The research carried out by geographers has always been to seek the most favorable space for human habitation, life and development.

3. The relationship between the core quality of geography and the value of education

The core quality and educational value of geography belong to two aspects of a problem. There are essential differences between them, but they belong to an interrelated whole.

3.1 The core quality of geography is the condition of the educational value of geography

The proposal of core literacy breaks through the previous single training mode aiming at knowledge and examination, increases the process and methods, emotional attitudes and values, evaluates the teaching effect from a three-dimensional perspective, and pays more attention to the cultivation of students' practical ability, as well as the cultivation of students' future development ability. By studying the formation and evolution process of natural geographical elements on the earth's surface, as well as the basic characteristics, types and distribution of each element in natural geography, we can excavate the laws of interaction and interaction among various natural elements, explore the comprehensive learning methods of natural geography and the interaction mechanism between human and various elements of natural geography, and master and understand nature and understand nature. The research ability of physical geography is used to guide human social production and social life.

3.2 The core quality of geography is the concrete embodiment of the educational value of geography

Geography is a comprehensive subject, which has extensive connections with Chinese, mathematics, history, politics, biology and other disciplines. Students should constantly strengthen and infiltrate their core literacy in learning geography courses. For example, in the process of learning geographical knowledge such as earth resources, world population, atmospheric movement, urban development and energy development, it is also a process of constantly exploring and solving problems. In the process of discovering and solving problems, the spirit of middle school has been virtually cultivated to form a unique ability, which can be continuously improved in learning and form a personal unique way of doing things.

3.3 The educational value of geography is the purpose of cultivating the core quality of geography

Geographical core literacy serves the fundamental purpose of "educating people". The refinement and sublimation of geographical core literacy will help to further clarify the direction and principles of education. The educational value of geography is

to meet the students' self-development ability to learn theoretical knowledge and professional ability, pursue the value of life, pursue truth, goodness and beauty, and cultivate excellent scientific literacy and scientific quality. Therefore, we should pay more attention to the educational value of the subject in the setting of curriculum objectives and the structure of curriculum content. For example, the setting of China's national development, strategic energy, urban development, national policies and other contents is closely related to the cultivation of students' national concept and patriotism, and social consciousness continues to permeate in the teaching process of geography, so as to achieve the educational value of geography.

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