



A Discussion on the Ecological Balance and Sustainable Development of Higher Vocational Education

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Abstract

With the development of economy and progress of society, the viewpoints of ecological balance and sustainable development have extended to lots of other fields. Educational ecologicalization and sustainable development are becoming more and more important day by day. As a type of higher education, higher vocational education has not only unique developmental advantages but also many disadvantage factors. Basing on the clarification of connotation of education ecologicalization and analysis of the ecological environment of higher vocational education, this paper discusses the thinking and method of sustainable development of higher vocational academies in the atmosphere of ecological consciousness.

Keywords: Higher vocational education, Educational ecologicalization, Ecological balance, Sustainable development

After Industrial Revolution, in order to realize rapid development and achieve the maximization of economic benefit, human adopted the value of conquering and plundering the nature and unilaterally pursued the economic development, which directly led to environmental deterioration, ecological imbalance, and various unharmonious relationships between the reallocation of non-renewable resources and human who demands sustainable development. The existence and development of human are being severely threatened. To solve the most difficult problem in human history, human should keep ecological consciousness in his mind, and realize that human is a natural organic system at higher level. Human should maintain harmonious relationship with nature and make benefit for the nature and human with the science and technology. It is the responsibility of modern education, especially the modern higher education, to promote the all-round development of human in the aspects of spirit, intelligence, creativity and appetency.

As a relatively independent subsystem in the large system of education, influenced by the social environment that shows the ecological crisis, higher education exhibited various phenomenons of ecological imbalance. Keeping the ecological balance of higher education system is the only rational choice to achieve the healthy and sustainable development of Chinese higher education. Ecology is a subject to study the dialectical unification relations between the biotic environment and abiotic environment, and is a scientific thinking method. The thinking method in Ecology will be a new angle and an effective tool to study the rule of education. Higher education should, from the angle of ecology, resurvey its value concept and construction system, timely regulate its developmental orientation and guideline, so as to establish a new educational system that accords with the ecological rule, create democratic, harmonious and assimilative school culture, and build beautiful, humanistic and harmonious ecological campuses (Zhang, 2006).

1. Educational ecologicalization

The concept of educational ecologicalization was firstly put forward in the "Public Education" by the famous American educationist Lawrence A. Cremin in 1970s (Zhang, 2006; He, 2005), which attracted much attention immediately. Marx pointed out that "The natural condition can be sorted as the nature of human and the nature around human" (Hong, 2007), i.e. "noumenal nature" and "external nature". When the concepts of "noumenal nature" and "external nature" are introduced into education, education ecologicalization means that education should, in accordance with the principle of ecology, make effort in solving the contradictions of "noumenal nature" and "external nature" themselves and the contradictions between "noumenal nature" and "external nature", and realize harmonious development and benign cycle in education by the coordination and transcendence of the two concepts, finally promote the progress of society. From the aspect of ecology, educational ecologicalization can be taken as the mutual interactions between the factors in the inner of education system and the exchange relationship between education and the external environment in the aspects of material, energy and information.

Ecology and sustainable development are hot spots in recent years. The concept of ecology has been applied to many fields, such as politics, economy, culture, science and technology, with the purpose of realizing ecologicalization and

sustainable development. The fields mentioned above can be taken as the environment for educational development, which provides background, conditions and demands for the educational ecologicalization. Hence, educational ecologicalization is a new educational concept and the general trends; it is the inevitable requirement of social and educational sustainable development on education.

2. The ecological environment for higher vocational education development

In ecological system, ecological environment means the environment that influences the individual, population or community (including human) (He, 2007). The ecological environment of higher education system means the multidimensional space and plural environment that control and regulate the occurrence, development and existence of higher education, including the external natural environment, social environment and normative environment (Tian and Wu, 2001). The ecological environment of higher vocational education that belongs to the higher educational system has its special characteristics besides the common characteristics with higher education.

Education lays the basis for the long-term development. Chinese government always pays much attention to the higher education, and gives higher education much support in the aspects of policy, system, economy, publicity and public opinion. In recent years, Chinese government attaches much importance to the higher vocational education that is growing up gradually. Zhou Ji, the minister of Ministry of Education pointed out that "In the past short six years, the scale of higher education doubled, and has entered the stage of popular education. The scale of higher education in China is the largest in the world now. Chinese government made leaping development in education as it realized large-scale and high quality education with low investment (Zhang, 2007 a).

The good ecological environment created by the nation and society made great contribution to the rapid development of higher vocational education. Firstly, the higher vocational education has a good political environment. The putting forward of a series of policies, such as the Opinion about Strengthening the Construction of Teacher Team of Higher Vocational Academies (Education Department No.[2002] 5), the Decision of the State Council on Making Great Efforts to Push Forward the Reform and Development of Vocational Education (Decree No.[2002] 16), and the Decision of the State Council on Vigorously Developing the Vocational Education (Decree No.[2005] 35), provided sound political environment for the development of higher vocational education, and effectively guided the higher vocational education to develop towards a right direction. The policies indicate that Chinese government has resolution and confidence to develop higher vocational education. Secondly, the economic environment for the higher vocational environment is becoming better and better. Higher vocational education has cultivated many talents with special skills, and people are identifying with this kind of education. In order to encourage and guide the higher vocational education to develop healthily and continuously, the Ministry of Education and the Ministry of Finance implemented the Plan of Setting up the Demonstrative National Higher Vocational Schools and Colleges, and would support the construction of 100 higher vocational schools to improve the quality of higher vocational education. At present, two batches of higher vocational schools, totally 70, were being supported by the national program. During the eleventh five-year plan, Ministry of Finance will allocate at least 2 billion Yuan to support the implementation of the plan. Beside, various scholarships were established, such as National Scholarship, Encourage Scholarship, Government Scholarship, and National Grant-in-aid. The amount of scholarship has been increased and the scholarship is covering more students, further more, the state loan for college student provides opportunity for more students to go to college, which also promotes the benign development of higher vocational education. Thirdly, the socialist culture with Chinese characteristics provides good cultural environment for the development of higher vocational education. Education and culture depend on each other and influence each other, the rich material culture provides abundant material basis for the development of education, and the bloom of spiritual culture provides strong spiritual support for the development of education. The mainstream culture of China is the socialist culture with Chinese characteristics, which is based on the Marxism-Leninism, Mao Zedong Thought, Deng Xiaoping Theory and Three Represents. The characteristic of making progress in every new era unceasingly of socialist culture provides good cultural environment for the development of higher education. As an important member of higher education, higher vocational education should follow the step of era, and try to make great achievement taking advantage of the cultural environment.

Although higher vocational education is developing at great speed because Chinese government is attaching much importance to it and is optimizing its developmental environment, it is a long-term process to establish an ecology-balanceable and environment-friendly developmental environment for higher vocational education. From the aspect of ecology, there are lots of urgent problems to be solved in the developmental environment of higher vocational education as follows: the first problem is that the higher vocational education is developing too fast. In the past a few years, the higher vocational schools come forth rapidly, and they expanded the enrollment every year, but the developmental speed of teacher team is far fall behind that of student, so the teaching quality shows an trend of decrease, the qualities of students are different, and the good and the bad are intermingled, accordingly, it is difficult for students to find a job because the supply exceeds demand. The second problem is that the vocational education simply copies the model of higher education. Every species has unique attributes and ecological behaviors, which make it occupy a

position in the fast changing boundless universe, or else, it will be inundated and washed out easily. It is accepted by the mass that higher vocational education is one type of the higher education, but many scholars didn't grasp the ecological behavior of higher vocational education, they just copied the school running model and teaching model of colleges and universities, which make them get lost and go to the dead end.

3. The sustainable development of higher vocational education in ecological consciousness

Sustainable development is an important concept in ecology, which is put forward in Our Common Future approved on the 43rd General Assembly of the United Nations. It is put forward in the report that sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Zhang, 2007 b). The strategy of sustainable was firstly used to maintain the balance and the benign cycle of ecological system. With the progress of society and development of economy, the value and developmental concept in the strategy are more and more embodied and used in other fields. It can be seen that there are still lots of severe problems in the higher vocational education system, which will influence the sustainable development of higher vocational schools, so we think that the problems should be solved in the follow aspects:

3.1 Transform the development thinking

In the nature, any population can not grow without limit. The unlimited growth of a population will lead to the imbalance of ecological system. Similarly, the number of higher vocational schools should be controlled within a certain scope. The over development of higher vocational education and large number of students will put great pressure on the teaching quality, teacher team and employment rate, which will be bad for the development of higher vocational education. Hence, we should pay attention to the quality but not quantity when developing the present higher vocational schools.

3.2 Define correct self orientation

It is narrated in the above text that higher vocational education is a young educational model, before which, Chinese higher education is mainly composed of junior colleges and universities, and relatively mature teaching model and school running model have formed. Staring from scratch, higher vocational schools will definitely learn from the junior colleges and universities. But the higher vocational schools that are upgraded from technical secondary schools still have the characteristics of technical secondary school in many aspects. Hence higher vocational schools should find other ways, exert their characteristics, and orient themselves correctly so as to achieve healthy and sustainable development.

3.3 Improve the teacher team and the overall quality of student

Higher vocational schools have poor background and lack high quality teachers. In recent years, higher vocational schools introduced many talents; they have got many graduate students who have at least a master degree, which improved the joint of teacher team in the ecological chain. The high quality teacher team will make great contribution to the teaching, scientific research and management of the school. We expect that the graduate students could inspire the depressive high vocational schools, and benefit all the students just like a blast of academic breeze, and essentially improve the quality of students who have poor background. Attention should be paid to the construction of both teacher team and student, so as to achieve an ecological balance of mutual benefit and symbiosis.

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