Research on High Quality Development of Higher Education

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Abstract. This paper analyses the concept of higher education quality. Higher education refers to the education carried out on the basis of the completion of advanced secondary education. Its main task is to train high-level specialized talents with innovative spirit and practical ability. According to the hierarchy and specificity of higher education quality, the time and space of higher education quality, the subjectivity and objectivity of higher education quality, the basic characteristics of higher education quality are analyzed. This paper studies the factors affecting the high-quality development of colleges and universities and the main paths for the high-quality development of higher education.

1. Quality regulations of higher education

According to CiHai, "quality" has fourteen meanings, the eighth meaning is nature, or essence; "quantity" has five meanings, and the third meaning is the limit of accommodation. "Quality" and "quantity" are philosophical concepts. In philosophical sense, "quality" refers to an internal stipulation that a thing is different from other things, and it is stipulated by special contradictions within things. Diversity of things is the manifestation of qualitative differences between things. In philosophical sense, "quantity" refers to the scale and degree of development of things, and it is a prescription that can be expressed by quantity. All things are the dialectical unity of quality and quantity. The quality of things is the condition of their existence with a certain quantity, and the quantity of things is restricted by the quality of people.

The Higher Education Law stipulates that higher education refers to the education carried out on the basis of the completion of higher secondary education. Its main task is to train senior specialized talents with innovative spirit and practical ability. Degree education in higher education is divided into specialty education, undergraduate education and postgraduate education.

Academic criteria of vocational education are: to enable students to master the basic theory and expertise necessary for their specialty, and to have basic skills and preliminary abilities to engage in practical work of their specialty.

The academic standards of undergraduate education are: to enable students to systematically grasp the basic theories and knowledge necessary for their subject and specialty, to master the basic skills, methods and related knowledge necessary for their specialty, and to have the preliminary ability to engage in practical work and research work of their specialty.

The academic standards of master's degree education are: to enable students to master the solid basic theory and systematic professional knowledge of the subject, to master the corresponding skills, methods and related knowledge, and to have the ability to engage in practical work and scientific research of the subject.

The academic standard of doctoral education is to enable students to master the solid and broad basic theory, systematic and in-depth professional knowledge, corresponding skills and methods of the subject, and to be able to independently engage in creative scientific research and practical work of the subject.
2. Basic characteristics of higher education quality

2.1 Hierarchy and specification of higher education quality

Hierarchy of higher education quality refers to the performance of higher education in training qualified personnel to meet the corresponding standards according to the needs of different levels of higher specialized personnel in the development of social, economic, cultural, scientific and technological undertakings. The hierarchy of higher education quality corresponds to the hierarchy of social needs. It is the root of higher education, the reason for its existence and the motive force for its development. At present, there are three levels of higher education in China: specialized education, undergraduate education and postgraduate education.

The specificity of higher education quality refers to the difference of talents trained to meet the needs of different professions or scientific fields at the same level of social needs. There are two main aspects in the standardization of talents: one is the difference between natural science talents and social science talents. Because the object of natural science research is nature, the objectivity, systematicness, accuracy, predictability, universality, and repeatability of the same conditions of its theory cultivate the rigorous and realistic style of students in natural science disciplines (specialties). The object of social sciences research is society or human, and the characteristics of its theory such as fuzziness, uncertainty, complexity and non-repeatability of the same conditions cultivate the students’ thinking and flexible style in Social Sciences (specialties). Within natural sciences, science students are different from engineering students in that they are strong in theory, abstract thinking and engineering. Science students have strong practicality and image thinking ability. Secondly, different colleges and universities have different talent specifications at the same level. Undergraduates trained in an ordinary university or a university that may not have a master's degree are certainly quite different from undergraduates trained in Peking University. That is to say, their specifications must be very different, that is, their preliminary research ability must be strong or weak.

2.2 Temporal and spatial characteristics of higher education quality

The timeliness of higher education quality refers to the different stages of social development in different periods. It has different demands for the standards of training talents in higher education. The timeliness of higher education's training talents with different standards in different periods is the manifestation of the timeliness of its education quality. The timeliness of the quality of higher education in a country indicates that the development of higher education is synchronous with the development of society. Often, it is appropriate to advance the development of society, which is determined by the periodicity of talent cultivation. Spatiality of higher education quality means that the quality of higher education at the same level varies from country to country in the same period.

2.3 Subjectivity and objectivity of higher education quality

The subjectivity of higher education quality refers to that the educatee is the active party, the positive side and the cognitive subject. Therefore, the educatee is the active part of education, the main body of education, as the undertaker of the quality of education; it is also the main body of the quality of education. Educated persons are composed of thousands of different individuals. The same knowledge and the same way of understanding will produce different effects on different individuals. This difference is the difference of the subject, and also the difference of the quality of the educated person. The objectivity of higher education quality means that educatees have a unified standard to meet social needs.

3. The main path of high quality development of higher education

There are many factors affecting the high quality development of colleges and universities. Here, we pay attention to the three key factors as well as the basic ones. One is to formulate a scientific development plan, which mainly includes three parts: current situation analysis (characteristic
advantages and existing problems), development goals (guiding ideology, overall objectives, specific objectives, etc.), development measures (development projects, development priorities, development stages, etc.). Secondly, we should deal with the balanced allocation and coordinated operation of the political power centered on the Party committee, the administrative power headed by the principal, and the academic power led by the professor. The third is to establish a total quality management system, that is, to establish the concept of total quality, and to establish a system of all staff participating in quality management, whole process quality management, total factor quality management and overall quality monitoring.

3.1 Scientific development planning system

Because the development planning has the characteristics of overall, systematic, forward-looking and long-term, it is the basis of balanced and coordinated development of all elements in the development process of universities to formulate a scientific development planning. Whether in the growing or mature stage, the development planning of universities includes three parts: the status quo analysis (characteristic advantages and existing problems), the development goals (guiding ideology, overall objectives, specific objectives, etc.), and the development measures (development projects, development priorities, development stages, etc.).

The current situation analysis is the deep understanding and comprehensive judgment of the development history, characteristics, advantages and problems faced by colleges and universities, as well as the development level and stages of schools. The analysis of the present situation can be based on the soft conditions of running a school [the idea of running a school, the spirit of the university, the style of the university, the motto of the university], the human resources, the management system, etc.) and the hard conditions of running a school (land, environment, architecture and equipment, etc.). It can also be based on the leading group, the scale of running a school, the discipline, the faculty, the basic facilities, the teaching work, etc. Scientific research, exchange and cooperation, and the quality of education are carried out in nine specific aspects. Based on the analysis and judgment of the characteristics, advantages, problems, development level and stages of universities, universities can plan their development goals (guiding ideology, overall objectives, specific objectives, etc.) and measures (development projects, development priorities, development stages, etc.) for a period of time to come.

After defining the existing development level, development stage, characteristic advantages and problems, universities put forward the guiding ideology of development according to the economic and social needs, the national educational policy and the law of higher education. It is the general principle and general program of development planning, the ideological method and action criterion of formulating and implementing the plan, the orientation of the present situation and development of schools, and the guiding ideology of development. According to the guiding ideology of development, the school determines the development goal, that is, the comprehensive index system of the quantity, quality, scale, speed, internal structure and proportion of university development in a long period of time. It is generally divided into general objectives (development direction and degree, nature and type, scale and service direction in a certain period of time) and specific objectives (selection of key development direction, scale and degree at the element level).

Development Measures refer to the planned work programme of human, financial and material resources allocation and supporting policies formulated by universities in accordance with the development goals. Because of limited resources, development measures should consider both key development and coordinated development. They often take development projects as the carrier, select key points at the element level, divide the development process into several stages, refine the overall objectives into specific objectives at each stage, and implement them in stages, so as to ensure the coordinated and sustainable development of colleges and Universities from the overall and long-term perspective.
3.2 Coordinating power operation system

In order to ensure the balanced and coordinated development of the internal factors in the process of achieving the development goals, the key is to deal with the balanced allocation and coordinated operation of the political power with the Party Committee as the core, the administrative power with the principal as the head and the academic power with the professor as the leading. Since academic affairs are the main affairs of universities and academic affairs have their own special regularity and academic development is the main goal of the development of universities, it is necessary to scientifically define and coordinate the relationship between academic power, administrative power and political power, and establish a reasonable power allocation mode and a scientific decision-making mechanism within universities. In view of the fact that the bureaucracy system is the institutional framework of universities and the principal responsibility system under the leadership of Party committees is implemented in Chinese universities, the orientation of political power, administrative power and academic power in Chinese universities should be the leadership of Party committees, the management of principals and the management of professors.

In accordance with the decision-making principles of democratic centralism and the principles of collective leadership, democratic centralism, individual deliberation and deliberation decided by meetings, the Party Committee shall coordinate the overall situation and all parties concerned, grasp the political nature and development direction of the school, concentrate its efforts on major events, and correctly handle the relationship with the principal's administration, professor's academic management and democratic management. Principals administer according to law and professors devote themselves to academic management. They support the broad participation of teachers and staff in democratic decision-making, democratic management and democratic supervision.

3.3 Effective quality management system

In order to ensure the balanced and coordinated development of internal factors in the process of achieving development goals, Chinese universities in both growing and maturing stages focus on the establishment of a total quality management system. Its main contents include the establishment of a total quality concept, the establishment of a total participation in quality management, whole process quality management, total factor quality management and overall quality monitoring system.

In the 21st century, the world has entered the era of knowledge-based economy, and Chinese higher education has entered the stage of popularization. Talents training in Colleges and universities should establish the quality concept of quality education based on the world, the future and the coordinated development of modern knowledge, ability and quality, as well as the diversified quality concept adapted to the popularization of higher education.

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References

[1] H. Q. Lin, Promote the deep integration of information technology and education and teaching, and realize the high-quality connotative development of higher education, China University Teaching, vol. 1, pp. 4-6, 2018.

[2] J. Wu, Multidimensional thinking on the development of higher education quality, Higher Educational Research In Areas of Communications, vol. 2, pp. 31-33, 2005.

[3] J. Peng, A probe into the connotations of quality development paradigm in higher education, Fudan Education Forum, vol. 11, pp. 57-62, 2014.