

Analysis on the Reform of Educational Structure in Undergraduate Colleges ——From the Perspective of the Cultivation of Knowledge-based and Highly-skilled Talents

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Abstract: Higher education is one of the important ways to cultivate professional talents. It has become an important prerequisite for improving social productivity and has become an internal driving force for promoting the overall progress and development of society. However, the actual development of the economy and society also restricts the development direction of higher education. This requires that higher education (especially undergraduate education) must fully understand the relationship between talent education and social real needs, and adjust the educational structure to implement coordination with social change. Knowledge-based, highly skilled personnel develop education.

1. Introduction

Since the founding of New China, China's higher education has not changed. However, due to the rapid development of China's economy and the rapid changes in social changes, the speed and quality of higher education reform still lag behind the actual development process, which requires higher education—especially Undergraduate college education - must completely change the concept, fully understand the relationship between talent education and social real needs, and adjust the educational structure to implement knowledge-based and high-skilled personnel training that is in harmony with social change, which is proposed by the State Council. The education reform and deployment that guides the transformation of a group of undergraduate colleges to applied technology universities is also completely consistent. In this context, this paper analyzes the reform of the educational structure of undergraduate colleges under the environment of knowledge-based and high-skilled personnel training.

2. Knowledge-based and highly skilled personnel and their requirements for undergraduate institutions

2.1 The definition of the meaning of knowledge-based and highly skilled personnel

China divides skilled talents into three categories: technical skills, compound skills and knowledge skills. Knowledge-based and highly skilled personnel still belong to skilled talents in the division, combining high skills with knowledge. The requirements for such talents have a new connotation: knowledge-based and highly skilled personnel are both professional knowledge theory and higher. Personnel who operate skills. The management scientist Peter Drucker called these people "knowledge workers" because they have such characteristics: first, they can apply the theoretical knowledge they have learned to production practice, and Creatively carry out practical work. Second, knowledge-based and highly skilled workers can not only solve various practical problems, but also realize innovation and enrich and develop their own expertise through innovation, so that their knowledge and skills can be improved. Third, knowledge-based, high-skilled, high-skilled skills have strong ability to acquire new knowledge, absorb new technologies, and process new information, and integrate new knowledge, technology, and information, and ultimately apply to their own professional activities. Thereby making your knowledge and technology capabilities even further. Generally speaking, knowledge-based and highly skilled

personnel have strong learning, application and innovation capabilities. It is precisely because of this that knowledge-skilled talents can become the fundamental driving force for technological upgrading, industrial transformation and upgrading and sustainable economic development.

2.2 Knowledge-based high-skilled personnel training requirements for undergraduate colleges

Judging from the current situation of talents cultivated by colleges and universities, knowledge-based research-based scientific and technological talents and low-quality labor are not lacking. What is lacking is precisely the middle level—high-quality, skilled application talents. On the one hand, the students trained in the original undergraduate colleges have relatively complete professional knowledge theory, but their hands-on operation ability is insufficient. On the other hand, the students trained by local vocational colleges have basic knowledge and lack of developmental stamina. Problems, each can not meet the comprehensive requirements of "the theoretical knowledge is sufficient, the key focus on use." Therefore, whether it is upgrading the vocational colleges of undergraduate colleges or the original undergraduate colleges, these two aspects must be combined to cultivate the high-quality application skills talents needed for the society.

3. The status of knowledge-based high-skilled talents and problems in the education of undergraduate colleges

3.1 Status of social needs of knowledge-based and highly skilled personnel

(1) Social needs of knowledge-based and highly skilled personnel. The current state of society's demand for knowledge-based and highly skilled personnel is the most telling problem from the employment phenomenon of college students. Some news reports pointed out that it is not difficult to recruit a college student for three thousand dollars, but it is not easy to ask a skilled technician. What is this concept? Are there more college students in China than in ordinary workers? Not at all. With the transformation and upgrading of low-end manufacturing in China to high-end, innovative and emerging industries, the demand for talents in society has shifted from quantitative demand to quality, quality and quality. According to the statistics of the 2014 Education Blue Book published on May 13, 2015, the initial employment rate of undergraduate colleges and universities nationwide in 2013 was 75.4%, which was lower than 78.1% of higher vocational college students. It can be seen that social institutions do not need college students anymore, and college students are not oversupply, but what kind of college students are needed by the market. Therefore, high-quality, high-skilled applied talents are not only the types of talents that are urgently needed by society, but also the types of talents that are currently in short supply. This invisibly creates a "useless place" for ordinary knowledge-based undergraduates.

(2) Current status of knowledge-based high-skilled personnel. Of course, China's economic development and social changes are very fast. Although the overall economic downturn is obvious, the key issue is that international competition and industrial upgrading and innovation have become more and more demanding for talents. It is harsh, which further shows the incompatibility of the status quo of talent cultivation. First of all, there is a shortage of knowledge-based and highly skilled personnel in absolute terms, as evidenced by the above data. The characteristics of knowledge-based and highly skilled personnel are that they have a rich and complete professional knowledge system and a strong hands-on ability. The high quality of their professional positions is mainly the unification of these two aspects. Knowledge is the theoretical guidance of skills. The skills supported by theory not only have high precision and high efficiency, but also can carry out certain and necessary innovations. The basis of innovation is knowledge; while skills are the application and application of knowledge, only through skills. The application can deepen the understanding of knowledge and further improve, deepen and innovate the professional knowledge system. Obviously, there are not many high-quality skills application talents, at least not able to meet the needs of the social market. Secondly, the talents cultivated by colleges and universities currently have defects in their ability and structure. The lack of theory and lack of skills are the

defects of undergraduate students. The strong skills and weak knowledge are the weakness of the technical college, which leads to the overall low quality.

3.2 Problems in the education of undergraduate colleges

(1) The concept of talent training is not compatible with social development. If there is a problem with the employment of college students, then the key to the problem should not be in the society, but in the college students themselves; if the students themselves have problems, then the essence of the problem is not the college students, but the education in the universities, the direction and structure of the personnel training. There is a problem with the profession and the effect. Therefore, on the basis of reconstructing the political logic and management system of higher education in China, higher education, especially undergraduate education or institutions that need to be upgraded to undergraduate education, must change their concepts and rationalize the logical relationship between talent cultivation and economic and social development. The cultivation of talents in colleges and universities is closely linked with the social market. Through the effective adjustment of the educational structure, the weight of vocational and technical education and adult education is increased, and the higher education system of the relative balance and inclusive development of discipline logic and application logic is constructed to promote the national industrialization and higher education structure. Loosely coupled.

(2) There is a contradiction between the undergraduate education structure and social needs. According to the statistics of the Ministry of Education, as of June 21, 2013, the Ministry of Education approved a total of 2,198 colleges and universities across the country (excluding military academies and one school). There are 877 undergraduate colleges, of which 162 colleges have just been established for 10 years, and 130 colleges have less than 10 years of undergraduate education. Analysis of these data can lead to the deeper reasons for the contradiction between undergraduate education structure and social needs. First of all, the development of undergraduate colleges has risen rapidly in number, but specific to each undergraduate college, its development scale, quality and level of education are not ideal, which is difficult to meet the needs of graduates and social needs. It can be confirmed for contradictions. Second, there are structural contradictions in the development of regional undergraduate colleges. The development of regional undergraduate colleges is mainly characterized by quantitative imbalance. Due to the rapid economic and social development in the eastern coastal areas, the growth rate of undergraduate colleges greatly exceeds that of the western regions. However, the increase in the number has not effectively alleviated the contradiction between supply and demand of talents. The structural contradictions of undergraduate education are still outstanding. Thirdly, the increase of undergraduate colleges does not follow the market of social demand. The cultivation of a large number of knowledge-based college students has caused a shortage of high-quality skilled application talents in the front line, and the theoretical lack of higher vocational education can not meet the social knowledge. The demand for high-skilled talents, the contradiction between supply and demand still exists.

4. The concrete implementation of undergraduate education structure reform in the training of knowledge-based high-skilled personnel

4.1 Regional structure adjustment in undergraduate education

China's higher education and economic development are also characterized by a highly uneven regional development. [10] Because the level of economic development in the eastern coastal areas is much higher than that in the central and western regions, it also determines that the level of higher education and the degree of popularization are also higher than those in the central and western regions. As mentioned above, there is an intrinsic relationship between higher education and economic and social development. Driven by economic conditions and industrial needs in the more developed regions of the east, professional talents must be kept up to date with the requirements of the times, professional talents— In particular, the cultivation of knowledge-based and highly skilled personnel is naturally ahead of the Midwest. Therefore, no matter from

undergraduate education or middle and high vocational education and vocational and technical education, or from various types of personnel training, the imbalance of Xi Shudong is presented. It is imperative to adjust the regional structure in undergraduate education. First of all, we must promote the development of the central and western industries by accelerating the development of the central and western regions, so as to promote the improvement of the level of higher education in the central and western regions. Based on this consideration, in recent years, the country is also systematically migrating the advantageous industries in the east to the central and western regions. This requires that the central and western regions must accelerate the development of higher education in both quantity and quality. Second, the eastern and western regions Appropriately adjust the proportion of higher vocational education and undergraduate education according to the characteristics of industrial development, adhere to the social needs as the core, while adjusting the various levels of educational structure, vigorously promote the application-based undergraduate education model, in order to improve the knowledge-based high-skilled personnel Cultivate scale and quality to provide talent protection for the new development of the local economy and society. Third, the central and western regions and the eastern region should also set up education majors based on industrial innovation and the future development of emerging industries. While increasing the domestic professional talent reserve, they will enhance international competitiveness and make China's industry more innovative potential. vitality.

4.2 Type Structure Adjustment in Talent Cultivation

The factors affecting the development of higher education usually include social factors, environmental factors, policy factors and the needs of colleges and universities. [11] However, among many influencing factors, social factors have always been the decisive factor in the development of colleges and universities. Even if other factors exist, such as political and economic factors, the formulation of national higher education policies must be based on different social factors. If adjustments are made, higher education will lose its vitality and gradually move towards the end of unsustainable development. The type structure arrangement in talent cultivation is obviously carried out according to the needs of social development. This is completely different from what people usually think of as “the higher the talent level is, the better”. The level of talent level is generally reflected by the academic qualifications. Undergraduate college graduates must be “higher” than vocational college graduates. This concept is not problematic for most people; the level of talent is also through talents. The type of academic students is higher than that of skilled college students, and it is completely correct for most people. In fact, whether it is the development of social internal drive or the employment of college students, these views are one-sided and wrong. Only the degree of social demand can determine the type and level of talents. This has been proved by facts. Therefore, higher education must carry out structural adjustment of the type of personnel training, in order to effectively solve the employment problem of college students while driving the rapid development of the economy and society. On the one hand, some undergraduate colleges should integrate skills training courses on the basis of the original knowledge-based personnel training, so that the cultivated talents have the quality of knowledge-based and highly skilled personnel; on the other hand, local undergraduate colleges should be based on regional characteristics. Education is transformed into applied undergraduate education to meet the needs of talents in the region's industrial development to the greatest extent. At the national level, macroscopic means should also be used to regulate the number, layout and direction of undergraduate colleges, and guide the application of undergraduate education. The transformation of technology and vocational education to ensure the docking of talent education and social realities in undergraduate colleges.

Finally, it should be pointed out that the cultivation of knowledge-based and high-skilled personnel cannot stop the adjustment of the educational structure of undergraduate colleges. Strengthening adult education, continuing education, lifelong education and various vocational training should also be an important component of the reform of undergraduate education. section. As a knowledge-based and highly skilled application talent, only by constantly learning and being

good at innovation can we use knowledge, develop skills, and practice innovation in modern professional positions. This is a new goal and new pursuit for all types of higher education, including undergraduate education.

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