

Research on the Integration of Higher Education and Industry in Hunan Province

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Abstract

The 19th National Congress of the Communist Party of China clearly proposed that "it is necessary to improve the higher education and training system, deepen the integration of industry and education, and school-enterprise cooperation", which shows that entering the new era to promote the integration of higher education and industry is not only the need for the transformation and upgrading of the industry and the restructuring of business formats, but also the only way for higher education to solve imbalance, inadequacy and rapid development. Throughout the development process of higher education, the coupling and coordinated development of higher education and industrial structure is not only a static process, but also a dynamic development change. By reviewing and sorting out the relevant data of the Hunan Statistical Yearbook, this paper sorts out the current situation of higher education structure and industrial structure in Liaoning Province, and then calculates the degree of coupling and coordination between the two, divides the coupling coordination degree according to the relevant standards of coupling coordination, and then analyzes the relevant factors affecting the relationship between the two, in order to achieve the trend of coordinated development between the higher education structure and the industrial structure in Hunan Province.

Keywords

Higher education, Industry, Degree of fusion

1. The origin of the problem

At present, Hunan Province vigorously promotes the adaptive development of both higher education structure and industrial structure. The interaction between the structure of higher education and the industrial structure of Hunan Province is very worthy of attention, the structure of higher education should be adjusted according to the transformation and upgrading of the industrial structure, and the further optimization of the industrial structure also requires the transformation of the talent training mode of the higher education structure (Ji Yi, Mi Xinyuan, & Wu Yunqing, 2020) Human resources are in the first and most important position, and the talents in each industry are high-end talents cultivated through higher education. Secondly, if you want to upgrade and accelerate the development of the industry, you need to use high-tech methods and methods, and high-end talents need to interact with high-tech products to achieve the desired results. There are many advantages of this, for example, the cultivation of high-end talents can improve the level of science and technology in society, providing strong support for the rapid development of science and technology; Then the upgrading and acceleration of the industry has upgraded and accelerated the production scale of high-end tal-

ents and provided a certain theoretical reference for the direction of their training. At present, the higher education and industrial development in Hunan Province have not reached a coordinated balance point, so how to find this balance point is the focus of this research, this research will deeply understand the deep connection between the integration of higher education and industry in Hunan Province, find the problems between them and propose some corresponding solutions.

2. The basic structure of the current universities

2.1 The basic structure of universities in Hunan Province

The basic structure of colleges and universities is mainly reflected in the enrollment rate of students, and overall, if the enrollment ratio of college students is about 14%, it belongs to the era of advanced education; 15%-50% is the stage of popularization of higher education; If it is greater than 50%, it means that higher education has entered the stage of popularization. Through the survey, it is found that the overall enrollment rate of higher education in Hunan Province from 2016 to 2021 shows an increasing trend, especially in 2019, the enrollment rate reaches 50.5%, and the gross enrollment rate of higher education in Hunan Province takes the lead in entering the popularization stage (XU Qiuyan & HAO Han, 2020).

2.2 Scale structure of higher education in Hunan Province

The survey found that in recent years, the scale of higher education in Hunan Province has gradually expanded, and it was found that in the higher education of Hunan Province in previous years, the enrollment scale of undergraduate students, the enrollment scale of junior college students, and the enrollment scale of graduate students, the number of graduate students obviously only accounted for a small part, which can show that the overall development of Hunan Province has little demand for graduate students.

From the current college graduation students, the proportion of undergraduate and junior college people is getting closer and closer, the gap is obviously not obvious, for the occurrence of this phenomenon through the survey found that it is mainly due to the current demand for talents in Hunan Province is different, mainly need undergraduate and junior college students more. In addition, looking at the number of graduate students vertically, it has shown an increasing trend in recent years, indicating that Hunan Province is paying more and more attention to the cultivation of high-end talents.

2.3 Discipline structure of higher education in Hunan Province

The survey found that the number of students in 12 disciplines in Hunan Province from 2016 to 2021 has changed significantly, with the number of majors beginning to decrease and some majors beginning to increase. This shows that Hunan Province has been constantly changing in accordance with the needs of society. Specifically, the number of students in literature and science has changed the most, the number has decreased to 1/3 of the original, and the number of students in economics, law, education, history, engineering, agriculture, medicine, management, and art has shown an upward trend, of which the number of students in education, engineering, and medicine has increased the most, which is due to the fact that these disciplines show strong practical operability, and the knowledge and skills learned can be directly connected with related jobs, which is easier to solve employment problems (Gao Ran, 2020).

2.4 Higher education structure in Hunan Province

According to the different entities of running schools, colleges and universities can be divided into public universities and private universities. The survey found that the number of additional universities in Hunan Province is on the rise, which shows that the country attaches more and more importance to education. Therefore, Hunan Province is mainly based on public universities and supplemented by private universities. From the perspective of the number of universities, the number of private universities is significantly lower than the number of public universities, indicating that the backbone of Hunan Province still belongs to public universities.

3. The current situation of the industrial structure of Hunan Province

With some strategic guidelines for national development and the current trend of normalization of the epidemic, the industrial environment of the entire Hunan Province is also accompanied by these factors in a process of constant change, in the process of change, some contradictions that could be hidden before are now all highlighted. It is mainly

reflected in the fact that some of the current industrial models are difficult to meet the current social development needs, so the current industry in Hunan Province needs to make major changes, and it is imperative to upgrade the industry.

3.1 Status quo of three major industries in Hunan Province

Through the survey, it is found that the overall change range of the construction machinery industry in Hunan Province is a steady trend, and not much change has been made. The overall development of rail transit equipment industry is in an increasingly backward state, and the development of aviation power industry has supported the industrial development of Hunan Province, and the overall development trend is steadily rising. Since 2017, the industrial structure of Hunan Province has changed, with the tertiary industry as the main industry, and the proportion of the secondary industry has declined, indicating that the supporting force of Hunan Province's economy has gradually declined (Zeng Yifan, 2016).

3.2 The proportion of employees in the three major industries of Hunan Province

The survey found that the number of people in the construction machinery industry and the rail transit industry has always been lower than the number of people in the aviation power industry, and the number of people in the rail equipment industry is also in a gradual downward trend, while the number of employees in the mechanical engineering industry first declines and then rises. Therefore, it can be seen from these changes that the rail transit industry is regressing more and more, and the number of people is gradually declining. In recent years, Hunan Province has paid more attention to the development of mechanical engineering industry, so the number of employees in mechanical engineering industry has gradually increased (HU Changrong, 2017).

4. The path of integration of higher education structure and industrial structure in Hunan Province

4.1 For the integration of industry and education, the government needs to find a guiding role in integration

The integration of industrial structure and higher education needs to let the relevant government departments carry out a ruler guiding role at the beginning stage, without the government does not play a role, then the subsequent work is difficult to carry out is almost empty talk, most enterprises are reluctant to cooperate with universities at the beginning. We can learn from successful cases abroad to carry out some mandatory measures and policies for the integration of higher education and industrial structure at the legal level. However, at present, China's legal provisions in this regard are very thin and almost ineffective. Therefore, at this time, it is necessary for relevant government departments to stand up and play a leading role in helping and promoting the integration of higher education and industrial structure. Therefore, it is hoped that the relevant departments of Hunan Province can introduce a series of encouraging policies and subsidies for the integration of higher education and industrial structure to enhance the enthusiasm of enterprises to participate, for example, in the integration of higher education and industrial structure, all participating enterprises can carry out a preferential policy for them in terms of loans, and at the same time increase their loan amount; At the same time, the costs and expenses required in higher education and industrial integration can be included in the company's own cost calculation, which can deduct the corporate income tax, so that many enterprises can greatly increase their participation in the project.

4.2 Form a special institutional department for the integration of industry and education, and have a set of management systems

The integration of higher education and industrial structure in Hunan Province requires the formation of a special institutional department and a set of management systems. This management system should have a clear division of labor to ensure the timely issuance and implementation of each policy, including physical management and assessment affairs, and ensure that each policy can be effectively implemented. Through investigation and research, it is found that at present, Hunan Province has established several relevant departments, which are responsible for the management, supervision and assessment of the integration of higher education and industry. At the same time, it can also be suggested that relevant government departments take the lead in promoting the role, and the professionals of other relevant departments form a team to establish a working committee of the higher education and industry integration department. In this way, this department can be responsible for the implementation process of the entire project, guide the docking

process of higher education and industrial structure integration, and evaluate these projects, and then report to the relevant government departments and provide relevant training and professional guidance to the relevant government departments, so as to improve the efficiency and success rate of the entire project. It plays a good role in promoting the professionalism of China's higher education and industrial structure integration project plays a benchmark role.

4.3 Create a new platform through other groups in society to improve the efficiency of the integration of industry and education

First of all, the integration of higher education and industrial structure requires the state to pay considerable attention to universities, and at the same time, the funding investment in colleges and universities should be increased, so as to ensure that universities have sufficient confidence to carry out projects of integration of higher education and industry. Secondly, it is necessary to mobilize other ideals in the corporate society, do a good job in publicity, increase investment in education, and increase mutual cooperation between schools and enterprises to play a mutually beneficial role. In addition, the fair and reasonable distribution of higher education funds ensures the fair distribution of educational resources within the province. At the same time, the construction of teachers in colleges and universities in Hunan Province should also be strengthened, because the construction of teachers is conducive to cultivating the number of high-end talents. Therefore, we should not only pay attention to the growth of the teaching team in colleges and universities, but also cannot ignore the teaching ability and scientific research level of teachers.

4.4 Integrate the professional structure of colleges and universities to cater to the development of society and the adjustment of industries in Hunan Province

Since the opening of all majors in colleges and universities is based on the talent structure of various industries required by social development, according to some strategic guidelines of national development and the current trend of normalization of the epidemic, and because the industrial environment of the entire Hunan Province is also accompanied by these factors in a changing process, so the majors of the entire university should also be adjusted to promote the integration of higher education and industrial structure.

4.5 Improve the enforcement of relevant provisions and ensure the safeguards of relevant systems

Through the survey and found that at present, the structure of higher education in Hunan Province is in a relatively unbalanced state, and there are many main reasons for the imbalance that play a major role in the lack of a guiding mechanism for the market, so in order to improve the role of higher education to serve the society, it is necessary to put forward a reasonable guidance mechanism for higher education needs in the process of higher education education and industrial structure integration. Judging from the current situation, Hunan Province is in a blank slate for the guidance mechanism of higher education and higher education in the process of industrial structure integration, not only does not have a certain practical foundation and experience for this guidance mechanism, but also lacks theoretical knowledge about the guidance mechanism of higher education and industrial structure integration process, so it is difficult to operate. At present, what needs to be done is to let the relevant government departments take the lead and guide them, grasp the needs of the market and enterprises, improve the implementation of relevant regulations, and ensure the protection of relevant systems. At the same time, a discipline adjustment mechanism is formulated to promote the adjustment of the discipline structure of colleges and universities, which plays a role in promoting the integration of higher education and industrial structure in Hunan Province, and also promotes the professional adjustment strategy of Hunan Province to adapt to the industrial development of the province.

4.6 Cultivate talents related to the integration of higher education and industrial structure

In the process of integrating higher education and industrial structure, what the government needs to do is to dynamically predict some jobs with relatively large demand for talents, and then let colleges and universities establish relevant professional settings in these industries with relatively large demand. At the same time, government departments should conduct a count of college graduates and need to evaluate the quality of talents in demand in some industries. On the basis of these, a new pattern and model are proposed that promote the overall development of Hunan Province. The premise of this is first of all, to be open and transparent about all kinds of information in the whole process and to achieve information sharing among various departments. In this way, colleges and universities can play a very good role, they can adjust the entire professional structure in time to adapt to the changing trend of Hunan Province's industry, and achieve the professional layout of the integration of higher education and industrial structure.

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