

Research on the Cultivation of High-Skilled Talents in Zhejiang Province

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Abstract: The total amount of high-skilled talents in Zhejiang Province cannot meet the requirements of the province 's economic and industrial development, and the structure of industrial talents deviates greatly. The cultivation of high-skilled talents is the key factor to promote the construction of China 's education power and human resources power, and has important strategic significance in the process of national modernization. By exploring the development status of high-skilled talents in Zhejiang Province, this paper deeply analyzes the matching relationship between supply and demand of high-skilled talents, compares the high-skilled training modes at home and abroad, and puts forward ways and means to optimize the supply and demand mechanism of high-skilled talents in Zhejiang Province.

Keywords: High-Skilled Talents; Supply and Demand Matching; Vocational Skills Upgrading

Introduction

The National Talent Work Conference emphasizes the establishment of a scientific concept of talent, clearly incorporates high-skilled talents into the scope of talent management, requires the improvement of the social status of high-skilled talents, creates a social atmosphere for the development of high-skilled talents, and incorporates high-skilled talents into the overall deployment of talent power, which fully reflects the urgency of accelerating the construction of high-skilled talents. With the steady progress of intelligent manufacturing in Zhejiang Province, Zhejiang Province is in a critical period of economic structure transformation and development mode transformation. The process of industrial transformation and upgrading means that technology replaces labor, and human capital replaces material capital to promote the improvement of labor productivity. Therefore, the requirements for the skill level of workers are gradually increasing, and the contradiction between the supply of high-skilled talents and social demand is increasingly prominent. From the perspective of occupational supply and demand reflected in Zhejiang 's labor market, the demand rate of senior workers, technicians and senior technicians is generally above 2, reaching a maximum of 10. The shortage of high-skilled talents has become a major constraint on Zhejiang 's economic development and industrial upgrading.

1. Problems in the development of high-skilled talents in Zhejiang Province

1.1 Shortage of high-skilled talents

Through the analysis of historical data since 2006, there has been a big contradiction in the supply and demand structure of the labor market in Zhejiang Province for a long time. The maximum matching rate of the labor market has remained at about 0.6-0.8 since 2006, and the total supply is insufficient. The matching rate of the labor market has gradually declined, especially in 2008, the matching rate fluctuated greatly. Since the outbreak of the economic crisis in 2007, the overall economic situation has changed. International developed countries have begun to return to the development of the real economy dominated by manufacturing. Due to the lag effect, the talent supply market is difficult to meet the changes in the types of occupations required by enterprises. It is difficult to respond to social needs in a short period of time for highly skilled labor with a long training cycle. For the prediction of the

development trend, through the comparative analysis of the trend of GDP growth and the proportion of high-skilled talents, although the proportion of high-skilled talents in the labor force continues to increase, the speed of its growth is decreasing year by year. The growth trend of the proportion of high-skilled talents is not consistent with the growth rate of GDP, and the economic growth shows cyclical fluctuations, while the proportion of high-skilled talents is decreasing year by year. According to Okun 's law, economic growth brings about an increase in the number of jobs, so the demand for high-skilled talents increases, but the growth rate of high-skilled talents continues to decline, which cannot meet the needs of economic growth. The shortage of high-skilled talents is still an urgent problem to be solved in the short term.

1.2 High-skilled personnel structure does not match

The regional distribution of high-skilled talents is unbalanced. For the economically developed areas in Zhejiang Province, the number of high-skilled talents has gradually reached the goal of the " Twelfth Five-Year Plan " talent plan. However, the economically underdeveloped areas in the province are limited by the lack of motivation for talent introduction, and the number of high-skilled talents is far from meeting the needs of economic development in the region. Less developed counties rely more on non-public enterprises to play a supporting role, but the current high-skilled personnel is weak, can play a limited role in promoting the economy.

From the analysis of the industry distribution data of professional and technical personnel, the industry distribution of high-skilled talents is also unbalanced. Influenced by social concepts, industry restrictions, personal preferences and other factors, the total deviation coefficient of high-skilled talent structure has been higher than 1.5, and there is still much room for adjustment between industrial structure and high-skilled talent structure. According to the total output value and the three major industries from 2001 to 2015, the structure deviation and total deviation coefficient of high-skilled talents in the three major industries are calculated according to the calculation formula of talent structure deviation^[1]. The deviation coefficient of the primary industry is positive, indicating that the talent structure of the primary industry is unreasonable. Affected by the economic environment, geographical location and human environment, agriculture accounts for a relatively low proportion, and high-skilled talents are also seriously lacking.

2. Research on the training mode of high-skilled talents at home and abroad

2.1 Foreign high-skilled personnel training mode

German dual system model : German dual system characteristics, training institutions have two kinds, schools and enterprises ; students have two identities, both school students and enterprise apprentices ; there are two types of teachers, practical teachers and theoretical teachers, two types of examinations, enterprise skills examinations and school theory examinations ; there are two kinds of certificates, namely graduation certificate and skill level certificate ; there are two sources of training funds, enterprises and schools share the cost of training^[2].

American cooperative education model : American cooperative education is an effective education that combines students ' school learning and enterprise production experience based on students ' professional and professional goals, and gives students work remuneration. This model adopts the work-study alternation system. Students ' learning and working hours alternate, generally in weeks, months or semesters. Students work about 40 hours a week. By the end of the 1960 s, there was a half-day alternation system.

2.2 Domestic high-skilled personnel training mode

The four-in-one training model in Suqian City, Jiangsu Province, has established a new model of four-in-one training of skilled talents, including supervision and guidance, training and promotion, identification and access, and recommendation. The supervision guide is a special inspection of the employment access situation carried out by the labor supervision department in accordance with the law, and urges employers and employees to work with certificates ; training promotion, is the vocational training institutions according to the classification of professional types of work, the registration personnel training in batches ; identification access is that the vocational skill appraisal institution awards the corresponding national vocational qualification certificate to the qualified personnel ; the job recommendation is that the employment management service agency recommends the employment of the certified personnel, honors the certification reward policy, and supports the people with entrepreneurial aspirations to start a business.

Shanghai 's higher normal apprenticeship training model : the higher normal apprenticeship model is to take the enterprise as the main body, give full play to the leading role of the chief technician studio, the model innovation studio and the high-skilled talents, and

establish a personalized training system for high-skilled talents. Higher normal school refers to the talents with professional qualifications of technicians or senior technicians employed by enterprises, which are one level higher than the professional qualifications of apprentices. Apprentice refers to people with intermediate professional qualification level or equivalent to intermediate and above level. In order to cultivate compound talents, teachers can take one, two or more with one.

2.3 Enlightenment of domestic and foreign high-skilled personnel training mode to Zhejiang Province

Strengthen the advantages of school-enterprise cooperation. Colleges and universities should pay attention to the changes of enterprise demand in combination with the requirements of enterprise posts. Enterprises should do their best to provide funds, technology and equipment, and the two sides should jointly formulate training plans. Gradually reduce the distance between professional settings and enterprise needs, teaching content and training objectives, theoretical learning and practical training, so as to achieve from one-way cooperation to two-way cooperation, from recent cooperation to long-term cooperation, to achieve complementary advantages, win-win cooperation.

Enterprises actively carry out high-skilled personnel training. Fully and effectively play the main role of enterprises in the cultivation of high-skilled talents. It is necessary to guide enterprises to establish and improve the staff training system, improve the training system of high-skilled talents combined with the shortage of jobs and enterprise training, carry out multi-level and diversified post skills upgrading training, and carry out training and learning of new equipment, new technology, new materials and new knowledge, so as to give full play to the role of teachers' guidance and make enterprises an important position for training high-skilled talents.

3. Analysis of the reasons for the imbalance between supply and demand of high-skilled talents in Zhejiang Province

3.1 Conceptual reasons

It has always been only to get a high degree and diploma to have the opportunity to have the best development prospects and master the most social resources, high-skilled talents in society can not get due respect, not valued can not reflect its due value. Many parents are worried about their children's hardship, or hope their children to go to college, later become white-collar, gold-collar, income and social status will be relatively high, and read vocational and technical schools, is no way to choose. Many people have a white-collar plot, thinking that sitting in the office is superior to the lower factory. This distorted view of career choice has led many young people to be unwilling to learn skills as workers. A large number of vocational education institutions do not meet the needs of the market, but tilt funds, equipment, talents and other resources to general education, resulting in vocational education, both in scale and quality, is far from meeting the needs of economic development. Therefore, there is a structural employment contradiction. On the one hand, college students are facing a difficult employment situation. On the other hand, enterprises are facing a shortage of technicians, especially senior technicians^[3]. At present, high-skilled talents lack professional identity for their work, indicating that they are generally respected in enterprises, and those with concurrent management positions are more respected. Formally due to these wrong views of talent, resulting in the lack of students in technical colleges, resulting in insufficient supply of highly skilled personnel.

3.2 The professional structure of vocational education is unreasonable

Stagnation in the development of the industry, not able to market demand-oriented settings. The curriculum system adopts the traditional three-stage curriculum model, which is biased towards the systematicness and integrity of theoretical knowledge, and virtually causes the disconnection between theory and practice. There is a lack of double-qualified teachers in vocational education in Zhejiang Province. The overall quality of vocational education teachers is not high, and the proportion of professional course teachers and internship instructors is relatively low. Many professional course teachers are from the cultural curriculum reform. Lack of vocational education experience and professional skills, lack of ability to guide students in practical operation. The lack of funds leads to the lack of vocational and technical education bases, the lack of training platforms, and the weak teaching staff, which makes it difficult to meet the learning technology needs of high-skilled talents, resulting in the shortage of high-skilled talents and the low

quality of training.

4. Suggestions on the cultivation of high-skilled talents in Zhejiang Province

4.1 Improve the policy system, mobilize the enthusiasm of talent development

To create a benign development environment for the growth of skilled talents, we need a set of perfect laws and regulations system, and cooperate with the special guidance and supervision system, so that the grassroots departments can implement the talent policy and mobilize the enthusiasm of talent development. Judging from the experience of foreign vocational education development, policies to solve the shortage of skilled workers such as the national skills strategy gradually implemented by the British government have very clear goals and detailed implementation plans, which can be used as a reference for China 's policy formulation to formulate laws and regulations that are binding and driving forces for enterprises.

4.2 Change the awareness of talent cultivation and give full play to the initiative of enterprises in the development of skilled talents

The phenomenon that some enterprises pay more attention to the use of skilled personnel and less attention to training cannot be ignored, especially private enterprises and small and medium-sized enterprises, which fail to extract the full amount of staff education funds for front-line staff skills training, and the overall investment in staff vocational training is insufficient^[4]. It is necessary for enterprises to change their understanding of technical talents. The demand for technical talents comes from enterprises, and the main body of the new technician training plan is also enterprises. Therefore, it is necessary for enterprises to assume the main role of high-skilled personnel training.

4.3 Strengthen the interaction between vocational education and college education, improve the matching degree of training and occupation

While the government encourages enterprises to cultivate high-skilled talents, the basic role of higher vocational colleges cannot be ignored. Higher vocational colleges should aim at the cultivation of applied talents, take professional ability as the guidance, take technical practice as the task, make the curriculum design meet the needs of professionalization, and alleviate the shortage of high-skilled talents by implementing order-based education.

4.4 Cultivating an open international talent market

In response to the shortage of domestic talent market, developed countries have adopted various ways to attract technical talents and supplement their human resource reserves worldwide. Therefore, on the basis of ensuring no brain drain, we should increase the introduction of international high-skilled talents as much as possible, and set up a talent subsidy fund to encourage foreign skilled labor to be used by us.

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