

Analysis on the Strategy of Coordinated Development of Vocational Education and Regional Economy

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Abstract: vocational education has provided a large number of skilled talents with high quality and knowledge for regional economic development, and has made outstanding contributions to regional economic development. Vocational education has the most direct and close connection with regional economic development. Serving regional economic development is the most basic duty and function of vocational education. In the new period of development, the development of education can be described as the coexistence of opportunities and challenges. Reform and development coexist. In the new era of development, the positive role of education has been played a greater role, one of which is reflected in the process of promoting economic development. Higher vocational education for regional economic construction services has a strong role in promoting regional economy and is an effective guarantee for its sustainable development. This paper analyzes the current situation and existing problems of vocational education, deeply grasps the close relationship between vocational education and regional economic development, and puts forward the strategy of coordinated development of vocational education and regional economy.

1. Introduction

In recent years, china's vocational education has developed rapidly and its overall structure has developed steadily, making outstanding contributions to improving the knowledge quality and practical skills of workers, promoting economic and social development and improving employment [1]. The coordinated development of modern vocational education and regional economy is the mission and responsibility entrusted by the times. The logical agreement between the two blend in the demand of regional economic development for vocational education to cultivate skilled talents and the social responsibility that modern vocational education should bear [2]. The development of higher vocational education needs a strong economic foundation as its backing, while the development of regional economy needs the support of human resources and science and technology from higher vocational education. Higher vocational education and regional economy realize coordinated development in the process of continuous interaction [3]. The development of vocational education helps to improve the quality of workers and labor efficiency, thus providing strong support for promoting regional economic growth. Vocational education has the most direct and close connection with the development of regional economy, promoting the coordinated development of modern vocational education and regional economy and society, and improving the quality of training skilled talents [4]. Vocational education is an important part of the national education system. It shoulders the important responsibility of cultivating diverse talents and inheriting technical skills. It must pay great attention to and accelerate development.

From the current situation of china's higher vocational education and regional economic development, there are still many problems while the two are interdependent to achieve common development [5]. The scale and level of schooling of vocational education, planning and training of different types and levels of labor groups according to the regional industrial structure and regional economic development potential, determine the speed, efficiency and quality of regional economic development [6]. Higher vocational education, as an important part of china's education, has played an irreplaceable role in the training of professional talents in china [7]. In the new period, the goal of higher vocational education is also changing towards being more able to adapt to social progress

and economic development. Under the new normal economy, the national innovation-driven development strategy is implemented. Regional economic development and industrial transformation and upgrading urgently need to accelerate the transformation of power. The change in the mode of economic development places higher requirements on modern vocational education [8]. The development of regional economy provides a good external environment for the development of vocational education. The characteristic industries, industrial structure, and economic benefits of the regional economy determine and restrict the professional structure of vocational education, and the direction of personnel training [9]. This article analyzes the development status and existing problems of vocational education, grasps the close connection between vocational education and regional economic development, and proposes a strategy for the coordinated development of vocational education and regional economy.

2. The Relationship between Vocational Education and Regional Economic Development

Serving and promoting regional economic development are the main tasks of vocational education and the embodiment of its value. The existence of modern vocational education and regional economy is not fabricated out of thin air or achieved overnight, but a subordinate and logical process of development and combination. The healthy and orderly development of vocational education plays a strong role in promoting regional economic development [10]. The basic task of the development of modern vocational education is to cultivate morality and cultivate talents with high social responsibility, innovative spirit and practical ability for economic and social development. Higher vocational education has made important contributions to the development of regional economy in training applied technical talents, improving the level of production technology, broadening the channels of regional employment, promoting employment and reemployment, etc. In the process of interactive development of vocational education and regional economy, it is necessary for enterprises to solve the problems encountered in actual production, and constantly accumulate experience and innovative technology, so as to form a certain cutting-edge and applied technology. With the continuous upgrading of industrial structure, the regional economy has become more and more dependent on technology and talents, and the investment and expectation of higher vocational education have become higher and higher, which indirectly promotes the development of higher vocational education.

The strong efficient market hypothesis holds that all information in the market has been fully reflected in the price of financial assets. For example, the expansion plan of the enterprise in the future, the change of business mode and the personnel adjustment of the senior management of the company. Even though these information has not been made public, investors have obtained it in various ways, so the inside information that has not been made public has already become a public secret. The relationship between effectiveness and investment analysis is shown in table 1.

Table 1 Relationship between Market Effectiveness and Investment Analysis

	Technical analysis	Basic analysis
Invalid market	Invalid	Effective
Weak and effective	Effective	Invalid
Semi-strong and effective	Invalid	Effective
Strong and effective	Invalid	Effective

There are n indicators for evaluating the independent innovation capability of enterprises. On the basis of these indexes, the independent innovation capability of enterprises is quantitatively divided into T grades, which are described as the following quantitative comprehensive evaluation matter-element models:

$$Q(u_{ij}) = \sum_{i=1}^n \text{Max}_{1 \leq j \leq m} \{g_{ij}(T)\} \quad (1)$$

Regional relevance is proportional to distance, that is, the shorter the distance between regions,

the stronger the relevance. The matter-element model formed by the allowable value range of each index in the comprehensive evaluation of independent innovation capability is called nodal matter-element:

$$y_{f-n_m} = \sum_{i=1, i \neq n}^N \sum_{l=1}^M \sqrt{p_i} h_{i,n_m}^T W_{i,l} S_i \quad (2)$$

For the enterprise to be evaluated, the detected data or analysis results are expressed by matter element P:

$$d = 2r_b \left(\frac{\sqrt{2}\sigma_R B}{2\sigma_{td}} \right)^{1/\beta} \left(\frac{\sqrt{2}\rho_0 D^2 n k^{-2\gamma} l_e B}{16\sigma_{cd}} \right)^{1/\alpha} \quad (3)$$

In the current development process, higher vocational education has made great progress, but there are still some problems affecting its positive role. The basic goal of modern vocational education is to train technical and skilled talents for economic and social development. Serving regional economic development is the most basic duty and function of vocational education. The coordinated development of higher vocational education and regional economy is bi-directional, and the two are interdependent, mutually promoting and mutually reinforcing. The orientation of vocational education must be connected with the demand target of regional economic development, scientifically and reasonably adhere to the orientation of running a school, adjust the direction and target of running a school, and promote the healthy and coordinated development of regional economy [11]. In the process of higher vocational education development, many schools have poor progressiveness in curriculum and professional courses, and can not keep pace with the needs of the times. Many students have fallen behind the demand for economic development, and the effect of learning has been greatly reduced. Vocational education as a type of education, its rise and development has never been isolated, and its development also reflects different regional characteristics. The internal driving force of regional economic development lies in the adjustment of regional economic structure, which promotes the transformation and upgrading of traditional industries in the region and the development of regional characteristic industrial economy.

3. Strategies for Coordinated Development of Vocational Education and Regional Economy

3.1 Increase Investment in Vocational Education Funds

Higher vocational education, as the main position for training applied technical talents, is an important channel to solve the problem of regional talents and an important supporting force in the process of regional economic development. The level of economic development varies from region to region. As a vocational education oriented to the economic development of the region, one should first understand the current industrial situation and future industrial planning. When facing huge user data, any enterprise needs to find data suitable for its own development characteristics. Inconsistency of expected rate of return leads to inconsistency of time discount rate of financial institutions. The discount rate of time decreases continuously, and hyperbola is steeper than hyperbola, which means that the degree of inconsistency of time preference is obvious. As shown in Figure 1.

Although there are still some problems in China's higher vocational education in the current development, its own uniqueness is more prominent. A core content of the construction of modern vocational education system is to set up and build a scientific and reasonable professional structure [12]. From the perspective of regional economic development, the regional economic system determines the system and mechanism of vocational education, which in turn affects the school-running system, management system, target orientation and curriculum setting of modern vocational education. The training of applied technical talents puts forward higher requirements for training venues and equipment. The average cost of education per student is much higher than that of ordinary higher education. With the deepening of China's educational reform, this uniqueness has

become more obvious and has greatly promoted the continuous development of China's higher vocational education.

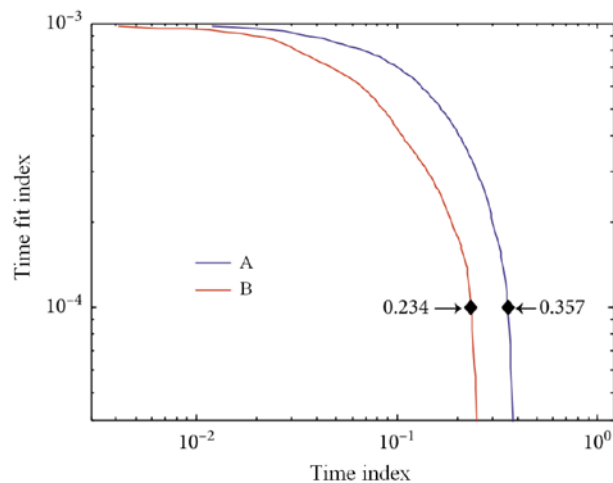


Fig.1 Time Inconsistency Curve

3.2 Setting Up an Open Education Concept

Under the new normal of economy, the position and role of material capital and natural resources in China's economic development are decreasing. The real foothold is talents to change the mode of economic growth and implement the innovation-driven development strategy. The nature of vocational education determines that schools should not be the only subject to train talents, and the combination with enterprises is the important way to train qualified talents. As an important part of higher education, higher vocational education actively focuses on the adjustment of industrial structure in accordance with the personnel training objectives, and strives to promote the transformation of knowledge capital of higher vocational schools into practical productive forces that win and benefit each other with the local regional economy. The specialty setting of modern vocational education is a systematic project, which is related to the purpose and direction of vocational colleges, and reflects the degree of matching with the regional economic and industrial layout. If modern vocational education can not meet the development requirements of regional economy, or even run counter to the development of regional economy, it will hinder the development of regional economy. In terms of personnel training, higher vocational education has carried out a more comprehensive work, not only focusing on the enrichment and utilization of educational resources, but also learning advanced international concepts and education models to promote the effective development of personnel training in China.

4. Conclusion

As a new way to promote the coordinated development between Higher Vocational Colleges and enterprises, the collectivized running of vocational education is an important form to realize the connection between higher vocational education and regional economy, and a higher level development of school enterprise cooperation. To meet the requirements of regional economic development and promote regional economic development is an important feature and outlet of modern vocational education. There is a close relationship between the progress of education and the development of economy. On the one hand, the development of economy can provide more resources for the progress of education, on the other hand, the progress of education can provide more technology and talents for the development of economy. The interactive development of vocational education and regional economy should be based on the long term, export all kinds of suitable applied senior technical talents to the society, and improve the regional service level of higher vocational education. In the current development process, there are still some problems in the coordinated development of higher vocational education and regional economy. However, with the continuous progress of education and the continuous improvement of economic development

forms, the mutual promotion between the two will become more obvious. It is an important trend for the future development of modern vocational education to continuously innovate the training methods of skilled talents, establish and perfect the growth mechanism of skilled talents, and undertake the lifelong vocational training system for laborers.

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