

The Fundamental Logic Basic Compliance and Main Path of High-Quality Development of Modern Vocational Education

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Abstract: High-quality modern vocational education is the symbol and support of high-quality economic and social development, and it is the "first move" to consolidate the foundation of China's industrial modernization. Accurately grasp "what is high-quality development, what kind of high-quality development to achieve, and how to achieve high-quality development", and focus on the construction of multiple systems, the improvement of service efficiency, and the demonstration of the value of education, so as to form the value identity and road self-confidence of the high-quality development of vocational education. The high-quality technical and skilled talents, skilled craftsmen, and craftsmen of great countries needed by society and industry fully demonstrate the special value and responsibility of vocational education given to economic and social development and the all-round development of people.

Keywords: Vocational Education; High-Quality Talent Training; Integration of Industry And Education; Technical Skills

At present, high-quality development is the primary task of building a modern socialist country in an all-round way, and education, science and technology, and talents are the basic and strategic support for building a modern socialist country in an all-round way. As the type of education that is most directly and closely related to economic and social development, high-quality modern vocational education is the symbol and support of high-quality economic and social development, and the "first move" to consolidate the foundation of China's industrial modernization. Putting the promotion of the high-quality development of modern vocational education in a more prominent position is a comprehensive deployment and strategic decision made by the

party and the government on vocational education. In January 2021, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the "Opinions on Promoting the High-quality Development of Modern Vocational Education" to systematically deploy the high-quality development of modern vocational education in China; In January 2022, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the "Opinions on Deepening the Construction and Reform of the Modern Vocational Education System", which built the "pillar" of the high-quality development of modern vocational education from the top-level design to the overall planning. With the economic and social development, the development pattern of vocational education has realized the transformation of the connotation from "seeking a career and making a living" to "unique value". To achieve the theoretical consensus and practical consensus on the development of modern vocational education in the realistic path of high-quality development, it is necessary to accurately grasp "what is high-quality development and what kind of high-quality development to achieve. How to achieve high-quality development", cultivate more high-quality technical and skilled talents, skilled craftsmen, and craftsmen of great powers, and lay a solid foundation for accelerating the construction of a strong country in education, science and technology, and talents.

1. The Fundamental Logic of the High-Quality Development of Vocational Education

1.1 Logical Starting Point: To Meet the Needs of Economic and Social Development
China's modern vocational education is rooted

in the soil of modern China's "salvation and survival", and its founder Huang Yanpei once pointed out: vocational education "is to seek the development of personality; preparation for personal livelihood; Preparation for individuals to serve the community; Fourth, to prepare for the increase of productivity in the country and the world"^[1], with the ultimate goal of "enabling the unemployed to have a job, and making the employed happy"^[2]. In modern China, vocational education should first solve the problem of human survival and give people the necessary skills for development, and secondly, it should solve the practical needs of the country's insufficient productivity and weak technical skills. It can be said that since the birth of vocational education, it has determined that it is the unity of personal development, social construction and national needs, and the coordination of realizing the all-round development of people and the overall improvement of productivity.

China's vocational education in the mid-to-late 80s of the 20th century showed large-scale development, especially after the 14th National Congress of the Communist Party of China, the construction of the socialist market economy system accelerated the social demand for applied talents at all levels, in 1994 At the second national education work conference of this year, Comrade Jiang Zemin pointed out: "It is necessary to vigorously develop vocational education and adult education at all levels." In 1998, under the Ministry of Education's vocational education development plan of "three reforms and one supplement," a prosperous situation was formed in which "the six-way army runs higher vocational education." The Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010-2020), promulgated in 2010, states that the modern vocational education system "meets the needs of the economy and society for high-quality labor and skilled talents". Entering a new era, the Third Plenary Session of the 18th Central Committee of the Communist Party of China (CPC) has clarified the development program for comprehensively deepening reform, and it is urgent for vocational education to provide support for high-quality technical and skilled talents. In 2014, the Decision of the State Council on Accelerating the Development of Modern Vocational Education pointed out that

"vocational education should adapt to the needs of technological progress and changes in production methods, as well as social and public services"; 2 The National Vocational Education Reform Implementation Plan in 2019 emphasized that "vocational education and general education are two different types of education and have the same important status".

Vocational education is no longer a supplement in China's current education system, the educational attributes of vocational education can be truly recognized, and the connotation of vocational education has a relatively clear basic definition, the new "Vocational Education Law of the People's Republic of China" stipulates that vocational education refers to "in order to enable the educated to have professional ethics, scientific culture and professional knowledge, technical skills and other comprehensive qualities required for a certain occupation or career development. It can be said that "the meaning of vocational education is the result of practical development, not of academic construction"^[3]. Its qualitative prescriptiveness is rooted in the entity of economic and social development, and the power source of its development is rooted in the necessity of the actual demand for talents. This determines that the establishment of vocational education takes the improvement of workers' vocational and technical skills and professional quality as the starting point of education, and is a concrete manifestation of the great development of the socialization of productive forces in the field of education. Therefore, based on the present, further clarifying and deepening the connotation of vocational education in the field of vocational education types is the logical starting point for realizing the high-quality development of vocational education.

1.2 Logical Path: The Pattern of High-Quality Development of Vocational Education

Industrial development and technological reform have shifted the "talent structure from a pyramid to an olive-shaped" ^[4]. The "high" of the development of industrial education presents a new shape, and there are two main directions: "upward" refers to the research and development and innovation of new technologies and new skills, supports the high-

quality transformation and development of the industry, and meets people's needs for higher quality and more personalization. "Downward" refers to the comprehensive application of complex job responsibilities and technical skills, the creation of economic and social value of enterprises in the service industry (especially entity enterprises), and the continuous development of "upward" development channels.

First, the innovation and development of technical skills has given rise to the high practical value of vocational education

As a type of education, it is different from other types of education and is an important manifestation of the "vocational" nature of vocational education. The academic education of academic colleges and universities is based on the in-depth development of disciplines, and "scientific discoveries and theoretical breakthroughs" [5] are its core characteristics. The applied education of applied undergraduate colleges refers to the "intersection of technicians and engineers" in the vocational belt [6], and the deeper reason behind the integration of industry and education is the change of knowledge production mode [7]. It is to translate the deduction of the theory into specific "construction drawings". Vocational education in vocational colleges is to serve the technological development and vocational needs of the industry, and the key point is the technological innovation and technological iteration of specific products or services. No matter what type of institutions and education are indispensable in today's high-quality economic development, as General Secretary Xi Jinping emphasized at the fifth collective study of the Political Bureau of the CPC Central Committee: "Strengthen the independent training of top-notch innovative talents, and provide talent support for solving China's key core technology research", "Targeted training of national strategic talents and urgently needed talents, and enhance the support and contribution of education to high-quality development", "Coordinate vocational education, higher education, and continuing education, and continuously cultivate high-quality technical and skilled talents, Great country craftsmen, skilled craftsmen". Under the surge of multi-source outbreak and convergence of science and technology, the

society urgently needs the talent support and intellectual support of "1-100" technology transformation, which determines that vocational education should shoulder the most diverse and cutting-edge task of promoting the upgrading of science and technology, and transform scientific discovery and knowledge production into technological innovation that can provide high-quality products or services. The faster the upgrading of technical skills, the higher the quality and adaptability requirements of vocational education, which is determined by the essential attributes of vocational education and the expectation of industrial development and modernization.

Second, the demand for talent is becoming increasingly complex, emphasizing the high level of supply of vocational education

With the rapid development of science and technology, job requirements are becoming increasingly complex and comprehensive, workers must have a more complete theoretical system, comprehensive ability and technical skills, and the type of talent can not be distinguished by simple innovation, engineering, technical skills, craftsmen, etc., the boundaries between talent types are more blurred, and the industry's demand for compound talents is more intense. Therefore, the content scope of vocational education continues to expand, the talent training model is constantly updated, and the types of students are more diverse, and the short-term technical skill training or single vocational education can no longer adapt to the development of economy and society. High-quality vocational education is oriented to the cultivation of complex abilities, teaching a high professional level of education with a perfect skill system, high-quality technical and skilled talents need to be systematic, staged, and long-term training, secondary vocational education, higher vocational education, vocational education undergraduate and even vocational education graduate students, the vertical development channel of vocational education needs to be smooth and constantly "move high". At the same time, vocational education is no longer a single post or technical unit of personnel training, the past vocational education is to cultivate skilled operation of machinery and equipment "skilled craftsmen", is to understand the process, fine skills of high-quality industrial workers. However, the rapid

development of the level of intelligence in today's society, so that the occupational structure and talent demand structure have undergone tremendous changes, artificial intelligence, industrial robots, the Internet of Things and other technologies have greatly reduced or even disappeared from the direct service front-line technical positions, this iteration of science and technology has brought about further changes in the social division of labor, practitioners need to deal with complex and advanced problems, while taking into account the technology of product and process research and development. Technical skills, it can be said that the position is oriented to the entire industrial chain or production streamline. For example, the on-site engineer is a compound talent demand based on the development of the whole chain of industrial chain and post chain, and the flat occupation, which is a complex of "engineers and technicians" who can solve complex processes and complex management.

Third, the all-round development of human beings requires a high level of functional orientation of vocational education

The change of talent demand directly determines the change of the functional orientation of vocational education. Since vocational education is a different type of education, then promoting the all-round development of people and serving the development and progress of society should be the main function of vocational education, people in vocational education activities are "free individuals" with subjective initiative, vocational education from "seeking employment" to "people-oriented", representing that the core goal of vocational education is no longer a single technical skill reserve for students' employment and entrepreneurship, as well as the career development competency and core values obtained by students in learning and practice. The two directly determine the employment quality and career prospects of students, and also directly affect the judgment and cognition of the government, society and the people on the quality of vocational education. On the one hand, vocational education cultivates people as an important part of human resources, in addition to cultivating people's technical skills, it is also necessary to cultivate their professional roles, give professional

responsibility, professional ethics, professional ideals, professional goals, professional spirit, etc., and grasp the "human capital elements with technical knowledge as the core and the values and cultural system with practice as the core" [8]. to build a value recognition of the high-quality development of vocational education. On the other hand, vocational education is the main body of development, can not utilitarian vocational education as an educational tool to meet the needs of industrial development, which confuses vocational education with vocational training, vocational education is to link human subjectivity with social development, guide students to integrate individual value with social value, fully mobilize subjective initiative, and achieve sustainable development of the ability and literacy of cultivation, which is manifested in the grasp of job needs, the pursuit of knowledge and practice, right. Planning for growth and success, full understanding of the real society, etc. Therefore, vocational education should always adhere to educating people for the party and the country on the fundamental issue of "what people to cultivate, how to train people, and for whom to train people", so as to form the cultural core of vocational education.

Fourth, the indispensability of social development has led to the high strategic position of vocational education

The transformation of the functional orientation of vocational education determines that vocational education should not only closely follow the needs of the construction of a modern industrial system, but also build a vocational education force that supports the overall situation of social development through the cultivation of talents and the innovation of technical skills, and give full play to the irreplaceable role of vocational education in supporting the development of the real economy, rural revitalization, solving grassroots employment, inheriting intangible cultural heritage, and the prosperity and stability of ethnic areas. Therefore, vocational education cannot be narrowly understood as a type of education that meets the needs of front-line production, but a "basic project" and backbone that supports national strategies and economic and social development. Vocational education needs to be closely linked with other types of education and other social systems,

and promote the in-depth docking of education chain, talent chain, industrial chain, innovation chain and supply chain, which is the only way to achieve the high-quality development of vocational education. Vocational education is an important fulcrum of the national talent strategy, innovation-driven development strategy, and education power strategy, and its high status is self-evident. Only by fully demonstrating the special value of vocational education can we fundamentally change the social phenomenon of "short-sighted" and "amblyopia" vocational education, and assume the new mission given to vocational education by the times.

2. The Basic Compliance of the High-Quality Development of Vocational Education

With the transformation of the development pattern of vocational education, on the basis of deepening the understanding of the logic and rationale of vocational education, vocational education must adhere to the type positioning in order to achieve high-quality development, and form the value identity and road confidence of high-quality development of vocational education.

2.1 System Construction of Diversified Integration: Deepen the Integration of Vocational Education, Industry and Education, and Science and Education

The development of vocational education is not to separate vocational education from other types of education, but only to interconnect with other types of education and other social systems can fully demonstrate the vocational nature of vocational education. So who do you connect with? And how to achieve integration? This is the primary principle for the high-quality development of vocational education. The "Opinions on Deepening the Construction and Reform of the Modern Vocational Education System" clearly points out the direction: "to deepen the integration of industry and education as the focus, to promote the integration of vocational education as the key, to the integration of science and education as the new direction". This points out three dimensions for the diversified integration system of vocational education.

First of all, the "integration of vocational education" plans for the high-quality

development of vocational education from the perspective of value recognition. On the one hand, from a formal point of view, vocational education and general education are integrated, and application-oriented undergraduate education is integrated, and the dual-track operation of "further education" and "employment" forms a "rising channel" for high-quality technical and skilled talents, and general vocational education is relatively independent and complementary to each other. On the other hand, from the perspective of content, vocational skills training and technical skills research and development are integrated, and talent training not only covers the specific "instrumental rationality" of the "vocational belt", but also includes the humanistic and technological literacy and personality and moral cultivation necessary for career development, which is consistent with the mission of higher education to "make people become independent and conscious people"^[9]. Secondly, the "integration of industry and education" analyzes the high-quality development of vocational education from the main line of development. The integration of industry and education in vocational education should be oriented to technological upgrading and transformation, oriented to R&D and production practice, break through the supply and demand blockages, break the technological boundaries, and integrate the talents, intelligence, technology, capital, management and other advantageous resources in education, industry and science and technology, so as to fundamentally improve the core competitiveness of vocational colleges. At the same time, with a scientific, open and market-oriented policy support system, the upstream and downstream coordination and integration of scientific research institutions, enterprises and other diversified industry-education integration subjects will be smoothed. Third, the "integration of science and education" allocates the high-quality development of vocational education from the source of power. Therefore, in order to achieve high-quality development, vocational education must return to the research and development of technology and the construction of technical knowledge system, which is the only way to build a modern vocational education system.

2.2 Improving the Quality and Efficiency of Service Efficiency: Realizing the Organic Unity of Empowering Individuals and Serving the Country

Vocational education is an important part of the national education system and human resource development, craftsmen and high-skilled talents have been included in the national strategic talent team, and it is necessary to form a recognition of vocational education at the national level, social level and individual level, so that it must serve the all-round development of individuals and the modernization of the country, which is the mission of education given to China as a large socialist country, and it is also the organic unity of vocational education and educational attributes.

Under the changes in the global political and economic pattern, the coordinated development of the whole industrial chain is the basis for all countries to cope with economic risks, which urgently needs a talent system to support the development of the whole industrial chain. The construction of the industrial chain not only requires top-notch innovative talents to lead front-end scientific and technological innovation, but also requires a large number of front-line engineers and technical skills to realize the transformation and application of innovative achievements. The purpose of the high-quality development of vocational education is to continuously provide high-quality technical and skilled talents for China's modernization, and vigorously developing vocational education is the "first move" to improve the level of China's human capital and consolidate the foundation of the industrial chain. At the same time, we are building an economic pattern of international and domestic dual-cycle development, and eliminating regional development differences and narrowing the gap between the rich and the poor are the new growth points of the domestic economic market. Vocational education is an important channel to promote common prosperity, promote rural revitalization, and expand middle-income groups quantity, development potential, enhance the adaptability of technical and skilled talents to industrial positions, provide diversified choices and multi-path opportunities for students with different endowments, different interests and specialties,

different quality potentials and different learning stages, and constantly inject fresh vitality into the market. On the other hand, it is necessary to consolidate the talent foundation in underdeveloped areas, create a group of new professional farmers, national skill masters and other technical leaders urgently needed for regional development, and serve rural revitalization and the construction of a skill-based society.

2.3 Positive Demonstration of the Value of Education: Adhere to the Convergence of Internal and External Logic of Vocational Education

On the one hand, the educational value of vocational education comes from the fundamental task of cultivating morality, and on the other hand, it comes from the vocational requirements and technical needs under the social division of labor. Highlighting the special educational value of vocational education, from a macro point of view, vocational education is the cornerstone of technical research and innovation as the theoretical construction of vocational education and education and teaching practice. Therefore, in order to achieve high-quality development of vocational education, it is necessary to establish a discourse system and academic form of vocational education, form a vocational education culture with "excellence and innovation" and "craftsman spirit" as the core, sublimate the practice of technical skill innovation into the spiritual core and theoretical source of promoting the continuous reform and innovation of vocational education, and shape the vitality and vitality of the sustainable development of vocational education. From a micro point of view, the professional construction and teaching resource development of vocational education should walk in the front end or even in front of industrial development, and actively explore the new direction and new inflection point of industrial development, technological and technological transformation, and social services, so as to produce teaching standards, technical standards, and industry standards that meet social requirements, so as to integrate regional or industrial vocational education resources, innovate various vocational education carriers and training models, truly integrate the "four new" into curriculum

construction and textbook construction, and improve the quality of independent training of vocational education talents and independent technological innovation. Let the internal logic of vocational education be subordinated to the external logic of economic and social development, and take the development path of "leading education by production, determining education by production, reforming education by production, and promoting education by production".

3. The Specific Path of High-Quality Development of Vocational Education

3.1 Find out the Development Orientation of Vocational Colleges and Build a Solid Community of Integration of Industry and Education

The high-quality development of vocational education is ultimately reflected in the high-quality development of vocational colleges, and the current vocational education policy dividends are intensively released, and it is urgent for vocational colleges to deepen the implementation and creative practice, and take the lead in key areas such as the integration of industry and education, and talent training. In practice, each vocational college is affected by industry, region, major, history and other factors, with different resource endowments, vocational colleges should reasonably allocate internal and external resources, find out the positioning of school development. First of all, it is necessary to clarify the region and industry oriented to the training of its own technical and skilled talents, and shape the "strategic positioning" of the core competitiveness of higher vocational colleges. Specifically, the professional setting should be "adaptable" and "transcendent" to a certain extent, follow the economic and social development, and be able to predict the needs of economic and social development, so as to avoid following the trend and blindly starting the race; Professional construction should be "open", closely follow the front end of the development of industry enterprises, carry out education and teaching reform with multi-element collaboration and multi-system integration, explore the reform of talent training mode of co-construction and sharing, and avoid homogeneous competition, competition involution, and convergence of

mentality. Secondly, it is necessary to grasp the key path and necessary questions of the reform of the modern vocational education system, which is the integration of industry and education, and the integration of science and education, and build the core competitiveness elements of higher vocational colleges from the path design. Specifically, colleges and universities should form a relatively stable and systematic "community" structure with industry enterprises, form a development pattern of benign interaction between industry and education, and complementary advantages of schools and enterprises, so as to avoid the "derailment" of education and teaching in vocational colleges and the social environment.

3.2 Strengthen the Development of Vocational Education and form the Core Competitiveness of Vocational Colleges

At present, higher vocational colleges are in the "quality improvement and multiplication period" of high-quality development, and various project construction, curriculum reform, and competition selection are emerging in an endless stream, and vocational colleges are bearing a lot of reform pressure, and they are also easy to be "kidnapped" and lose "determination" in the complex reform and construction. Vocational education should be adapted through reform, integration and even advance of the layout of industrial transformation and upgrading, this process is the process of vocational colleges to achieve quality "metabolism", to enhance the resilience of development, do not blindly follow the trend of construction, to pay close attention to the quality of all aspects of talent training, to explore their own school-running characteristics, construction focus, continue to make efforts, long-term work, in order to be more confident, more calm to deal with the interference and impact of the external environment. Specifically, first of all, establish and improve the carrier and mechanism of the integration of industry and education that closely link the three core functions of education and teaching, scientific research and social service of vocational colleges, and realize symbiosis and common prosperity from multiple aspects such as mechanism, resources, paths and carriers, so as to reduce external risks and reform costs, and improve the adaptability of education and teaching reform

and talent training; Secondly, vocational colleges should provide long-term and timely creative output for the industry to urgently need technology, and boldly explore new industry-education integration physical operation platforms such as mixed ownership, industrial colleges, and on-site engineer colleges, so as to provide full support for technological innovation, process transformation, product research and development, and stunt inheritance; Furthermore, vocational colleges, especially higher vocational colleges, should fully grasp the development trend of the industry and the law of student growth to form a talent "demand map", and deeply integrate the industry's specifications, standards, and quality requirements for the training of technical and skilled talents into the process of talent training programs, new teaching materials, and teaching reforms, so as to form a precise closed loop of talent training and shape the gathering highland of technical and skilled talents.

3.3 Closely Follow the Main Line of Vocational Education Development and Improve the Key School-Running Capacity of Vocational Colleges

Brian Arthur points out in his book *The Nature of Technology* that "technology is a means to achieve human ends, to serve and affirm our lives"[10], and that high-quality vocational education is the most. In the end, it is reflected in the promotion of rapid economic and social development through the supply of high-quality talents, and vocational colleges are the "source of living water" for enterprises to achieve technological innovation, and the "source of technical skills" to serve the people's better life. Therefore, the "key ability to run a school" is the key factor group for the development of vocational colleges, vocational colleges to create a number of core courses, high-quality teaching materials, teacher teams, practical projects, service enterprise staff training, product pilot, process improvement, technology research and development, etc., of course, its external support is the vocational college general vocational integration, integration of production and education, science and education integration of resources gathering. It should be noted that in this process, the teaching staff is the key subject of

talent training, and the construction of a high-level "double-teacher" team is the key to improving the school-running ability of vocational colleges. An important pillar, professional teachers should form a two-way flow between schools and enterprises, build a normal mechanism for the improvement of teachers' professional ability and teaching ability, and provide high-quality team support for the reform and development of vocational colleges.

General Secretary Xi Jinping pointed out: "Adhere to the people-centered development of education, take the initiative to advance the layout, effectively respond to changes, strive to open up a new situation, accelerate the modernization of education, strengthen the foundation of people's happiness with the power of education, and consolidate the foundation of national prosperity with the strength of education", and the high-quality development of modern vocational education is an important part of building a "strong country in education". It is an important support for the realization of a modern socialist country. With the economic and social development, the high quality of vocational education has a new meaning, based on new development opportunities and development positioning, only by constantly breaking through the cognitive limitations and mindset of vocational education, and re-examining the authenticity and value of vocational education from a strategic perspective, can we do a good job in "education that satisfies the people" and allow every professional to achieve "free and comprehensive development".

Acknowledgments

This paper is supported by 2024 Humanities and Social Science Research Project of the Ministry of Education in Western and Border Regions: Construction and Empirical Research on the Collaborative Mechanism of Industry-Education Integration Based on Convergence of Interests (24XJC880010); Sichuan Provincial 2024 Education Science Planning Project: "Research on the Long-term Mechanism of Municipal Industry-Education Consortium".

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