

Analysis of the Development Trends of China's Vocational Education Industry in 2024

Translator: Liu Xiaofei

1. The Industry related definitions

Vocational education refers to the education that enables learners to acquire the professional knowledge, skills, and ethics which are needed in certain professions or productions.

Vocational education includes vocational school education and vocational training. Vocational school education includes various vocational and technical schools, technical schools, vocational high schools (vocational middle schools), etc. Vocational school education is a degree-based education, divided into primary, secondary, and higher vocational school education. Vocational training includes various types of vocational training, such as pre-employment training for employees and re-employment training for laid-off workers.

2. Current Development Status of the Industry Market

A. Market size

Due to a series of encouragement measures provided by the government to provide a favorable policy environment for vocational education, coupled with increasingly fierce competition in the job market, and the constantly changing demand for talent in the job market with technological progress and economic development, the vocational education market is experiencing unprecedented scale expansion.

In recent years, China's vocational education has vigorously promoted the application of modern information technology, making significant progress in information infrastructure construction, digital education resource development, personnel technical training, and management system application. The construction of digital ecology has achieved positive results.

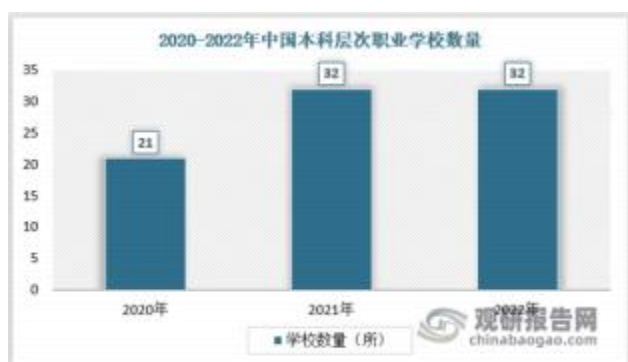
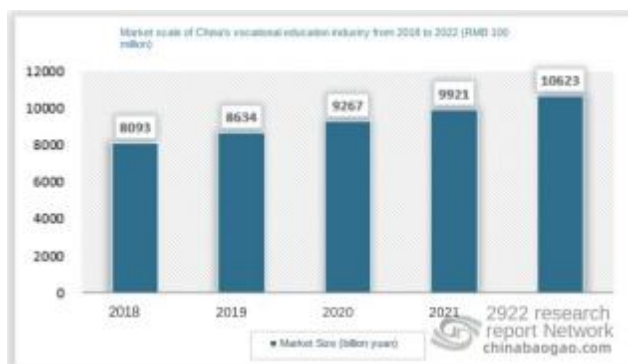
Over 90% of vocational schools have built campus networks that operate smoothly and are fully functional; over 85% of vocational schools have completed digital campuses according to standards. A number of online course platforms have been established, 203 national professional teaching resource libraries for vocational education have been built, and 992 high-quality video open courses and 2886 national high-quality resource-sharing courses covering 12 disciplines including literature, science, engineering, agriculture, and medicine have been developed.

In 2022, China implemented the "Education Digitization Strategy Action" and launched the National Vocational Education Smart Education Platform, which gathered 1200 professional resource libraries, more than 6600 online premium courses, and more than 2000 video open courses. Its users covered various provinces across the country and benefited more than 180 countries and regions.

B. Supply situation

There are a total of 7201 secondary vocational schools in China in 2022. From the policies released in recent years, it can be seen that the national policy for developing vocational education at the undergraduate level has become increasingly clear and firm, and vocational undergraduate colleges have achieved positive and stable development.

As of 2022, there area total of 32 undergraduate level vocational schools in China, an increase of 11 compared to 2020.



C. Demand situation

China has established the world's largest vocational education system, with over 29.15 million students enrolled in vocational schools. At present, domestic vocational schools can cultivate about 10 million high-quality technical and skilled talents every year, and existing vocational schools carry out various types of training for over 100 million people every year.

Forecast of skilled talents gap in key areas of China's "14th Five-Year Plan" (ten thousand people)

| Key areas | Total talent forecast | Talent Gap forecast |
|--|-----------------------|---------------------|
| New generation information technology talents | 2000 | 950 |
| High-end CNC machine tools and robots | 900 | 450 |
| Aerospace Equipment | 96.6 | 47.5 |
| Marine engineering equipment and high-tech ships | 128.8 | 26.6 |
| Advanced rail transit equipment | 43 | 10.6 |
| Energy saving and new energy vehicles | 120 | 103 |
| Electric Equipment | 1731 | 909 |
| Agricultural machinery equipment | 72.3 | 44 |
| New material | 1000 | 400 |
| Biomedical and high-performance medical devices | 100 | 45 |

Since 2019, the number of undergraduate vocational schools and enrollment in China has been continuously increasing. As of 2022, there were 41400 enrollments in

domestic vocational undergraduate programs, an increase of 2946 people or 7.66% compared to the previous year. The Implementation Plan for the "Skilled China Action" issued by the Ministry of Human Resources and Social Security clearly requires an increase in the number of skilled talents during the 14th Five Year Plan period.

With the upgrading of industrial structure, China's demand for talent in technology intensive fields such as new generation information technology and new materials is constantly increasing; However, labor-intensive but low-added-value industries, such as wholesale and retail business, construction, etc., are experiencing a slowdown in growth and an oversupply of labor, which urgently requires the improvement of vocational skills. The dilemma of employment and recruitment in the labor market coexists, and vocational education faces a huge market demand.

Currently, there is a high demand for professionals in the digital technology field in the market, and the supply of high-quality human resources is seriously insufficient. Therefore, the country regards vocational skills training as a key measure to maintain employment stability, alleviate structural employment contradictions, as well as an important support for economic transformation and upgrading and high-quality development.

3.Forecast of the Development Trends of Vocational Education Industry in 2024

A. The deep integration of digital technology

As one of the buzzwords of 2023, "artificial intelligence" is profoundly changing the nature, content, work methods, and requirements for vocational skills and qualities of many social professions. As early as 2017, the State Council issued the "Development Plan for the New Generation of Artificial Intelligence", which proposed to "establish a multi-level education system for artificial intelligence" and "encourage vocational colleges and ordinary universities to offer artificial intelligence related majors or courses", to advance the deployment and construction of China's first mover advantages in the development of artificial intelligence. Vocational education workers should keenly perceive the development and progress of technology, fully understand the changes in

social production and lifestyle, and welcome new technologies with a positive attitude, accepting them and applying them.

On the one hand, vocational colleges need to adapt to the new demands of the labor force structure brought about by social and occupational changes in talent cultivation. At the same time, they also need to timely introduce and apply new technologies in the talent cultivation process, improve the pertinence and effectiveness of talent cultivation and technology research and development.

In order to meet the future work, life, and development needs of students from various disciplines, schools should promote digital technology in daily teaching, such as the development trends of artificial intelligence, virtual reality, and big data analysis. This will guide students to correctly understand and apply digital technology to serve their personal growth and progress.

It is also necessary to incorporate general courses on digital technology into the curriculum system, organize students to learn basic concepts and application cases of artificial intelligence, virtual reality, and big data, systematically cultivate students' higher-order thinking abilities, integrate innovative technological thinking into different professional problem-solving, enable students from different majors to understand the theoretical research and application development of digital technology from their own perspectives, cultivate professional general abilities, and enhance their ability to face future workplace challenges.

Digital technology will lead to a new paradigm for modernizing the governance of vocational colleges, stimulate innovative driving forces for modernizing the governance of vocational colleges, reshape the governance system of vocational colleges, and bring the high-quality development of vocational education.

B. Accelerated landing of modern industrial colleges

From "integration of industry and education" to "integration of industry and education", from order classes to professional co-construction, practical training bases, and then to modern industrial colleges, the integration of industry and education has undergone a transformation from shallow to deep, becoming the core driving force for the high-quality development of vocational education. With the rapid progress of industrial structure transformation and upgrading, many emerging technologies, digitalization, and information industries have put forward higher requirements for talent cultivation. In this process, digitization, information technology applications, intelligent devices, and smart campuses have a more profound impact on the integration of industry and education, bringing industry university research cooperation to a more cutting-edge stage.

In 2020, the country released the "Guidelines for the Construction of Modern Industry Colleges (Trial)", officially entering the stage of modern industry colleges through the integration of industry and education. The construction of modern industrial colleges is oriented towards current and future industries, requiring more emphasis on industry demand orientation in talent cultivation, scientific research, and social services. Afterwards, after the release of the "Opinions on Deepening the Reform of Modern Vocational Education System Construction" in 2022, Chen Ziji, the person in charge of the Vocational Education and Adult Education Department of the Ministry of Education, stated that the development of vocational education has achieved three major changes in functional positioning reform, from "education" to "industry education", from "career seeking" to "people-oriented", and from "classification" to "collaboration" in development path.

In the process of promoting the construction of modern industrial colleges under the guidance of policies, the following aspects need to be focused on:

firstly, promoting the integration of industry, academia, and research by introducing enterprises into education; Secondly, using real projects and environments of enterprises as teaching scenarios; Thirdly, promote the synergy between professional certification and entrepreneurial employment qualifications; Fourthly, through collaborative innovation of talent cultivation models, establish a two-way flow mechanism; Fifth, schools, enterprises, and institutions should establish a collaborative and win-win organizational system. Finally, to achieve circular development of the education chain, innovation chain, and industrial chain, in order to promote the cultivation of great country craftsmen and the construction of a skilled society.

C. Vocational education going global, steady and practical

Internationalization of vocational education is an important way to cultivate high-quality talents that meet the needs of internationalization, enhance national education level and international competitiveness, and achieve the goal of becoming a strong education country. In recent years, vocational education has implemented the "Opinions on Deepening the Construction and Reform of Modern Vocational Education System" issued by the General Office of the Communist Party of China and the State Council, which require "serving international production capacity cooperation and Chinese enterprises going global". It has organized and promoted vocational colleges to form groups with "going global" enterprises to "go global" and cultivate and train localized technical and skilled talents for overseas Chinese enterprises.

Vocational colleges also face some specific difficulties and problems in overseas education, which to some extent affects the pace of "going global". On the one hand,

there is a lack of linkage between international production capacity cooperation and education opening up to the outside world, and the cross-border exchange mechanism is not smooth enough. On the other hand, the lack of dedicated support at the national level means that the cost of running schools are essentially borne by the schools and their cooperative enterprises, which affects the scale of education and sustainable development. However, China has established the world's largest vocational education system, forming a unique modern vocational development paradigm. It is necessary to make vocational education a public product that serves the world. At the same time, it is necessary to actively participate in global educational governance, vigorously promote the brand building of 'Studying in China', tell China's stories well, spread Chinese experiences, and make China's voice heard, thereby enhancing the international influence and discourse power of our country's education.