

Research on the Talent Training Model of "Dual Coordination, Three-Chain Docking, and Four-Dimension Guarantee" under the background of Future Network Technology

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Abstract: With the continuous development of 5G technology, Internet of Vehicles, cloud computing and other technologies, the Internet era will enter the future network era. Mobile terminal equipment will become more indispensable products for people's lives and work, and mobile platforms are becoming more diversified, enriched, and intelligent. "Cloud" technology will be more integrated into people's lives, work, and teaching. Great changes have taken place in the talent training model of higher vocational colleges. The influence of the development of future network technology on the training mode of higher vocational talents is an urgent problem to be solved. The main issues studied in this subject include the impact and solutions on the professional setting of higher vocational colleges, curriculum construction, school-enterprise cooperation, etc. The research content is mainly divided into four parts: first, research and investigation of future network technology and talent training models in higher vocational colleges; second, collation and analysis of research data, to provide reference for follow-up research; third, construction based on research data "Dual synergy, three-chain docking, four-dimensional guarantee" talent training model; fourth, "dual synergy, three-chain docking, four-dimensional guarantee" talent training model implementation guarantee; The vocational talent training model provides a theoretical reference.

1. Current Situation of the Current Higher Vocational Talent Training Model

The orientation of talent training in higher vocational colleges is based on market-oriented training of technical talents, and higher vocational colleges pay more attention to practicality in talent training [1]. According to research findings, the current major talent training models in higher vocational colleges include order-based classes, modern apprenticeships, and school-enterprise cooperation.

1.1. Order Class

The "Order Class" talent training model is employment-oriented and follows the principle of combining production, education and research. The school signs employment and talent training agreements according to the needs of the enterprise, clarifies the responsibilities of both schools and enterprises, and conducts order-based training. After completing the basic knowledge in school, students can participate in the real enterprise project of the enterprise [2]. The school guarantees to train the required talents in accordance with the needs of the enterprise, and the enterprise guarantees to employ qualified graduates to work in the enterprise. The relationship between the school and enterprise is a cooperative and mutually beneficial relationship in the process of talent training.

1.2. Modern Apprenticeship

The "modern apprenticeship" talent training model is a new type of talent training model that the government, schools and enterprises jointly train students. In the process of talent training, enterprises participate in the whole process of vocational education talent training, realizing the connection of professional settings and industry needs, the connection of curriculum content and professional standards, the connection of teaching and production processes, the connection of graduation certificates and vocational qualification certificates, vocational education and lifelong learning Docking, improve the quality and pertinence of talent training. The government gives enterprises, vocational colleges and students appropriate policy support or subsidies to reduce employment pressure and promote social stability; higher vocational colleges provide students with learning opportunities and learning conditions, and obtain reasonable benefits from them, and promote higher vocational education The continuous development of the company; the company provides students with internship positions and skills training to reduce production costs and improve economic benefits; students pay part of the tuition for higher vocational colleges, obtain labor benefits from the company's internship positions, and improve themselves in the course of job practice Professional skills to realize personal value.

1.3. School-Enterprise Cooperation

The school-enterprise cooperation talent training model is the joint training of talents between schools and enterprises, which aims to strengthen the pertinence and practicality of teaching, improve students' comprehensive quality, cultivate students' practical ability and practical ability to solve problems, and realize the diversification of talent training [3]. School-enterprise cooperation talent training can be a learning model that can be combined with production, labor and social practice, and carry out order training, and explore teaching models that are conducive to enhancing students' abilities, such as work-study alternation, task-driven, project-oriented, and on-the-job internships. School-enterprise cooperation talent training implements school and department secondary management. The school is responsible for review, inspection and handling of major issues, and the department is responsible for specific implementation and management.

Most of the above-mentioned training model curriculum systems focus on practicality, but only teach students how to do it, but do not really make students understand why they should operate in that way, and how to explore better operations. Students trained under this training model lack innovative thinking and cannot adapt well to the needs of future network development.

1.4. Build a Talent Training Model That Meets The Needs of Future Network Development

The development of the future network puts forward new demands for the training of professional talents in higher vocational education. This project is based on the background of future network technology construction, conforms to the talent training requirements of the new era, and explores a talent training model that meets the needs of future network development. This training model should not only focus on students' skill training, but also take into account students' information literacy and innovation and entrepreneurship. ability.

The capacity and update speed of information in the future network age is astonishing. As college students in the new era, to adapt to new learning models and learning content, information literacy plays a vital role. How to quickly obtain the information you need from the data of the Internet of Everything, and process and use the information, the answer is information literacy. Possess high information literacy, which can be used and benefited infinitely throughout your life. Excellent information ability can improve learning efficiency, improve life convenience, improve employment competitiveness, and easily adapt to social development and changes.

Since 2007, the Ministry of Education has initiated the implementation of the "National Innovation Plan", in accordance with the principle of "interest-driven, independent practice, and process-oriented", advocating students as the main body to carry out innovative practice, and promoting the teaching content, curriculum system, and practice links of colleges and universities. Comprehensive reforms will be carried out in other aspects to enhance the innovation and entrepreneurship capabilities of college students. The 18th National Congress of the Communist Party of China clearly stated that it is necessary to increase support for the cultivation of innovative and entrepreneurial talents [4]. General Secretary Xi Jinping has issued important instructions on many occasions, demanding to speed up the reform of the education system, focus on cultivating students' innovative spirit, and create a large-scale, innovative spirit, and a team of innovative and entrepreneurial talents who dare to take risks. Premier Li Keqiang has also repeatedly emphasized that the core of "mass entrepreneurship and innovation" is to stimulate people's creativity, especially youth.

Therefore, the future network development talent training model must take into account "skills + information literacy + innovation and entrepreneurship", train students to innovate and entrepreneurial consciousness in the future Internet era, cultivate their strong information literacy and professional skills, enhance the innovation and entrepreneurship capabilities of college talents, and strengthen knowledge, abilities. Quality construction to meet the requirements of future network technology for talents' cross-border integration ability, personalized development, production, education and research, innovation and entrepreneurship ability, reduce the impact of graduates entering the information society, improve their own competitiveness, and contribute to the development of the country. Greater contribution.

2. Constructing a Talent Training Model of "Dual Coordination, Three-Chain Docking, and Four-Dimensional Guarantee"

The talent training model of "dual coordination, three-chain connection, and four-dimensional guarantee" aims at cultivating the upgrading and adjustment of industrial structure in the future network era, and cultivating "composite and innovative" technical skills talents. School-enterprise collaboration, docking the industrial chain, In the talent chain and innovation chain, the talent training model is reformed around the four dimensions of the ideological and political education system, the curriculum system, the information literacy training system, and the innovation and

entrepreneurship education system. Figure 1 shows the structure of the talent training model of "dual coordination, three-chain docking, and four-dimensional guarantee".

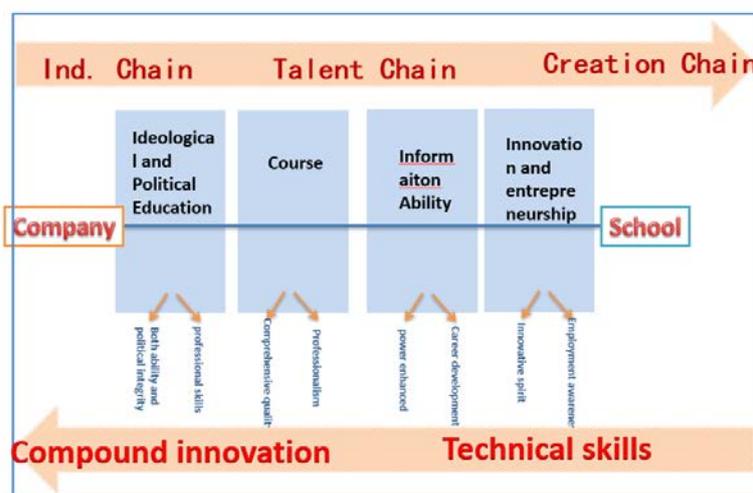


Figure 1: "Dual coordination, three-chain docking, four-dimensional guarantee" talent training model structure diagram

2.1. Dual synergy

Dual collaboration means that schools and enterprises collaborate to educate people, implement the joint development of teaching resource bases between schools and enterprises, implement reforms in teaching materials and methods, build a high-level teacher teaching innovation team, build technical skills and service peace and enhance professional technical service capabilities. Focus on professional service industry and regional development, explore innovative mechanisms for the integration of industry and education, build a platform for integration of industry and education, and create a community of shared interests and risk-sharing school-enterprise destiny. During the construction period, we will carry out in-depth integration of industry and education with well-known companies, jointly build industrial colleges and excellent workshops, and form an innovation mechanism of industry and education integration with enterprises as the main leadership, colleges as the important support, and key core technologies in the industry as the central task. Implement product research and development, achievement transformation, technical services, practical training, social training and other functions.

2.2. Three-chain docking

Facing the challenges of future network technology, actively meet the requirements of the new and old kinetic energy conversion and the "top ten" industries for high-skilled talents, deepen the integration of industry and education, connect the industry chain, talent chain and innovation chain, and investigate the profession's corresponding positions in the industry. Field, determine the training target of professional talents.

2.3. Four-dimensional guarantee

Persist in the fundamental task of cultivating people, and explore to build an ideological and political education system that aims at cultivating qualified builders and reliable successors of

socialism with Chinese characteristics in the new era, and "integrates skills and educates people" [5]. The system focuses on cultivating socialist successors, focuses on the full play of the leading role of party building, takes the dual-axis drive of "morality and technology" as the ideological and political education model, and takes full, full, full, and full curriculum education as the model. Specific ways. Promote the same direction of ideological and political courses and ideological and political courses.

Docking international first-class enterprise job standards, building professional groups, integrating and optimizing the existing courses of professional groups, building professional groups to share quality education platform and professional basic courses platform, professional direction course modules, quality and comprehensive practice expansion course modules, school-enterprise. Jointly build a "platform + module" professional group curriculum system of "platform sharing, direction diversion, expansion and mutual selection". The professional group curriculum system breaks through the professional curriculum barriers of the professional group, realizes the sharing of courses on the bottom platform of the professional group, the diversion of courses in the middle professional direction, and the mutual selection of upper-level expansion courses.

The "one-oriented, three-stage" embedded information literacy training system model is employment-oriented, with three stages of training in preparation, embedding, and service. The preparatory phase mainly focuses on the external environment of employment education and its related analysis, which is embedded. The education model obtains management support and sets a common goal recognized by the teaching department, library and employment guidance center.

In the embedded stage, the information literacy education team needs to reorganize the process based on business analysis, form a teaching team, and find the entry point of embedded teaching together with the employment education team, and expand services around common goals. In addition, the teaching objects must be tracked dynamically, combined with the shared data provided by the employment guidance center for data collection, analysis, and sorting, to form a dynamic feedback report, and share the research results with the employment education team. The employment education team also embeds information literacy education into teaching activities on the basis of optimizing and integrating business, and uses the shared information provided by the information literacy education team to improve the service model. At the same time, the employment education team should strive to provide basic guarantees for the embedded education model in terms of policy support and guidance guarantees, and build a cooperation platform that facilitates the collaboration of both parties. Finally, it is necessary to work with the information literacy education team to study the evaluation and assessment mechanism under this education model.

In the service stage, the two partners will finally provide employment guidance services for students in vocational colleges after completing the work that needs to be run-in and perfected in the preparation stage and the embedding stage. At the same time, the information literacy abilities of the teaching objects must be followed up and researched dynamically, and their employment. Long-term follow-up of the situation, and data collection and sharing should be done. In addition, in the service stage, it is possible to further optimize the cooperation model, expand and deepen the cooperation service projects, and complete the dynamic analysis report of the teaching effect on a regular basis, and form a long-term basis on this basis. Dynamic evaluation guarantee mechanism, as show on figure 2.

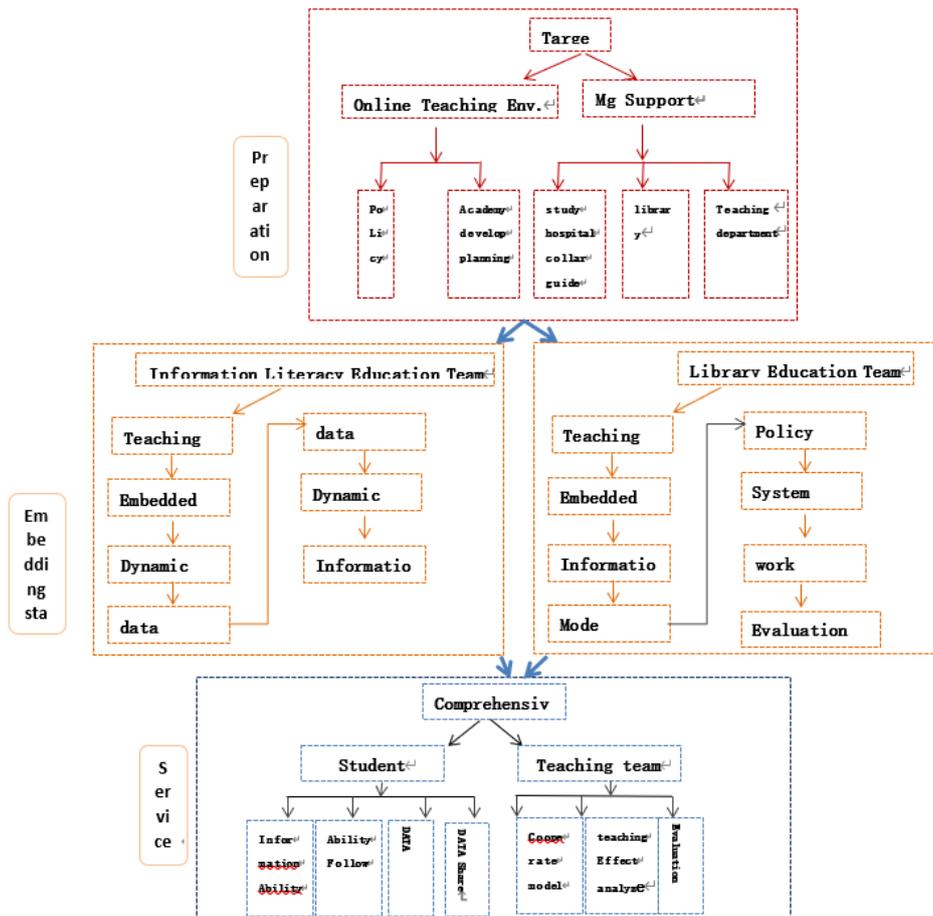


Figure 2: Framework diagram of the information literacy training model of "one orientation, three stages"

2.4. Innovation and Entrepreneurship Education System of "Five in One, Four Innovations Integration"

Track industry development trends, invite industry business experts, venture capitalists, and skilled masters to enter the campus to create an innovative and entrepreneurial atmosphere within the professional group in different forms such as forums, lectures, and simulation activities, and enhance students' innovative awareness and entrepreneurial capabilities. Relying on professional group innovation studios, virtual simulation centers, collaborative innovation centers, competition clubs, science and technology clubs, and entrepreneurship bases and other practical education platforms, it provides students with innovative and entrepreneurial training projects and entrepreneurial practice projects. Carry out innovation and entrepreneurship competitions, second classrooms and other activities, and create a "five in one" teaching system with curriculum, classrooms, training, competitions, and achievement incubation as the main content, and cultivate students' creativity, innovation, entrepreneurship, and creative consciousness and ability To achieve synergy and integration in aspects such as promotion, and form an innovation and entrepreneurship education system.

Through assessment measures, young and middle-aged teachers are encouraged to obtain professional qualifications such as software designer, network engineer, e-commerce designer,

information system supervisor, information system project manager, system analyst, etc.; so that young and middle-aged teachers can obtain the "dual qualifications" as soon as possible "The qualifications of teachers.

Organize teachers to conduct information technology skills training, improve teachers' information awareness and technology application ability in daily teaching and student management, make full use of the college's existing network information platform, and broaden multiple channels to improve teachers' information technology teaching level.

Actively explore effective ways to train professional teachers in cooperation with enterprises, establish teacher workstations in cooperative enterprises, and teach teachers to perform internships in well-known enterprises for more than half a year every five years. Professional teachers are encouraged to take part-time or phased positions in enterprises, and teachers are encouraged to acquire multiple professional skills. Job qualifications and vocational certificates improve the overall professional skills, teaching ability, professional quality and practical ability of teachers.

Through measures such as project initiation and funding support, teachers are encouraged and supported to participate in new technology training and study tours abroad for well-known international companies, increase teachers' overseas experience, broaden teachers' international horizons, and obtain qualification certification for internationally renowned companies. Rate, and use funds in real situations.

3. The Development of Project-Based Teaching Materials

The construction of teaching materials matches the goals of professional talent training and curriculum construction, in order to meet the needs of the development and reform of the college's education and to adapt to the development of the "new generation of information technology" industry as the guiding principle. The establishment of high-quality professional and the latest textbooks reflects the professional characteristics the professional curriculum teaching material system supplemented by self-compiled experimental teaching materials. The selection of textbooks focuses on planning textbooks for the 21st century (higher vocational colleges), and excellent textbooks (higher vocational colleges) selected at the national, provincial and ministerial levels. Cooperate with enterprises to compile school-enterprise cooperative development textbooks, focus on experiments (training) that can reflect the characteristics of the profession, organize the curriculum system structure by project-driven, and compile distinctive training textbooks that combine work with learning.

Take professional job skills as the core, cultivate students' professional ability, professional ethics and sustainable development capabilities as the basic points, and work (post) process-oriented, according to professional basic training, special skills training, professional comprehensive training and production Four levels of on-the-job internship build a professional training and internship base [6]. Realize the simulation, productivity, and openness of the on-campus training base, and the off-campus training base will enable students to continuously improve their production skills in the practical environment of the virtual enterprise.

Increase efforts to develop school-enterprise cooperation, open up new off-campus internships (training) bases on the basis of existing off-campus internships (training) bases, try open school-running models, and adopt "go out" and "invite in" Ways to encourage young teachers to take up posts in the software industry. Strengthen the guidance and supervision of practical teaching in schools. Hire off-campus experts and industry, corporate project managers and technical experts to teach practical development skills and experience on-site, and require in-school training instructors

to use enlightening, practical and flexible guidance in simulation teaching to gradually improve student analysis and problem-solving Ability and practical ability.

4. Measures to Strengthen System Construction

(1) Strictly standardize the rules and regulations of teaching management, establish a lecture system, teaching supervision system, teaching inspection system, teacher-student seminar system, student evaluation system, practical teaching management system, etc.;

(2) Establish and improve a two-level teaching quality monitoring and guarantee system for colleges and departments;

(3) Improve detailed and reform curriculum assessment methods;

(4) Establish a complete teaching file [7].

5. Conclusion

In order to adapt to the future development of network technology and cultivate high-quality skilled talents for comprehensive development, we will build a talent training model of "dual coordination, three-chain connection, and four-dimensional guarantee". Thanks to the joint efforts of the members of the research team for completing this report. The comprehensive improvement of national quality requires innovative talents. Innovative talents need to have the ability to effectively integrate multiple abilities such as problem thinking ability, problem decision-making ability, problem solving ability and the ability to cooperate with others. "Dual coordination, three-chain docking, The talent training model of "four-dimensional guarantee" focuses on the comprehensive training of the above-mentioned abilities. Therefore, through dual coordination to provide guarantee for talent training; through the docking of the industry chain, talent chain and innovation chain, determine the accuracy of professional talent training goals; through the four-dimensional guarantee system to improve students' ability to discover, solve and analyze problems, Improving students' overall quality and professional skills, improving overall national literacy, increasing competitiveness in the digital age, and serving the country's talent strategy are all of great significance.

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