Digital Intelligence Empowerment: a Study on the "Three Integration" Talent Training Model of Trade Economy

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ABSTRACT

The new generation of information technology, represented by Big data, block chain and artificial intelligence, has pushed the human society into a digital and intelligent era, and constantly reshaped the new form of economic society and higher education. The Dual circulation has spawned new forms of business such as new retail and new foreign trade relying on the Internet, and the demand for intellectual trade economic talents is also growing. Based on the concept of digital and intellectual talent training, combined with the requirements of the new liberal arts construction, the paper analyzes the urgent problems of trade economy talent training in the digital and intellectual era, and conducts in-depth research on the construction and implementation path of the "Three Integration" talent training model of digital and intellectual trade economy from three aspects of discipline integration, industry and education integration, and cultural integration, with a view to solving the problem of the structural lack of talents in the current trade economy field, Provide assistance for regional economic development.

Keywords: Digital intelligence, Three Integration, Trade economy, New liberal arts construction.

1. INTRODUCTION: THE PROPOSAL OF THE CONCEPT OF CULTIVATING DIGITAL AND INTELLIGENT TALENTS

The new generation of information technology represented by Big data, block chain and artificial intelligence has accelerated its development, pushing human society towards a digital and intelligent era of human-computer collaboration, cross-border integration, and co creation and sharing. The arrival of the era of digital intelligence has gone through a development process from digitization to intelligence, which promotes the digital upgrading and intelligent transition in various fields, and reshapes the new form of economy, society, and higher education. President Xi pointed out in his congratulatory letter to the International Conference on Artificial Intelligence and Education that "actively promote the deep integration of artificial intelligence and education, and promote educational reform and innovation", and the digital and intelligent transformation of higher education is becoming increasingly urgent [1].

In 2018, the Ministry of Education launched the "Education Informatization 2.0 Action Plan", which set up a series of development needs, such as the popularization of educational digital resources services, the coverage of online learning space, the standardized construction of digital 'China Education Modernization 2035' points out the importance of education reform in the information age. It is necessary to build an intelligent campus, create an integrated intelligent teaching mode, and set up a learning platform[2].

August of the same year, the Central Committee of the Communist Party of China proposed that "higher education should strive to develop new engineering, new machine, new agriculture, and new liberal arts", officially proposing the concept of "new liberal arts". The construction of new liberal arts requires closely following the new needs of national soft power construction and cultural prosperity and development, following the new

trend of scientific and technological revolution and industrial transformation, promoting the transformation and upgrading of the original liberal arts majors, while consolidating the curriculum system, promoting model innovation, and creating a quality culture, realizing the deep cross-integration between liberal arts and science, engineering, agriculture and medicine, constantly optimizing the structure of liberal arts, and leading the overall level of liberal arts professional construction[3].

In the face of the new economic development situation and environment, the CPC Central Committee proposed to accelerate the construction of a Dual circulation with domestic circulation as the main body and domestic and international double circulation promoting each other. The Dual circulation has given birth to new formats such as new retail and new foreign trade. The new formats, relying on the internet, are increasingly showing the characteristics of Big data, cloud computing, artificial intelligence and other technical factors, and the demand for trade and economic talents required is also increasingly becoming digital and intelligent. How to adapt to the new demand for talents in new business forms as soon as possible has become an urgent problem to be solved in the training of talents in trade economy.

2. THE URGENT PROBLEMS TO BE SOLVED IN THE TRAINING OF TRADE ECONOMY TALENTS IN THE DIGITAL AND INTELLIGENT ERA

The arrival of the era of digital intelligence is reconstructing social order, social organization, and social structure, bringing about chain and fission-type social changes, elevating the level and ability of human social governance to unprecedented heights, and also bringing new challenges to higher education. Modern information technologies such as Big data, block chain, and artificial intelligence are constantly reshaping new forms of economy, society and higher education, promoting digital upgrading and intelligent transition in various fields, and the demand for intelligent trade talents is increasingly strong; The new development pattern and the construction of new liberal arts require actively promoting the depth integration of modern information technology such as artificial intelligence and Big data with liberal arts majors, which has given the new connotation, provided new momentum and put forward new requirements for talent training[4].

The transformation and upgrading of trade economy talent training is not only an inevitable choice to solve the structural lack of talents in the current trade economy field, but also an important mission of higher education to realize the innovation of talent training mode and lead social development. It is imperative to develop the training of trade and economic talents in the direction of digital intelligence

In this context, Qilu Institute of Technology took the lead in proposing a "three-integration" talent training model for trade economy in the era of mathematical intelligence. Through reform and practice, it is committed to more effectively solving the following problems in the talent training of trade economy in the digital and intelligent era:

First, through the integration and development of trade economics majors with computer science and technology, data science and Big data and other disciplines, the contradiction between the demand for digital intelligent applied talents and the cultivation of single discipline specialty is solved.

The second is to solve the problems of insufficient integration of industry and education and the need for further improvement of students' practical ability by strengthening cooperation between government, schools, industries, and enterprises.

The third is to solve the problem that students' humanistic quality is not deep enough and their comprehensive quality needs to be further improved through the integration of Qilu culture into talent training and the promotion and practice of Confucian business spirit.

3. THE MAIN CONTENT OF THE "THREE INTEGRATION" TALENT TRAINING MODEL OF DIGITAL AND INTELLIGENT TRADE ECONOMY

The "Three Integration" talent cultivation model of digital intelligent trade economy (as shown in "Figure 1") deeply integrates new technological elements of digital intelligence into the training of talent, and transforms and upgrades the trade economy major through disciplinary integration, industry education integration, and cultural integration. It helps to solve the current structural shortage of talents in the field of trade and economy, and also helps higher education achieve the goal of

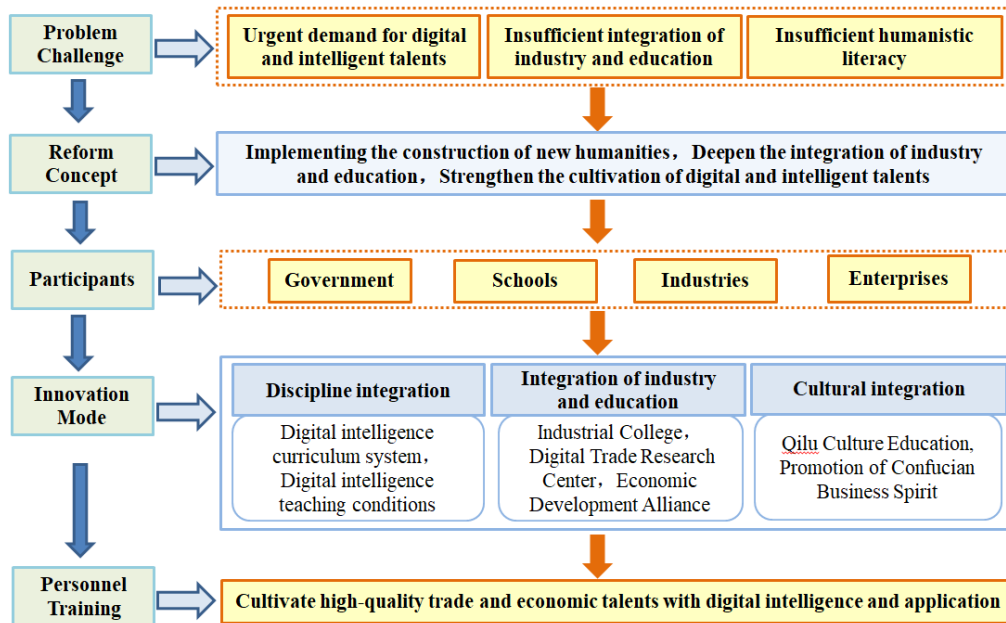innovative talent cultivation models leading social development.

Figure 1 The "Three Integration" talent training model of digital intelligence trade economy.

Firstly, the Trade Economy major focuses on interdisciplinary integration, integrating relevant disciplines such as computer science and technology, data science and big data, etc., to construct a course system for digital intelligence, build a teaching team for digital intelligence, and improve the teaching conditions for digital intelligence.

Secondly, the Trade Economy major has built a resource platform through the integration of industry and education, and has deeply cooperated with the government, school, industry, and enterprise to construct the "134" industry and education integration model (with a practical system as the main line, three stage capacity improvement as the goal, and four main body coordination as the guarantee). This has built a resource platform for digital talent cultivation, academic research, and social services, forming a four coordinated educational ecological environment[5].

Thirdly, the Trade Economy major actively implements the concept of new liberal arts construction, with cultural integration as its characteristic, actively promotes the "double innovation" of excellent traditional Chinese culture, and realizes the deep integration of Qilu cultural spirit into professional courses, second classrooms, and teacher team construction. This major continuously explores new paths to improve the education system and enhance students' humanistic literacy, focusing on cultivating high-quality, prime, and intelligent applied talents with excellent traditional cultural heritage and keeping up with the times.

The "Three Integration" talent training model of digital intelligent and trade economy actively adapts to the new demand for trade economy talents and conforms to the direction of new liberal arts construction. It puts forward a new concept of training applied talents of digital intelligence trade economy. Through the integration of disciplines and the integration of industry and education, it effectively integrates the high-quality digital intelligence education and teaching resources inside and outside the school. Through cultural integration, the cultivation of humanistic quality of trade economic talents is strengthened. A new way of cultivating high-quality talents with mathematical intelligence and application in trade economy specialty has been found.

4. THE IMPLEMENTATION PATH OF THE "THREE INTEGRATION" TALENT TRAINING MODEL FOR DIGITAL INTELLIGENCE TRADE ECONOMY

The training of digital intelligent trade economy talents needs to be deepened from three aspects,

such as discipline integration, industry and education integration and cultural integration, and the implementation of talent training mode needs to focus on these three aspects.

4.1 Promoting the Integration of Disciplines and Creating a Platform for Cultivating Digital and Intelligent Talents

The construction of the major focuses on the integration of disciplines, starting from the cultivation of applied talents in the field of digital intelligence, integrating disciplines such as computer science and Big data, and laying the foundation for the cultivation of digital intelligence trade and economic talents in terms of curriculum

system, teaching staff, teaching conditions, and other aspects. [6]

The first is to build an advanced course of digital intelligence that integrates disciplines. Through multi-disciplinary integration of economics, management, computer, Big data and other disciplines, the Trade Economy major has added courses such as Big data introduction and Python Programming, transformed traditional courses to create trade databases and analysis tools, digital trade, and other courses, formed advanced courses in digital intelligence, and constructed a three-stage digital intelligence practice link for ability improvement (as shown in "Figure 2").
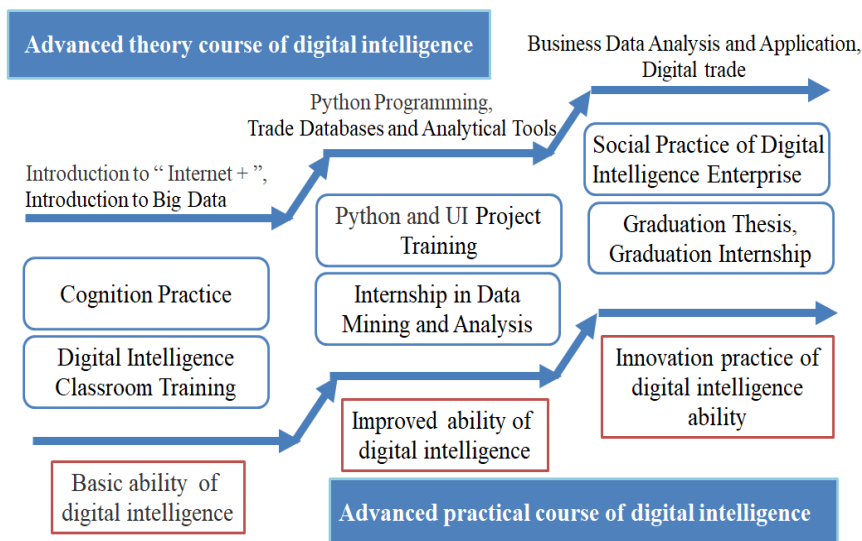

Figure 2 Digital intelligence curriculum system of trade economy.

The second is to continuously improve the teaching conditions of digital intelligence. Relying on discipline integration, give full play to the advantages of teaching resources in trade economy, computer science and technology, data science and Big data technology and other majors, focus on integrating the practice training platform and software of the Economic and Management Experimental Teaching Center, the Computer Experimental Teaching Center, and the Big data Experimental Teaching Center, improve the teaching conditions of digital intelligence, and meet the needs of teaching and students to participate in college students' innovation and entrepreneurship projects and discipline competitions, and provide guarantees for the cultivation of digital and intelligent talents.

4.2 Building a Digital Intelligence Practice Platform

The four parties of government, schools, industries and enterprises cooperate to further promote the integration of industry and education, and build a new mode of "134" integration of industry and education with ability training as the main line (as shown in "Figure 3"), achieving mutual promotion of theory and practice, and forming a four-party collaborative education ecological environment[7].
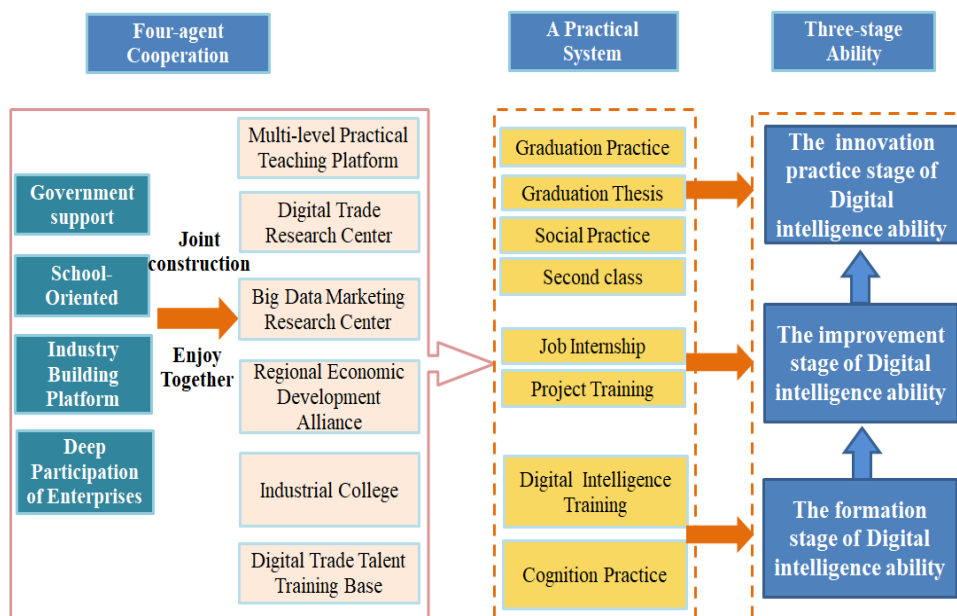
Figure 3 "134" industry education integration model.

The first is to build a practical platform mainly based on the industrial college, supplemented by the four-in-one off-campus practice base of "teaching, training, job internships, and social practice", jointly revise the talent training program, build data-driven courses, conduct practical training on Python, UI, and other projects training, conduct practical teaching on data mining, customer service, and business data analysis, and enable students to systematically master digital and intelligent tools, To enhance students' ability to apply digital intelligence.

Secondly, colleges and universities should closely connect with local governments and industry associations, based on the development of regional economy and pillar industries, jointly build regional economic development alliances and digital trade talent training bases, achieve resource sharing and complementary advantages, actively participate in cooperation and exchanges in the field of trade economy, and focus on applying knowledge such as business data analysis, new retail operations, cross-border e-commerce, and new media marketing to promote the development of small and micro enterprises, effectively enhancing the social service capabilities of talents, and making important contributions to regional economic development[8].

4.3 Strengthening Cultural Integration and Cultivate Intelligent Talents to Create a Soul

The construction of the new liberal arts has proposed the concept of spreading traditional culture. The integration of Qilu culture and Confucian business spirit in traditional Chinese culture into talent cultivation for the Trade Economy major helps to improve the education system and enhance students' humanistic literacy. [9].

Firstly, Qilu culture is integrated into the whole process of talent training. The curriculum system includes mandatory and elective courses on the theory and practice of Qilu culture, which enable students to master the essence of Qilu culture through course offerings. By enriching the second classroom with Qilu culture, integrating Qilu culture education into the entire process of talent cultivation, effectively enhancing students' awareness and ability of patriotism, dedication, enterprising spirit, and innovative thinking, and promoting their comprehensive development.

Secondly, talent cultivation highlights the integration and promotion of the Confucian business spirit. The Trade Economy major has established a Confucian business culture and social practice teaching base, closely integrating Confucian business culture, offering courses to assist rural revitalization, providing reference for

enterprises from the perspectives of business philosophy and development strategy, and assisting enterprise development.

5. CONCLUSION

With the accelerated development of the new generation of information technology represented by Big data, block chain and artificial intelligence, the national talent strategy in the new global pattern and new trade environment needs to be constantly upgraded, the degree of digitalization and intelligence of business operation is constantly improving, and higher requirements are put forward for the training of intelligent trade economy talents[10]. The "Three Integration" talent training model of digital and intelligent trade economy is conducive to the integration of digital and intelligent theoretical research and talent training practice, the integration of digital and intelligent application research and the improvement of students' practical ability, the mutual promotion of cultural education and the improvement of students' humanistic quality, which can enhance students' ability to skillfully use the Internet and Big data to analyze and solve trade problems, and grow into digital intelligence trade economic talents with high information literacy and strong innovation ability.

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