Research on innovation of training path for new business talents in higher vocational colleges under the background of mathematical intelligence

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Abstract: The business reform under the background of digital intelligence has a profound impact on talent training. The purpose of this study is to explore the path innovation of new business talents training in higher vocational colleges under the background of number intelligence. Through analyzing the current status and existing problems of the new business talents training in higher vocational colleges, the paper puts forward the targeted innovation path, which provides reference for the training of new business talents with innovation ability and information technology.

Key words: numerical background; New business; Talent training; Path innovation

1. Introduction

With the continuous development of science and technology, digital economy and intelligent technology have gradually become an important force to promote social and economic development. With the rapid development of information technology and the intensification of market competition, the business operation model is undergoing profound changes. Big data, artificial intelligence, etc., have become an important support for business development and enterprise competition. The new business discipline is a new type of discipline that ADAPTS to the development needs of the age of digital intelligence, and puts forward higher requirements for the demand and training of talents

The business reform under the background of number intelligence puts forward higher requirements for talents. The application of intelligent technology makes enterprises need talents with business analysis, data mining and artificial intelligence in order to better cope with market competition and changes in customer demand. Therefore, the training of new business talents in higher vocational colleges needs to be closely combined with the development needs of the era of digital intelligence, and cultivate new business talents with innovative thinking, practical ability and good professional ethics. At present, the curriculum and teaching content of higher vocational colleges still stay in the traditional business education, which can not meet the training needs of new business talents; At the same time, the teachers of higher vocational colleges are insufficient, especially the teachers with mathematical intelligence background are scarce. Through in-depth analysis of the current problems and deficiencies in the training of new business talents in higher vocational colleges, the paper puts forward innovative paths and methods in order to provide references for vocational colleges to train new business talents with innovative ability and practical experience.

2. Research Review

Under the background of digital intelligence, the cultivation of new business talents has become a hot topic in the field of higher education. Aiming at this topic, the academic circles have analyzed the background, current situation, problems and solutions of new business talents training from different angles. The changes in the business field have promoted the emergence and development of the new business. The traditional business education has been unable to meet the needs of modern business operation, so the new business comes into being. The new business major emphasizes the use of big data, artificial intelligence and other technical means to analyze and predict business phenomena, and provide strategic planning and decision support for enterprises. New business talents need to have an interdisciplinary knowledge system and comprehensive ability, including knowledge and skills in mathematics, statistics, computer science, economics and management.

In view of the current situation and problems of new business talents training, the academic circle has carried on an in-depth discussion. Wang Qing (2023) thought that some problems existed in higher vocational colleges in cultivating new business talents in Qing Qing, such as unreasonable curriculum, lack of teaching resources and insufficient teachers. At the same time, due to the traditionalization of the training system and teaching mode, students lack of practical ability and innovative thinking, which fails to meet the needs of enterprises. Therefore, it is necessary to reform the traditional teaching mode and introduce numerical intelligence technology to improve students' practical ability and innovative ability. Some scholars put forward the innovative path of cultivating new business talents. For example, the construction of dual-teacher teaching team is considered to be an important innovation path. By forming a teacher team composed of on-campus teachers and off-campus enterprise experts, teaching resources inside and outside the school can be better integrated, teaching quality and students' practical ability can be improved. Teaching reform and scientific research innovation are also the core of new business talent training, and some scholars advocate the use of project-driven, case-based teaching and other methods to combine theory with practice to cultivate students' practical ability and innovative thinking.

The integration of industry and education and the collaboration of industry are also important ways to cultivate new business talents. Huang Tong et al. (2023) believe that more practical opportunities and practical teaching contents can be provided for students by establishing practice teaching bases and carrying out school-enterprise cooperation. At the same time, some scholars emphasize the



cultivation of craftsman spirit and believe that cultivating students' professional quality and ethics is one of the important factors to improve the quality of talent training. Previous studies mainly focused on the curriculum, practical teaching and teachers, while Li Cui et al. (2023) put forward the business talent training model of "integration of curriculum and certificate", which takes vocational certificates and curriculum system as the starting point to improve students' practical ability and professional quality. Therefore, this paper aims to systematically explore the path innovation of training new business talents in higher vocational colleges empowered by numerical intelligence, so as to provide reference for the reform and innovation of higher vocational education.

3. The current situation of training new business talents in higher vocational colleges under the background of number intelligence

The current situation of new business talents training in higher vocational colleges under the background of mathematical intelligence is mainly analyzed from four aspects: curriculum, teachers, practical teaching and training of innovative and entrepreneurial talents.

First, in the course setting, most of the business majors in higher vocational colleges lack their own characteristics, and the course arrangement usually adopts the traditional public basic courses plus business professional basic courses, which leads to a short learning time for students and a late learning time for professional knowledge. In addition, the existing curriculum system rarely involves the cultivation of knowledge and ability of innovation and entrepreneurship, which makes students lack enough innovation awareness and entrepreneurial ability when dealing with the complex and changeable business environment.

Second, in terms of teachers, vocational colleges generally lack teachers with mathematical intelligence background, which makes students lack effective guidance when learning new business knowledge. Although some schools have realized this and are trying to improve the teaching staff by introducing talents or training existing teachers, it still needs a long-term process.

Third, in terms of practical teaching, the practical teaching system in higher vocational colleges is still not perfect. Although some schools have established practice teaching bases, in practice, practice teaching is often just a formality and does not really play its role. At the same time, due to the lack of close cooperation between schools and enterprises, it is often difficult for students to find suitable internship opportunities, which also affects the improvement of students' practical ability.

Fourthly, in terms of talent training for innovation and entrepreneurship, although some schools have begun to attach importance to innovation and entrepreneurship education, there are still some problems in practice. For example, some schools lack a flexible cooperative training mechanism and cannot make good use of social resources to train innovative and entrepreneurial talents; Still others lack long-term planning for students, and the support system for cultivating innovative and entrepreneurial talents is not sound.

The goal of training new business talents in higher vocational colleges is to cultivate new business talents with innovative thinking, practical ability and good professional ethics. In terms of curriculum setting, most higher vocational colleges have set up majors and courses related to new business, such as e-commerce, big data analysis, artificial intelligence and so on. However, due to the lack of excellent teachers and teaching resources, higher vocational colleges still have certain difficulties in training new business talents.

4. There are problems in the training of new business talents in higher vocational colleges under the background of mathematical intelligence

Through the analysis of the current situation of the training of new business talents in higher vocational colleges under the background of number intelligence, it can be concluded that there are many problems in the training of talents in higher vocational colleges, which are mainly manifested in the following five aspects.

First, the shortage of compound teacher resources. Under the background of digital intelligence, new business talents need to master multi-disciplinary knowledge and skills, including economics, information technology, data analysis and so on. However, at present, teachers with these comprehensive abilities are scarce in higher vocational colleges, which can not meet the needs of talent training.

Second, students lack practical ability. Due to the imperfection of practical teaching system, students often lack practical ability and experience, unable to apply theoretical knowledge to practical work.

Third, education on innovation and entrepreneurship is insufficient. Current higher vocational colleges lack innovation and entrepreneurship education in business education, and students lack innovation awareness and entrepreneurial ability, which can not adapt to the rapidly changing business environment.

Fourth, the cooperation between schools and enterprises is not close enough. Although some schools have begun to attach importance to the linkage with enterprises, most of them have not formed a mature cooperation mechanism, and a wide range of social resources have not been well utilized, resulting in an incomplete talent training support system for innovation and entrepreneurship.

In order to improve the training effect of new business talents in higher vocational colleges, it is necessary to start from multiple angles, including strengthening the training and introduction of compound teacher resources, improving the practical teaching system, strengthening innovation and entrepreneurship education and promoting the cooperation inside and outside the school. At the same time, it is also necessary to actively explore new education models and teaching methods to better adapt to the needs of the age of digital intelligence.

5. Training path for new business talents in higher vocational colleges

First, optimize the curriculum. In the context of digitalization, new business talents need to master multi-disciplinary knowledge and skills, including economics, information technology and data analysis. Therefore, higher vocational colleges need to optimize the curriculum

and increase the number intelligentization related courses in order to cultivate students' literacy and ability of number intelligentization. At the same time, it is also necessary to pay attention to the practicability and pertinence of courses, introduce practical cases and practical teaching of enterprises, and enhance students' practical ability.

Second, strengthen the construction of teaching staff. The training of new business talents in higher vocational college needs a team of teachers with mathematical intelligence ability and interdisciplinary background. Higher vocational colleges need to strengthen the construction of teaching staff, introduce talents with numerical intelligence background, train and promote existing teachers with numerical intelligence, and improve their practical ability and interdisciplinary teaching level.

Third, innovate teaching methods and means. Traditional teaching methods have been unable to meet the needs of the age of digital intelligence, and it is necessary to adopt new teaching methods and means, such as online courses, flipped classrooms, project-based learning, etc., in order to enhance students' autonomous learning ability and practical ability. At the same time, it is also necessary to use digital intelligent tools and platforms, such as artificial intelligence, big data analysis, etc., to assist teachers in teaching and students' independent learning.

Fourth, strengthen practical teaching. The era of numerical intelligence needs talents with practical ability and numerical intelligence accomplishment. Therefore, higher vocational colleges need to strengthen practical teaching, establish practical teaching bases and schoolenterprise cooperation mechanisms, introduce practical projects and practical opportunities of enterprises, so that students can master numerical intelligence skills and knowledge in practical operation.

Fifth, we will strengthen innovation and entrepreneurship education. In the age of digital intelligence, the business environment changes rapidly. Therefore, higher vocational colleges need to strengthen innovation and entrepreneurship education to cultivate students' innovation awareness and entrepreneurial ability. We can set up innovation and entrepreneurship courses, introduce innovation and entrepreneurship tutors, provide entrepreneurship support and other measures to encourage students to carry out innovation and entrepreneurship practice and innovative thinking, and enhance students' comprehensive quality and social competitiveness.

To sum up, the path innovation of new business talents training in higher vocational college of digital intelligence empowerment needs to start from many aspects, including optimizing the curriculum, strengthening the construction of teachers, innovating teaching methods and means, strengthening practical teaching, and strengthening innovation and entrepreneurship education. Only in this way can we cultivate business talents with digital intelligence literacy and ability to adapt to the needs and development of The Times.

6. Conclusions

It is of epoch-making significance and practical value to study the training path of new business talents in higher vocational colleges under the background of mathematical intelligence. The paper points out the current problems in the training of new business talents in higher vocational colleges, including the lack of targeted curriculum system, the lack of teachers with numerical intelligence background, the imperfect practical teaching system, the lack of in-depth innovation and entrepreneurship education and the inflexiency of cooperative training mechanism. In order to solve these problems, the paper puts forward the path of talent cultivation innovation from the aspects of optimizing the curriculum, strengthening the construction of teachers, innovating teaching methods and means, strengthening practical teaching, strengthening innovation and entrepreneurship education and promoting the cooperation inside and outside the school. The implementation of the innovation path will help cultivate business talents with digital intelligence literacy and ability, and help adapt to the needs and development of The Times.

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