

Analysis of the Teaching Reform of Computer Courses in Higher Vocational Education under the New Background

Lijuan Ma

Caofeidian College of Technology, Tangshan, Hebei, China

Abstract: *Vocational colleges are an important battlefield for talent cultivation, and computer teaching is an important component of vocational colleges. With the development of information technology, computer technology has gradually penetrated into various industries, bringing great convenience to people's work and life. In this context, the teaching situation of computer courses in vocational colleges is also receiving increasing attention. As a computer teacher in vocational colleges, it is necessary to promptly analyze the problems and shortcomings in the current teaching of computer courses, and actively explore effective ways to improve and adjust teaching methods, in order to achieve the effect of improving the quality of computer course teaching in vocational colleges. Therefore, based on my own teaching practice, the author analyzed the teaching reform strategies for vocational computer courses in the new context, hoping to provide ideas and references for the development of teaching activities for colleagues.*

Keywords: vocational computer science; Computer teaching; reform in education.

1. INTRODUCTION

With the introduction of the national vocational education reform plan and the implementation of specific policies, China's higher vocational education has officially entered a new stage of development. An important task of the current reform of higher vocational education in China is to cultivate skilled and applied talents with innovative thinking. In this context, vocational colleges must be based on the overall requirements and goals of vocational education reform, rely on the upgrading of educational informatization, and actively promote the quality development of vocational education. Computer courses, as an important component of the teaching system in vocational colleges, play a very important role in cultivating students' skills and application abilities. To this end, we need to strengthen the emphasis on the teaching reform of computer courses in vocational colleges, in order to actively cultivate and transport innovative skills and applied talents for society.

2. THE SHORTCOMINGS IN THE TEACHING OF COMPUTER COURSES IN HIGHER VOCATIONAL EDUCATION UNDER THE NEW BACKGROUND

2.1 Outdated teaching concepts of teachers

Computer courses have strong practicality. The main purpose for students to learn computer knowledge is to be able to flexibly apply computers, obtain useful information through computers, and apply it in practice, providing assistance and assistance for future work and life. However, many vocational teachers still focus their teaching on the explanation of computer theory knowledge in specific teaching, while paying insufficient attention to practical teaching, which can easily increase the dryness and boredom of computer teaching classrooms; Simply providing theoretical explanations not only hinders students from maintaining a high level of attention, but also increases their difficulty in understanding, which is not conducive to students fully mastering and applying relevant knowledge.

2.2 Computer teaching divorced from reality

The outdated, aging, and detached content of computer textbooks is a common phenomenon in computer teaching in most vocational colleges in China. Affected by this, it often leads to a disconnect between computer teaching and practice, making it difficult for students to effectively apply specialized knowledge. In recent years, the computer industry has been constantly developing and changing, and computer technology is also being updated and optimized accordingly. However, the teaching of many vocational computer courses has not been updated in a timely manner based on the dynamic changes of computers. Instead, traditional textbooks are used for teaching.

Table 1: The way to improve professional teachers' ideological and political ability "four teachers in one"

Teachers' ideological and political ability "four teachers integration" to improve the platform features		
Basis: clear role positioning and realize multi-level and multi-dimensional collaboration		Fundamentals: firm ideals and beliefs, and consensus on the direction of ambitious goals
Guarantee: carry forward noble teachers' ethics, promote mutual humility and trust, establish morality and cultivate people		Key: master excellent knowledge and improve the ability of mutual education
Improvement measures		Professional full-time backbone teachers, young teachers, full-time ideological and political teachers, and off-campus tutors grow together
1	Deepen the identification of ideological and political connotation of the curriculum, and construct the ideological and political teaching system	(1) Strengthen the education of national sentiment: professional course teachers should firmly adhere to the "four self-confidence", adhere to the goal of teaching for the country, shoulder the responsibility of establishing morality and cultivating people, actively spread the national theme, and transmit the positive energy of socialism; (2) Strengthen vocational standard education: love and work hard, prepare each class carefully, and devote to teaching work with full passion; (3) Strengthen the education of academic norms: we should abide by academic norms, adhere to academic ethics, study rigorously, teach meticulously, and pursue excellence; (4) Do a good job in thanksgiving education: care for students and provide assistance to students with difficulties in study and life.
2	Strengthen information literacy training and popularize the application of intelligent teaching mode	(1) Excellent teachers carry out demonstration classes and open classes; (2) Help young teachers and apply them in teaching; (3) Cooperate with universities and enterprises, and hire technical experts outside the university to give professional lectures; (4) Lead the team to participate in the school-level and provincial-level teacher teaching ability competition to further exercise and improve the level of informatization;
3	Build a multi-level and multi-dimensional cooperation platform to improve the comprehensive social service capacity.	School-enterprise cooperation: set up doctoral innovation workstation, take technical service as the center, point to area, cultivate teamwork spirit, accumulate work cases, enrich ideological and political materials, and improve teachers' ideological and political ability; School-government cooperation: undertake to complete the provincial and municipal training projects to improve the comprehensive service ability of teachers;
4	Optimize the external teacher team and realize the coordinated promotion of ideological and political work inside and outside the school	(1) Raise the threshold for teachers to be hired outside school and improve the quality of teachers to be hired outside school; (2) Set up a one-to-one mutual aid group of post-based modular professional capabilities inside and outside the school, and establish an evaluation and incentive mechanism; (3) Schools and enterprises jointly develop ideological and political teaching cases and participate in the construction of ideological and political textbooks;
5	Improve their professional level and innovate the teaching methods of courses	(1) Vigorously improve the training of teachers' ideological and political teaching ability and innovate teaching methods; (2) Set up teaching methods, cases, classes and curriculum activities, and set up corresponding incentive mechanisms;
6	Deepen the effectiveness of ideological and political training and enhance the ability of ideological and political teaching	Summarize the ideological and political teaching team by stages, such as submitting training summary, report and evaluation; Summarize and promote ideological and political teaching cases. Include the assessment of teachers' ideological and political ability into the year-end assessment system, and increase the proportion of ideological and political ability improvement in the year-end assessment.
Change ideas, seek foreign aid, enrich teaching methods, and increase ability		

With the application of digital economy, artificial intelligence and other technologies in the logistics industry, which has driven the transformation and upgrading of the traditional logistics industry, logistics has become one of the industries with highly intensive talents and technology. Therefore, cultivating composite specialized talents that meet the needs of modern logistics development and helping the logistics industry to develop steadily in a scientific and innovative direction has become the key. The article explores talent cultivation models around teaching objectives, constructs corresponding practical teaching course systems and modular course content, and explores the practical teaching system for cultivating applied talents at the undergraduate level of logistics management in the context of digital economy. The goal of practical teaching, which is to cultivate what kind of abilities, refers to the expected results to be achieved through practical teaching activities. Traditional logistics management needs to shorten the distance from social and economic development. It requires self adjustment, absorption of some courses in digital logistics, timely revision of talent training plans for various majors, and also ensures that the students trained can adapt to changes in social and economic development, and can establish a foothold in logistics activities in the digital economy era. Therefore, improving students' comprehensive quality, cultivating innovative spirit and digital technology practical ability to adapt to the logistics environment of the technological era is the main goal of digital logistics management practical teaching.

2.3 Inefficient teaching activities

At present, many vocational colleges in China still use the traditional indoctrination teaching mode in the development of computer courses. In the classroom, students are still in a passive position, with teachers unilaterally explaining and outputting, and students passively stopping classes, taking notes, etc. This single teaching mode cannot reflect the students' subjectivity well, and not only does it not comply with the new curriculum reform. The teaching requirements are not conducive to the improvement of students' learning enthusiasm and efficiency. The goal of digital technology-oriented logistics management practical teaching emphasizes the transformation of talents' single skills to composite skills, and the transformation of professional quality to cross disciplinary and comprehensive quality. This requires the cultivation of students' self-learning ability, allowing them to actively learn, self think, choose practical activities, unleash their potential, and improve their abilities.

Focusing on the training objectives of digital logistics professionals, it is necessary to conduct in-depth research on their knowledge structure, quality structure, especially their ability structure. The knowledge, qualities, and abilities of talents are an organic whole that cannot be separated from each other. The goal of cultivating abilities and qualities mainly relies on practical teaching to achieve. According to the structure of abilities and qualities, the specific goals of digital logistics management practical teaching in applied undergraduate universities include: professional cognitive goals, professional ability goals, digital technology application ability goals, entrepreneurial and innovative ability goals, and comprehensive quality goals. Therefore, the practical teaching objective system for applied digital logistics management talents is shown in Figure 1.

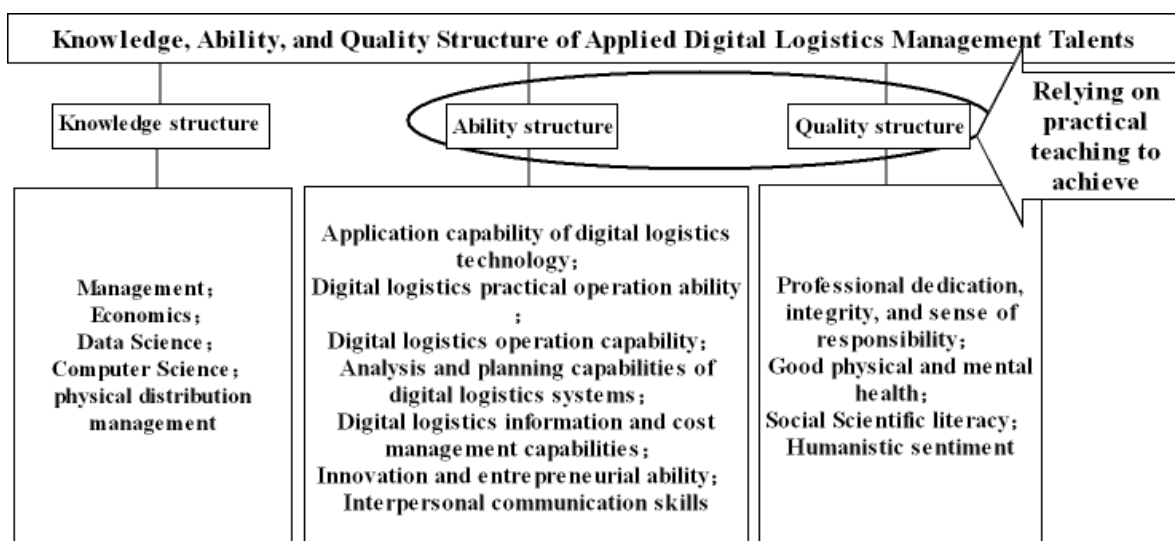


Figure 1: Practical Teaching Objective System for Applied Digital Logistics Management Talents

3. STRATEGIES FOR TEACHING REFORM OF COMPUTER COURSES IN HIGHER VOCATIONAL EDUCATION UNDER THE NEW BACKGROUND

With the development of the digital economy, Big data, financial technology, blockchain, cloud computing and other technologies are more and more used in logistics activities. The characteristics of the logistics market, such as decentralization and fragmentation, are increasingly apparent, which makes the logistics industry achieve leapfrog development in terms of production and service methods, information transmission means and management methods. The content of practical teaching is the foundation for achieving practical teaching objectives and directly affects the quality of talent cultivation. It is particularly important to comprehensively and systematically design practical teaching links, optimize practical teaching content centered on ability cultivation, and build a "multi-level and integrated" practical teaching content system. In terms of practical teaching content design, the main focus is on the integrated design of independent practice modules, course practice modules, and innovation and entrepreneurship second classroom modules. On each main line, follow the gradual law of knowledge and establish multi-level practical teaching links. At each level, there are several active ability modules that can be flexibly combined to achieve different ability development goals.

The transformation and upgrading of the logistics industry will inevitably lead to new changes in the teaching system of logistics management majors. In the traditional teaching system of logistics management specialty, due to the lack of attention to the training of scientific and technological means, the focus on Technological literacy, and the cultivation of students' systematic thinking, the trained talents lack the awareness and ability to use modern scientific and technological means to deal with logistics activities, and the lack of innovative ability and critical thinking in practical activities, As a result, it is unable to adapt to the logistics environment of the technological era and handle the impact of digital economy technology on logistics activities[1]. Therefore, in order to cultivate professional talents who can adapt to the impact of digital technology on the traditional logistics industry and proficiently use digital technology to handle new phenomena in logistics activities, the practical teaching mode for cultivating applied talents in logistics needs to be reformed urgently.

3.1 Optimizing the Teaching Team and Building a Professional Teaching Team

Teachers play a very important role in teaching activities. They are not only the organizers of teaching activities, but also the implementers of teaching activities and the guides of student learning activities. It can be said that teachers' own cognitive concepts and professional level can have a direct impact on the quality of teaching. However, looking at the situation of computer teachers in vocational colleges, many computer teachers still need to improve their professional skills and literacy, which is also a more important factor affecting the quality of computer teaching in vocational colleges. Therefore, in order to improve the teaching level of computer courses in vocational colleges, it is necessary to start with optimizing the teaching team, actively introducing high-quality and high-level educators, especially increasing the importance of introducing applied teachers, in order to continuously strengthen the vocational computer education team, improve the overall quality of teachers in the subject, and lay a good foundation for the efficient implementation of computer teaching activities in vocational colleges. On the one hand, vocational colleges should increase teacher recruitment and improve recruitment conditions, while introducing more high-quality professional talents through improving teacher welfare benefits, and creating a professional and high-quality computer teacher team. On the other hand, vocational colleges should also regularly organize knowledge training for teachers majoring in computer science, in order to promote computer teachers to update their teaching concepts, improve teaching systems, and optimize teaching structures in a timely manner, thereby enhancing the professionalism of computer science and technology and providing guarantees for the development of teaching activities. In addition, vocational colleges should actively cooperate with relevant enterprises and regularly organize computer science teachers to learn and practice in key enterprises, fully understanding the updates and optimization of computer technology and the actual application of computers, in order to lay the foundation for efficient teaching.

3.2 Update teaching concepts and increase computer practical teaching

Vocational computer teachers should constantly update their teaching concepts, actively understand the development status of computers, technological optimization and updates, and follow the footsteps of social development to timely abandon traditional teaching concepts and update teaching thinking, providing students with teaching content that meets the needs of social development. At the same time, in the teaching process, teachers should actively increase computer practice links and content, provide students with more practical

operation opportunities, promote students to deepen their understanding and mastery of knowledge in practical operation, and exercise students' computer knowledge application ability to fully meet the requirements of quality education. This also requires teachers to not only pay attention to the explanation of theoretical knowledge in the textbook, but also guide students to explore the application methods of relevant knowledge in real life, and actively expand the knowledge that is not available in the textbook during the actual teaching process. By gradually expanding students' knowledge, helping them understand the trends of computer development, the value of learning and applying computer knowledge, etc., we can mobilize students' internal motivation for learning, and promote effective improvement of their overall learning effectiveness and computer practical application ability. In addition, vocational colleges should actively increase their attention to the introduction of computing equipment, increase funding investment, and lay a foundation for students to better carry out computer skills learning.

3.3 Timely update textbooks to fully improve teaching timeliness

Textbooks are the foundation of students' learning, and their practicality can directly affect the practicality of the knowledge and skills they learn. Only by ensuring that the textbook knowledge has strong practicality can students master useful skills and effectively apply the knowledge and skills learned through teaching activities. Especially for computer science, it has strong practicality, and computer technology has always been in a state of updating and development. Therefore, it is necessary for teachers to select and update textbooks. Therefore, computer science teachers in vocational colleges should timely understand the development status, technological updates, and application of computers, and based on this, update and compile textbooks in a timely manner to ensure the effectiveness of the textbooks used in teaching activities and improve the timeliness of computer teaching. At the same time, they should also strengthen the importance of training teachers in the teaching and research group, and continuously improve their teaching and research abilities. Keeping up with the development of computer science, we should reasonably compile and update the content of computer textbooks, fully improving the effectiveness of textbook compilation and the effectiveness of content, ensuring that the computer knowledge handed to students can be well applied to daily practice, and fully leveraging the significance and value of computer teaching.

3.4 Carry out diversified teaching to improve computer teaching efficiency

The computer course covers a wide range of content and has a certain degree of dryness, only using Conventional methods of theoretical explanation often result in low interest in learning among students, which is not conducive to improving teaching effectiveness. Therefore, in actual teaching, teachers should actively adjust teaching methods based on the students' situation and the characteristics of computer science, enrich computer classroom forms with diverse teaching methods, and enhance students' interest and enthusiasm for computer learning. For example, after teaching During the process, a combination of theory and operation can be used to carry out teaching activities. After completing the explanation of a certain knowledge point, teachers can organize students to carry out practical operations related to the content, such as using computers to draw tables and create prescribed graphics. Students with good quality of practical operations can also be rewarded to stimulate their enthusiasm for learning and practical operations. For example, teachers can also use group collaboration to teach, and according to the situation of students in the class Reasonably divide groups and assign specific learning tasks to each group. At the same time, conduct inter group competitions to stimulate students' desire to win or lose, encourage them to actively participate in learning activities, and thus improve classroom teaching efficiency; At the same time, by carrying out cooperative learning, it can also increase communication between students, build a good classroom atmosphere, and effectively improve the efficiency of computer teaching.

4. SUMMARY

In summary, there are still certain shortcomings and problems in the teaching of computer courses in vocational colleges in China. As teachers of the computer major, they need to fully comply with the requirements of teaching reform in the future, actively update their teaching concepts, innovate teaching methods and means, enhance the practicality of computer teaching, and promote students to truly become practical and applied talents that meet the needs of social development, Continuously improving the quality of computer teaching in vocational colleges.

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