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Research on the Reform of School-Enterprise Cooperation Teaching and Education Mode for Computer Majors

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Abstract: This paper discusses the innovative methods of school-enterprise cooperation education mode in computer applied talent training. An innovative training model based on school-enterprise cooperation is proposed to promote the cultivation of students' practical and innovative skills, so as to better adapt to the needs of society. By analyzing the key links and influencing factors of the training mode, this paper puts forward some concrete suggestions and measures to provide guidelines for universities and enterprises in personnel training.

Keywords: School-enterprise cooperation; Computer applied talents; Innovative training mode

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1. Introduction

In the rapid development of the information age, the training of computer applied talents has become an important issue emphasized by universities and enterprises. There are often problems in the traditional education model such as disconnection between theory and practice and mismatch between talent training and social needs. In order to better train computer applied talents to meet the needs of society, the school-enterprise cooperation education model came into being. The purpose of this paper is to study the innovative training mode of computer applied talents under school-enterprise cooperation, and to discuss its application and effect in practice.

2. Overview of school-enterprise cooperation education model

The school-enterprise cooperation education mode is a talent training mode based on the close cooperation between universities and enterprises. In this mode, universities and enterprises participate in the whole process of talent training together and realize the organic combination of educational resources and enterprise needs through close cooperation and collaboration. The school-enterprise cooperation education model has the

characteristics of openness, practicality, and innovation. Through the mode of school-enterprise cooperation, colleges and universities can better understand the needs of enterprises for talents, adjust the teaching content and methods, and make it more suitable for practical application. Enterprise participation in talent training can provide practical opportunities and practical problems, so that students can practice and apply their knowledge and skills in a real working environment. This close cooperative relationship enables students to better understand the industry dynamics, master cutting-edge technologies, and cultivate computer applied talents who meet the needs of social development [1]. The implementation of school-enterprise cooperation education mode requires the establishment of long-term and stable cooperative relations between universities and enterprises, and the formulation of clear cooperation plans and objectives. Colleges and universities need to give full play to their own advantages and provide high-quality teaching resources and teachers as well as all-round learning support for students. Enterprises need to actively participate in talent training, provide practical opportunities and career development guidance, and guide students to combine their knowledge with practical work.

2.1. Demand analysis of computer applied personnel training

The training demand for computer applied talents stems from society's urgent demand for technology application and innovation ability. With the rapid development of information technology, computer applications have penetrated all aspects of all walks of life, and the demand for professionals who master computer application skills is growing day by day. With the advancement of scientific and technological innovation, the social demand for computer application talents with innovative abilities has become increasingly prominent. These talents need to have a solid basic knowledge of computers, be familiar with various application software and tools, be able to flexibly use computer technology to solve practical problems, and have innovative thinking and teamwork ability [2]. Therefore, the training of computer applied talents needs to be close to the actual needs and focus on the cultivation of practical and innovative skills, in order to adapt to the rapid changes of society and the continuous update of technology.

2.2. Methods and means of innovative training of computer applied talents

The innovative cultivation of computer applied talents needs to adopt many methods and means to cultivate students' practical and innovative skills. Teachers should focus on practical teaching and use the study of practical projects and practical cases to let students participate in the process of solving practical problems and cultivate their practical and problem-solving skills. Innovation and entrepreneurship education is carried out to encourage students to put forward new ideas and to provide training and support for innovation and entrepreneurship to cultivate students' innovative thinking and entrepreneurial ability [3]. Colleges and universities should strengthen the cultivation of team cooperation and project management skills through team projects and interdisciplinary cooperation. With the help of information technology means such as online learning platforms and virtual laboratories, diversified learning resources and practice environments can be provided and students' learning channels and practice opportunities can be broadened [4].

2.3. Mechanisms and models for implementing school-enterprise cooperation

The mechanism and mode for implementing school-enterprise cooperation is to promote the innovative training of computer applied talents and improve their practical skills and employment competitiveness. In the mode of school-enterprise cooperation education, it is necessary to establish a close cooperative relationship [5]. Schools and enterprises should establish a long-term and stable cooperative partnership, and clarify cooperation objectives and responsibilities by signing cooperation agreements and jointly formulating training programs. The two sides should strengthen communication and coordination to establish a cooperative relationship of

mutual trust and benefit. To develop a practice-oriented teaching model, schools and enterprises can jointly design and implement the curriculum, combining theoretical knowledge with practical application [6]. Through practical projects, internships, and training, students are allowed to participate in real work scenarios and project practices to cultivate their ability and skills to solve practical problems. A tutor system and practice guidance mechanism can be established, and schools can invite enterprise professionals to serve as teacher mentors to provide practical guidance and share professional experiences. Tutors can guide students in the development of practical projects and the design of solutions, helping them develop practical skills and innovative thinking. To carry out industry-university-research cooperation, schools and enterprises can jointly carry out scientific research projects to promote the transformation and application of scientific research results [7]. By conducting scientific research in cooperation with enterprises, students can be exposed to cutting-edge technologies and practical problems, and develop scientific research ability and innovation awareness. Additionally, schools and enterprises can jointly establish an employment docking platform to provide students with employment information and internship opportunities. Through the involvement of enterprises, students can better understand industry needs and employment trends, plan their career development in advance, and have the opportunity to obtain employment opportunities. The implementation of the mechanism and mode of school-enterprise cooperation requires the establishment of close cooperative relations, the development of a practice-oriented teaching mode, the establishment of a tutor system and practical guidance mechanism, the development of industry-university-research cooperation, and the establishment of employment docking platform. The effective implementation of these mechanisms and models will help to enhance the innovative ability and employment competitiveness of computer applied talents and achieve a win-win situation of school-enterprise cooperation [8].

3. Research on the innovative training mode of computer applied talents under the school-enterprise cooperation education mode

3.1. Introduction of innovative education model based on school-enterprise cooperation

The innovative education model based on school-enterprise cooperation is an education model based on the close cooperation between schools and enterprises, aiming at cultivating the innovative ability of computer applied talents. Through the close cooperation between schools and enterprises, the model combines education and practice to provide students with a training environment and opportunities closer to their actual needs. Under this model, the school establishes a close partnership with the enterprise to jointly develop training programs and curriculum. The school can adjust the teaching content and methods according to the needs of enterprises and the development trend of the industry to ensure that the talents cultivated have practical application ability [9]. Companies can also provide practice bases and internship opportunities for students to get in touch with real work environments and projects to improve their practical and problem-solving skills. In the innovative education model based on school-enterprise cooperation, the cooperation between schools and enterprises is not only limited to the curriculum and internship arrangement but also can carry out joint research projects, technical exchanges, innovation competitions, and other activities to stimulate students' innovation awareness and creativity. By working with companies, students can be exposed to the latest technology and industry dynamics, understand practical problems and challenges, and develop problem-solving skills and teamwork spirit [10]. The advantage of the innovative education model based on school-enterprise cooperation lies in the combination of education and practice, providing a training environment closer to the actual needs so that students can better adapt to the requirements of the workplace. The cooperation between schools and enterprises also provides more job opportunities and career development paths for students. However, the

model also faces some challenges, such as the difficulty of cooperation between schools and enterprises and the coordination of curriculum and practice links, which need to be solved by joint efforts of all parties. The innovative education model based on school-enterprise cooperation provides an effective way for the innovative training of computer applied talents. Through close cooperation between schools and enterprises, students can obtain a more practice-oriented education, improve their innovation ability and competitiveness, and lay a solid foundation for their future career development [11].

3.2. Application of school-enterprise cooperation education model in the training of computer applied talents

The school-enterprise cooperation education mode has a wide range of application value in the training of computer applied talents. Through cooperation with enterprises, colleges and universities can timely understand the latest needs of the industry and the trend of technological development, adjust the teaching content and curriculum settings, and make it more suitable for practical application. School-enterprise cooperation provides students with rich practical opportunities, allowing them to practice and apply in a real work environment to improve their skill level and problem-solving skills. Students are also able to understand the working processes and norms within the industry through communication and cooperation with enterprise employees and develop professional literacy and teamwork skills. School-enterprise cooperation also provides students with employment and internship opportunities, increasing their competitiveness in employment [12].

3.3. Cultivation of the innovative ability of computer applied talents by school-enterprise cooperation education mode

The school-enterprise cooperation education model has played a positive role in promoting the cultivation of innovative abilities of computer applied talents. Through cooperation with enterprises, students can get in touch with actual projects and needs, face real challenges, and stimulate their innovative thinking and problem-solving skills. The school-enterprise cooperation provides an innovation platform and resource support, and students can use the laboratory, equipment, and technical support of the enterprise to carry out innovative practices, scientific research projects, and technological innovation. School-enterprise cooperation also encourages students to participate in industry competitions and entrepreneurial activities to cultivate their innovative awareness and entrepreneurial spirit [13]. The school-enterprise cooperation model can also promote the exchange and cooperation between academia and industry, promote the transformation and application of scientific research results, and cultivate students' innovative abilities and practical skills. The school-enterprise cooperation education model can also help students build a wide range of personal relationships and professional networks. Through cooperation with enterprises, students have the opportunity to communicate and interact with industry professionals and business leaders and expand their networks. These network resources not only provide students with employment and internship opportunities but also provide strong support for their future career development. Students are also able to meet like-minded students through collaborative projects with companies, forming learning and innovation partnerships, and jointly driving each other's growth and progress. Therefore, the school-enterprise cooperation education model can not only cultivate students' innovative abilities but also lay a solid foundation for their career development [14].

3.4. Cultivation of students' innovative consciousness and teamwork by school-enterprise cooperation

School-enterprise cooperation plays an important role in cultivating students' innovation consciousness and teamwork. Through cooperation with enterprises, students can be exposed to practical problems and challenges,

and stimulate their innovation consciousness and creativity. At the same time, participating in school-enterprise cooperation projects can cultivate students' teamwork skills and enable them to work with others to solve problems [15]. School-enterprise cooperation projects provide students with real working environment and project practice opportunities, in such an environment, students need to face practical problems and challenges and apply the knowledge and skills to solve problems. This practical experience can stimulate students' sense of innovation and cultivate their ability to think and solve problems proactively. School-enterprise cooperation projects usually require students to work with others, which encourages students to develop teamwork skills. In teamwork, students need to communicate and collaborate effectively with others, and work together to solve problems. By working with others, students learn to listen to others, respect their views, and coordinate and cooperate effectively. School-enterprise cooperation projects usually involve interdisciplinary collaboration, and students need to collaborate with classmates from different professional backgrounds. Such interdisciplinary cooperation can promote the development of students' comprehensive abilities, broaden their horizons and ways of thinking, and cultivate their ability to solve complex problems. School-enterprise cooperation programs can also provide mentorship and practical guidance to help students develop innovation and teamwork skills. Tutors can provide professional guidance and feedback to help students improve and refine their innovative projects. Practical instruction can help students learn more knowledge and skills in practice, and provide feedback and guidance on practical experience [16]. School-enterprise cooperation has a positive impact on the cultivation of students' innovation consciousness and teamwork. By participating in school-enterprise cooperation projects, students can get in touch with practical problems and challenges and stimulate their innovation consciousness. Working with others can foster teamwork and interdisciplinary cooperation can promote the development of students' comprehensive skills. These skills are important for students' career development and personal growth.

4. Evaluation and prospect under the mode of school-enterprise cooperation education

4.1. Evaluation index system of school-enterprise cooperation education model

The evaluation index system of the school-enterprise cooperation education model includes many aspects to comprehensively evaluate the effectiveness and quality of the model. The employment rate and employment quality of students can be considered as one of the evaluation indicators to measure the impact of this model on students' career development. Students' practical and innovative skills can be assessed, including their performance in practical projects, problem-solving skills, and the output of innovative results. Students' comprehensive quality and skill development can be considered, including professional knowledge mastery, teamwork, communication skills, and leadership skills [17]. Students' satisfaction and participation can also be considered to understand their degree of recognition and participation in the school-enterprise cooperation education model. The satisfaction and cooperation effect of enterprises can be considered, including the evaluation of students' comprehensive quality, students' performance in practice, and their contribution to the development of enterprises.

4.2. Outlook and improvement direction of the school-enterprise cooperation education model in the future

The school-enterprise cooperation education model has a broad development prospect in the future, which can further strengthen the depth and breadth of cooperation between schools and enterprises, and establish a closer cooperative relationship. It mainly includes strengthening communication and exchanges between the two

sides, jointly formulating training plans and curriculum settings, and improving the effectiveness and pertinency of cooperation. The tutor system and guidance can be strengthened to provide students with better guidance and support, and the tutor can provide professional guidance and practical experience sharing to help students better understand practical problems and challenges, and improve innovation and practical skills. It can strengthen the joint research and technological innovation between schools and enterprises, promote the transformation and application of scientific research results, and cultivate students' scientific research ability and innovation awareness. It can also strengthen the evaluation and feedback mechanism of school-enterprise cooperation projects, timely understand the effects and problems of the projects, and improve and optimize the mechanism.

5. Conclusion

To sum up, the school-enterprise cooperation education model is an effective way to train computer applied talents. This model can promote the cultivation of students' practical and innovative skills. When implementing the model, the key links and influencing factors should be fully considered, and corresponding measures should be taken to improve the training effect. Although there are some challenges in the school-enterprise cooperation education model, its advantages and potential cannot be ignored. It is hoped that the research results of this paper can provide some guidelines for universities and enterprises in the training of computer applied talents and promote the further development and innovation of school-enterprise cooperation education mode.

Disclosure statement

The author declares no conflict of interest.

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