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Exploration and Practice of School-Enterprise Cooperative Education Model for Computer Majors

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Abstract: With the deepening of vocational education reform, the teaching work of computer majors in higher vocational colleges should be further optimized. Teachers should actively introduce new educational concepts and education methods, to better arouse students' interest, strengthen their understanding and application of the knowledge, and improve the education effect. School-enterprise collaboration, as a popular education concept at present, can greatly enrich the teaching content of computer majors, broaden the path of education, and greatly promote the more comprehensive development of students. Given this, this paper will carry out an analysis of school-enterprise collaborative education for computer majors, and put forward some strategies for other colleagues' reference.

Keywords: Computer; School-enterprise cooperation; Educating people

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1. The value of school-enterprise collaborative education for computer majors

1.1. Stimulating students' potential

In promoting the training of computer majors in higher vocational colleges, we should not only pay attention to the teaching of theoretical knowledge but also actively cultivate students' comprehensive quality and professional skills. By comprehensively deepening the cooperation between schools and enterprises, and building the education model integrating production and education, we are committed to training higher vocational students to establish a correct career view and development concept, so that they can become high-quality technical talents with both German and technical skills [1]. In this process, teachers should give full play to the main role, actively participate in the practice of school-enterprise cooperation, and strive to create a computer professional education classroom that combines theory and practice, so that students can master solid professional knowledge and form good computer professional skills, to effectively stimulate their inherent potential and improve the overall effect of education.

1.2. Meet the requirements of modern times

At present, the rapid development of all walks of life in China makes the enterprise's demand for computer professionals growing day by day, and the market's demand for high-quality computer professionals has also shown a significant increase [2]. In the face of this trend, when teachers train computer professionals, in addition to deepening the comprehensive expansion of vocational college students' professional knowledge, ability, and quality, they must also closely combine with the market demand, and strive to improve their problem-solving ability and professional quality, to ensure that they can better meet the needs of job talents [3]. Through the implementation of school-enterprise cooperation and collaborative education of the strategic measures, we are expected to train more computer professional skills in line with the requirements of the development of modern times and produce more high-quality talent resources into the market.

1.3. Promoting education reform

Currently, many higher vocational colleges are actively promoting the education of computer majors. However, we have noticed that there are still some deficiencies in the combination of theory and practice, which restricts the long-term development of higher vocational students to a certain extent [4]. In the daily teaching process, many teachers have formulated corresponding education programs based on professional knowledge and course content, but it needs to be strengthened in the introduction of actual cases and data from enterprises. This situation may lead to limited development of students' practical skills and problem-solving abilities, which is not conducive to the improvement of their comprehensive quality. Through in-depth cooperation between schools and enterprises, we can further optimize the education mode of computer majors and inject new vitality into teaching work, which is a key link to improve the effectiveness of education reform [5]. To this end, we must attach great importance to and actively explore to ensure that the education work is more realistic and better serves the needs of students' growth and talent.

2. Analysis of the current situation of university-enterprise cooperative education for computer majors

2.1. Lack of enterprise guidance

Under the mode of school-enterprise cooperation, many enterprises have not fully exploited the potential of education resources, and the guidance of students' innovation awareness and professional quality is insufficient. In practice, enterprises are not willing to take the initiative to cultivate students' craftsman spirit and entrepreneurial ability, and they lack comprehensive and systematic guidance for students [6]. Additionally, some enterprises only provide internship bases and fail to provide professional guidance for students, resulting in students only doing repetitive work in the enterprise, which is not conducive to improving the education effect. Moreover, when some students enter the enterprise, they have relatively insufficient knowledge reserves and need a long time to adapt to the position. Simultaneously, the enterprise has little systematic training for students, resulting in a large amount of time, energy, and resources wasted by students and enterprises.

2.2. The education model is singular

At the moment, many educators generally adopt the irrigation education model in the process of promoting the training of computer professionals. This mode makes it difficult for educators to dig deeply into the connotation of education work, which is not conducive to the construction of a computer professional knowledge system

independently constructed by higher vocational students [7]. Concurrently, under the traditional education mode, there is a problem of low efficiency in the learning of computer professional knowledge, which will harm the training of computer professional talents [8]. A good educational environment can significantly improve the effect of computer professional education. Therefore, educators must actively innovate the education model of computer majors and integrate new educational ideas, methods, and technical means into teaching practice to improve the quality of computer majors.

2.3. The curriculum design is unreasonable

At the current stage, many educators fail to fully consider the actual needs of higher vocational students in future employment when implementing the training of computer professionals, which leads to certain irrelevance in the educational content set. In addition, some teachers pay too much attention to the teaching of theoretical knowledge in the process of promoting the education of computer majors, while the introduction of practical work content and cases is insufficient, which also hurts the improvement of the knowledge mastery ability of students in higher vocational colleges [9]. When vocational college students graduate, they will be faced with the challenge of quickly adapting to the job, they need to spend a long time to adapt, which will undoubtedly negatively impact their future development. Therefore, we must attach great importance to and improve these problems to ensure that vocational college students can integrate into society smoothly and realize their value.

3. Computer major school-enterprise cooperative education strategy

3.1. Combine the market demand, clear teaching objectives

In the education and teaching practice of computer majors in higher vocational colleges, we must deeply realize that the promotion of school-enterprise cooperative education is not achieved overnight, but requires us to seek progress while maintaining stability and gradually deepen following the established educational policies. Teachers should accurately grasp the training objectives of computer majors, closely combine them with the actual development needs of enterprises, and make clear the direction of education, to implement the education plan more effectively and improve the results of education.

Under the background of the Internet era, to further improve the effectiveness of school-enterprise collaborative education for computer majors, teachers must attach great importance to the introduction of Internet technology, conduct in-depth research on the current computer market through network technology, clarify the specific direction of school-enterprise collaborative education for computer majors, and ensure the consistency between market development needs and talent training objectives [10]. Teachers should actively go to the front line of enterprises and industries, fully understand the work content, process, and standards of relevant positions, and conduct in-depth communication and interaction with enterprise managers and outstanding employees, to clarify the important goals of school-enterprise collaborative education of computer majors and ensure a high degree of docking between talent training and job requirements. Furthermore, teachers should change the traditional concept of education, combine the characteristics of school-enterprise collaborative education of computer majors in the new era, clarify the education goal, and devote themselves to cultivating more outstanding talents with professional quality and noble professional ethics.

3.2. Optimize the curriculum system based on the workflow

From an objective perspective, to strengthen the effectiveness of school-enterprise cooperative education for

computer majors, teachers should actively integrate theoretical teaching and practical teaching. In the process of carrying out the practice activities of school-enterprise cooperative education for computer majors, teachers should, under the guidance of advanced concepts and regarding the actual workflow of corresponding positions in computer majors, build a set of school-enterprise cooperative education curriculum system, to promote the comprehensive quality and professional quality of higher vocational students [11]. In the process of school-enterprise collaborative education for computer majors, teachers should closely combine the development trend of computer majors and the development trend of the industry, build a more professional and systematic curriculum system, and actively introduce diversified information teaching resources to ensure the continuous innovation and dynamic development of school-enterprise collaborative education for computer majors. To enable students to fully experience the charm and practicability of knowledge in knowledge exploration, to deepen the overall understanding of the computer market, and to lay a solid foundation for the future employment and entrepreneurship of higher vocational students.

3.3. Attach importance to environmental construction and cultivate double professional teams

In the process of deepening the reform of computer education and teaching and promoting school-enterprise cooperation in education, teachers should attach great importance to the construction of a high-quality education environment, and actively introduce advanced education equipment and software to ensure that vocational students can closely meet the market demand and master more updated professional knowledge and concepts of computer [12]. Simultaneously, higher vocational colleges should focus on strengthening the construction of teaching staff, and creating a more efficient and scientific learning platform for students, to improve the effectiveness of school-enterprise cooperative education for computer majors.

To realize the continuous optimization of the teaching environment, higher vocational colleges should increase the input of human and material resources, and deeply participate in the education of computer majors, to achieve better education results. In addition, to comprehensively improve the overall quality of computer professional teachers, higher vocational colleges can consider selecting teachers to carry out in-depth exchanges and communication with cooperative enterprises, so that they can have a deep understanding of the actual operation process of enterprises and industry dynamics [13]. In this process, teachers will combine their professional strengths to help enterprises solve practical problems, and come into contact with the latest computer knowledge, ideas, and equipment from enterprises. This will undoubtedly have a far-reaching impact on teachers' future work in computer education at a higher level. Concurrently, enterprises should also take active actions to send excellent staff of computer positions to schools as part-time teachers, so that they can combine their work practice to impart experience and knowledge to students, deepen students' understanding of the work content and process, and further improve the quality of education.

3.4. Deepening school-enterprise cooperation and improving application ability

In promoting the training of computer professionals, to improve the training quality, teachers need to attach great importance to the cooperation between schools and enterprises, to promote the further improvement of students' application ability of professional knowledge. Before students enter the enterprise, teachers can conduct in-depth analysis according to the actual job needs, and then implement targeted training for students to help them shape the corresponding professional quality and ability, to better meet the needs of the workplace. After students integrate

into the enterprise, they should be encouraged to spontaneously form a team, so that when faced with problems, they can use the strength of the team to solve problems together.

Commonly, enterprises will provide interns with mentors, who will impart skills and knowledge in practical work, which will greatly promote the improvement of students' problem-solving ability and benefit their long-term development. By strengthening school-enterprise cooperation, relevant enterprises are expected to relieve the current pressure on talent reserve to a certain extent, and vocational colleges can also improve the employment rate of graduates. In the process of cooperation, enterprises should take the initiative to carry out training according to the actual situation of higher vocational students, help them transform their computer professional knowledge into the ability to solve practical problems, improve their actual work efficiency in the enterprise, and then promote the continuous improvement of the quality of computer professional talent training [14]. At the same time, high-quality training can also enhance the corporate identity of higher vocational students and help enterprises retain talents. Through the implementation of school-enterprise cooperation projects, higher vocational students can gradually improve their computer professional knowledge system, enhance their ability to solve various practical problems, create more economic benefits for enterprises, and improve the overall education level of computer majors.

3.5. Improve the evaluation mechanism and enhance the effectiveness of education

To effectively improve the education results of computer majors, teachers should focus on the continuous optimization of the evaluation mechanism during the implementation of school-enterprise cooperation in education, to ensure education effectiveness. In the practice of educating students of computer majors, teachers should fully affirm and recognize vocational students, and be good at exploring their bright points, to stimulate their active participation in professional education.

Additionally, when praising vocational students, teachers should praise them openly in class as much as possible, which will help to enhance the pride and self-confidence of vocational students, and then create a positive environment for computer education. In the process of educating students of computer majors, teachers can find that encouraging evaluation plays a significant role in improving the learning ability of vocational students. Therefore, teachers should optimize the education process according to the reaction of vocational students to the evaluation activities, and form a positive cycle [15]. After being affirmed by teachers, vocational college students will greatly enhance their confidence in learning and better feel their progress, which has a significant role in promoting their future development. To ensure the perfection of the evaluation mechanism, we can not only carry out top-down evaluation activities, but also encourage higher vocational students to evaluate each other, which will help them better find their shortcomings, check and fill in the gaps in a targeted way, and further improve the computer professional knowledge system. In the process of mutual evaluation of higher vocational students, they can find each other's advantages more deeply, to produce the mentality of seeing the good and thinking of the good, so that the power of example in the computer professional education plays a greater role.

4. Summary

To sum up, if you want to improve the effect of school-enterprise cooperative education for computer majors, teachers can combine the market demand and clarify the teaching objectives; Based on the work process, optimize the curriculum system; Attach importance to environment construction, and train double teacher team; Deepen school-enterprise collaboration and improve application ability; Improve the evaluation mechanism, enhance

the effectiveness of education and other aspects of the analysis, to virtually promote the quality of computer professional school-enterprise collaborative education to a new height.

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References

[1] Liu L, 2022, Research on the Integration of Industry and Education and School-Enterprise Cooperation in the Context of "1 + X" Certificate. Scientific Consultation (Science and Technology Management), 2022(10): 42–45.

[2] Liu L, 2022, Research on Reform of Training Model for Computer Majors in the Context of "Integration of Industry and Education and School-Enterprise Cooperation" Under 1 + X Certificate. Scientific Consultation (Science and Technology Management), 2022(08): 148–150.

[3] Zhou Z, 2021, Research on Innovation of Computer Professional Talent Training Model Based on School-Enterprise Coordination and Cooperation. Paper Making Equipment and Materials, 50(11): 157–159.

[4] Qing L, 2020, Practice of Integration of Industry and Education and School-Enterprise Cooperation in Innovation of Collaborative Talent Training Model for Computer Majors. Modern Vocational Education, 2020(51): 206–207.

[5] Li H, Zhao W, Li R, 2020, A Practical Study on University-Enterprise Cooperation and Production-Education Integration in Technical Colleges: A Case Study of Computer Majors. Employment and Security, 2020(17): 130–131.

[6] Liu Y, 2020, Exploration on the Mode of University-Enterprise Cooperation in Building Computer Majors in Higher Vocational Colleges. China Educational Technology Equipment, 2020(17): 53–55.

[7] Wang X, Duan H, 2019, Reform and Practice of Talent Training Mode of Modern Apprenticeship System in Higher Vocational Colleges: University-Enterprise Dual and Piecework Rotation: A Case Study of Computer Majors. Modern Commerce and Trade Industry, 40(33): 89–90.

[8] Cheng Y, Bu X, 2018, Research on Innovation of Collaborative Talent Training Model for Computer Majors Based on "Integration of Industry and Education and School-Enterprise Cooperation". Computer Knowledge and Technology, 14(25): 161–163 + 167.

[9]Huang M, 2017, Research on Operation Mode of Off-Campus Practice Base for Computer Majors. Computer Products and Distribution, 2017(11): 227 + 285.

[10] Yong P, Hu L, 2017, Construction of Computer related Professional Curriculum System through School Enterprise Cooperation.. Education and Teaching Forum, 2017(28): 47–48.

[11] Hao Q, 2017, Exploration on Reform of Training Model for Computer Majors in School-Enterprise Cooperation. Information Systems Engineering, 2017(04): 172.

[12] Tao C, Lin M, Xie X, 2016, Exploration and Practice of School-Enterprise Cooperation Mechanism for Computer Majors. Education and Teaching Forum, 2016(51): 150–151.

[13]Wu G, Zhu Y, Tang Z, et al., 2016, A Study on the Cultivation Model of University-Enterprise Cooperation for

Computer Majors — A Case Study of Tropical Crop College of Yunnan Agricultural University. Science and Technology Information, 14(23): 14 + 21.

[14] Lu W, Hu X, 2016, Research and Practice of University-Enterprise Cooperation in Curriculum Development — A Case Study of Computer Majors. Modern Vocational Education, 2016(07): 50–51.

[15] Gu Q, Fu Y, Pan T, 2015, A Practical Research on the Training Mode of University-Enterprise Cooperation in Higher Vocational Colleges — Taking Computer majors as an example. Computer Knowledge and Technology, 11(20): 94–96.