Practice and Exploration of Innovation and Entrepreneurship Education for Computer Science and Technology Professionals Based on the Analysis of Big Data

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Abstract. According to the analysis of big data, in the process of computer science and technology talent management, it is necessary to take effective technology innovation and development as the core and pay attention to the expansion and promotion of the industry. According to the existing needs of comprehensive computer technology, it is necessary to train professional computer technology talents and strengthen the expansion of the technical model under the professional technology, combined with the existing technical development needs. Moreover, we should constantly integrate the control market of computer science talents, pay attention to the training and improvement of technology and carry out effective implementation of basic knowledge. According to the existing standard mode, we will have to adjust the development demand of specialization to ensure the professional technology integration under the innovation and development of computer specialty.

Keywords: Computer Science, Professional Talents, Innovative Practice, Big Data Analysis

1. Introduction
In the development of computer science and technology industry, it is necessary to focus on the expansion and integration of the industry based on the development requirements of effective technology models. Combined with the development of the computer industry, real-time and effective technology upgrading can be achieved. We should focus on the practical application of engineering concepts, adjust the experimental teaching model, strengthen school-enterprise cooperation and pay attention to the development and update of the industry. Through the improvement of computer science and technology, we can obtain effective innovative application effect. Moreover, we should also pay attention to deepening the practice of innovative education exploration and application combined with the relevant standard model to successfully improve the development of computer science and technology [1].

2. Development of integrated practical operation of computer teaching technology
In the practice of the development of computer science and technology, the course setting is often not the professional practice but assigned according to the compulsory content of the professional course.
Computer science students, according to different professional training difficulty standards, should implement different project practice, solve the technical model and consolidate the theoretical knowledge of students. In accordance to the standard content of "Computer Science and Technology Practice Learning System and Norms in Colleges and Universities", the professional teaching system of computer is constructed while the comprehensive mode of curriculum teaching is promoted. According to the outstanding hardware and software knowledge standards, universities should gradually increase the content of professional practice courses [2]. In the process of teaching, it is important to explore and cultivate the contents related to computer based on stratified education to further promote the application of comprehensive mode of social practice teaching. The comprehensive innovative application ability, practical ability and engineering thinking ability of computer students are far from perfect yet and they cannot effectively integrate and apply the practical system, which is the key content that computer science and technology students need to study at present.

3. Construction of teaching and practice mode of CD engineering concept

According to the education model of CD engineering philosophy and the teaching syllabus and objectives, the comprehensive quality training of engineering technology is emphasized, as shown in figure 1. Through the professional technical foundation model, we should lay emphasis on the improvement of various ability and quality level. Strengthening the deployment of interactive modes related to engineering through professional practice should also be valued. Starting from product demand, we should pay attention to the development of engineering ability [3]. Moreover, strengthening the engineering inspection and analysis and adjusting the product formulation in the integrated teaching mode are what really matter. According to the ideas of individual ability, interest, system structure, demand development, etc., technology training is carried out to determine the practical operation mode application in line with students. Through the adjustment of learning environment, students are encouraged to learn actively and teachers should help students accumulate practical teaching experience, which can improve comprehensive teaching standard ideas to meet the requirements of current practice model construction standards.

4. Application of integrated practical value model in computer science teaching

4.1. Construct a perfect new structure system of computer teaching

According to the standards of computer science and technology teaching integration, the implementation and training of curriculum practice should be adjusted. According to the operational and verification of computer professional practice thinking, strengthening the comprehensive
development of the practice of subjectivity, analysis level through different stages is really essential. The focus on design, experiment and application of innovation model, combined with the traditional technology of experiment operation standard can achieve the open application of teaching system implemented as a whole to improve the teaching standard and management measures as well as the operation of the integrated technology.

Based on the basic skills and experiments, we should take the teaching material as the basic content of the experiment by means of the setting of the experiment course, implementing the effective technical program assembly and paying attention to the integration of computer network information. Through experimental verification and analysis, students' comprehensive technology application will be improved step by step while the integration of system software and hardware will be adjusted to gradually promote students' comprehensive ability of using computer technology. According to the experimental standards, we can analyze the courses that conform to the computer multimedia application, computer algorithm, image processing, programming and so on, and study the experimental categories that conform to the actual cases in combination with relevant practical applications and gradually improve the practical application effect of computer technology teaching by analyzing problems and solving problems.

4.2. Integration of school-enterprise practice mode of teaching
We should focus on the assignment of course design steps based on teaching practice environment. According to the design requirements and objectives, the software is applied in practice to improve the effect of training. Through the multi-way model, we can strengthen the synchronous analysis of the practice system and gradually alleviate the problem of uneven and insufficient distribution of school-enterprise resource. Through school-enterprise communication, we will be able to achieve complementary and value more on what enterprises need. Through effective training, the joint establishment of the laboratory along with the enterprises’ needs of talents can be effectively combined. Based on effective school-enterprise integration, students' practical training skills are constantly improved and their professional vision is expanded. We should pay attention to the application of students' special development mode, fully stimulate students' learning interest and enthusiasm, gradually recognize the importance of computer practical training learning from the actual operational perception, constantly improve the standards of students' independent behavior awareness training mode and finally meet the current learning needs of students.

4.3. Improve the technical level of professional computer teachers
Computer professional teachers should pay attention to the improvement of their own technology and carry out course research in line with practical operation mode by analyzing the current social needs of enterprises and combining with the content in class. By organizing the curriculum research among teachers, actions of strengthening the expansion of technology model and adjusting the research direction of technology teaching, targeted teaching research can be more in line with the development needs of students, enterprises and society. Taking the idea of solving students' social skills as the standard as well as improving enterprise's technical talents as the goal, teachers should expand models conforming to the teaching practice of the application of technology, improve computer integration development, build a perfect standard of technology research, computer technology professional teachers' teaching level and teaching thinking of innovative applications in order to enhance the training of social comprehensive computer technology and the actual needs of talents.

4.4. Strengthen the international exchange of computer science and technology talents
According to the development and construction target of computer science and technology talents, this paper analyzes the international market level and pays attention to industrial integration and innovation. Starting from the development of the international computer industry, this paper analyzes the gap between China and the world and focuses on the case of talent innovation and entrepreneurship. Based on the content of teaching courses, we should pay attention to the analysis on
different projects, adjust the operation mode and standards, improve the synchronicity of course setting and promote the rapid development of the professional level of computer science and technology talents. The total application is shown in figure 2.

![Figure 2. Application table of comprehensive practical value model in computer science teaching.](image)

5. Conclusion
To sum up, according to the analysis of big data, in the teaching process of computer science and technology talents, it is necessary to take effective technology integration development as the thought. We should pay attention to the integration of teaching system and strengthen the construction and development of professional system. Meanwhile, we should also strengthen the integration and improvement of product capabilities, divide special knowledge, special needs and special capabilities, pay attention to the technical application of practical operation and adjust the thinking construction in the operation design mode. With new technology, new design, new ideas and new practice as the system, the construction of special courses is constantly enhanced while the mutual assistance of the construction of a perfect teaching system is built. On the basis of what are mentioned above, the accurate analysis of teaching is improved with great comprehensive effect of teaching.

References
[1] Zhou Xiaocong, Yi Yang, Lai Jianhuang. Exploration on the teaching mode of comprehensive practice course of computer science and technology specialty [J]. Computer Education, 2014(01): 60-63+75.
[2] Wang Zhi’an, Wang Xuhui, Li Yan. The practice teaching of computer science and technology under "3+1" teaching mode [J]. Computer Education, 2014(07): 59-63.
[3] Li Zongli, Yang Yanqin, Hu Xiaotao. Exploration on the training program of water conservancy professionals integrating engineering education and innovation and entrepreneurship education [J]. Higher Education Forum. 2017(11).