

## Research on Software Talent Practice Platform

Gang Chen, Dawei Zhao\*

College of Humanities & Sciences of Northeast Normal University, Changchun, Jilin, 130117

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**Abstract:** With the development of information technology and society, the demand for applied software talents is increasing, and the application software talent training is becoming more and more important. This paper analyzes the characteristics of applied talents and their training problems, and analyzes software talent training mode and practical teaching platform. The construction and training modes have been discussed, and the practice shows that the quality of software talent training has been greatly improved.

### 1. Introduction

The software industry is one of the key development industries in China. With the rapid development of information technology, human society has entered the information society in the 21st century. In the process of informationization of various industries, the upgrading of traditional industries and technological transformation require a large number of fields. The development of software design, development, maintenance and management personnel, information technology and industry requires a large number of application-oriented software professionals. At present, the scale, structure and level of China's computer software development and application development talent team can not meet the actual needs of the national software industry development and information construction. The shortage of software talents and the unreasonable structure of the software industry are becoming the software industry revitalization and information. The bottleneck of the construction, the application of software talent training issues is important. How to innovate the educational concept, reform the software talent training mode, and improve the quality of software talent training is one of the important issues to be solved in higher education. In recent years, with regard to the topic of software talent training, scholars from some universities in China have actively explored and practiced from the training mode, training program to curriculum plan, and achieved some results. Zhengzhou University Software Technology College is the first batch of 35 demonstration software vocational and technical colleges approved by the Ministry of Education. Since its establishment in 2004, the college has actively explored and practiced the application-oriented innovative software talent training model. A new approach to the cultivation of applied software talents has greatly improved the quality of personnel training.

### 2. The goal of application software training

Application-oriented talent development. Undergraduate student talent training can be divided into academic, engineering, and application. The so-called applied talents refer to a specialized type of talents that can apply professional knowledge and skills to the professional social practice they are engaged in. They are the basic knowledge and basic skills required to master social production or social activities, mainly engaged in first-line production. The specific connotation of professional and technical talents who comprehensively design, innovate and solve practical problems is constantly developing with the development of higher education history. The cultivation of applied talents is the need of China's new industrialization and modernization development. The cultivation of applied talents is different from the training of academic and theoretical talents. The application-oriented talent training model is based on ability and aims to cultivate technical application-oriented talents. of. The cultivation process of applied talents should emphasize the combination with production practice, and pay more attention to practical teaching links such as

experimental teaching, internship and training.

Software talent training positioning and school philosophy. Our school orientation is based on the principle of serving the society, guided by student employment, based in Henan, facing the whole country, and cultivating innovative engineering and application software technology talents for national and regional economic and social development. Highlight the educational concept of innovative and applied software talent training. First, highlight the educational concept of innovative talent training. Through the cultivation of innovative talents, continuously improve the quality of teaching, improve the level of running schools, and promote the overall development of the college. Second, adhere to the people-oriented The concept of educating people pays attention to the core concept of cultivating people to the work of the college, emphasizing that students should be cultivated as a "person" rather than as a simple "tool" for pure knowledge and Skills training; the third is to vigorously reform the curriculum training system, and focus on cultivating students' engineering practice ability.

### **3. Software talent training mode and platform construction**

Talent training system. In the construction of the talent training system, we actively explored a new model of talent cultivation, with the core of cultivating students' innovative spirit and engineering practice ability, focusing on professional quality training and professional skills training, and focusing on improving students' practical ability. The 3+1" software talent training mode, that is, the first three academic years, students mainly study at school, and in the fourth year, they no longer set up courses, providing students with a practical space for one-year project training. The design of professional training program "oriented for employment, from post, strengthen practice, focus on implementation", with engineering application ability and basic quality as the main line, formed a training program that meets the requirements for training of software technical talents, and built a complete training of talents. system. In the process of promoting the integration and optimization of the curriculum system, we adhere to the principle of equal emphasis on theory and practice, adhere to the theory of sufficient use, focus on the cultivation of students' practical ability, and achieved remarkable results.

Practical teaching platform. Practical teaching is an important core part of talent training and professional teaching. It plays an extremely important role in improving students' comprehensive quality, cultivating hands-on ability and innovative thinking, and directly affects the quality of talent training. We pay attention to the purpose of improving students' ability training, pay full attention to practical teaching links, continuously increase the investment in the construction of practical teaching hardware platform, take the actual needs of enterprises as the guide, focus on cultivating students' ability, pay attention to actual results, and improve students' practice. Ability, established a scientific and rational practical teaching curriculum system and a solid practical teaching platform. In the process of talent cultivation, we actively introduce the school-enterprise cooperation practice teaching mechanism, integrate the corporate culture and professional ethics education, and constantly optimize and update the practical teaching content under the guidance of the new ideological education concept, and the theoretical teaching is closely related to the training and practice. Combining, the "integrated, multi-level, open-ended" experimental teaching system from basic training, comprehensive experiment to project training is constructed. Continuously strengthen the construction of laboratories and training bases, continuously improve the conditions and environment of experiments and training, pay attention to the cultivation of students' professional practice ability and comprehensive post ability, and build a number of basic laboratories and professional laboratories with advanced equipment and complete functions. , to meet the experimental teaching needs of various professions. In cooperation with well-known IT companies and training companies at home and abroad, we have established a number of on-campus and off-campus training bases, and established a practical teaching hardware platform that is compatible with professional training objectives, which satisfies the requirements of cultivating applied innovative software talents. .

The "application type" of application software talents mainly refers to "technical application

type”, which is the application of technology and technology. The term "technology" as used herein refers not only to the technology of engineering background, but also to the management of technology, economic technology, and even professional foreign languages. Therefore, the core competencies of application software talents include engineering practice ability, team collaboration ability, foreign language application ability and technological innovation ability. Engineering practice ability refers to mastering the basic theory, basic knowledge, basic skills and methods of software engineering. And master modern software engineering design, development and programming skills. Among these core competencies, engineering practice ability is the most important ability, and it is also the “home-care ability” of students. Therefore, there are several specific requirements for the cultivation of this ability, that is, with solid theoretical and professional basic knowledge. Proficient in more than two programming languages, able to analyze and design small and medium-sized projects and management and maintenance of large database systems, master database development technology and component technology, familiar with the architecture of application systems and master one of the development platforms. This ability is cultivated through a large number of professional basic courses and professional courses.

Training mode. The training is crucial to the training of applied software talents. We focus on the cultivation of students' engineering practice ability and implement the "course training → semester comprehensive training → enterprise project training (including enterprise internship, graduation design)" The training system, and the summer experience training in the summer of the second to the third year, in the final year of the enterprise project training, the implementation of the combination of intramural training and off-campus training, the training model was built to enhance students The spiral talent training mode of “learning-training-re-learning-re-training” with the core of practical ability.

The college actively explored a new model of software talent training, and embarked on a new path of application software talent training, and achieved good results. Students' innovative ability, practical ability and comprehensive quality have been certified in many national and provincial science and technology competitions. Students have strong competitive advantages in terms of comprehensive quality, practical ability and teamwork ability. The graduates' ability and employment competitiveness have been significantly improved, and the quality and level of graduate employment have been significantly improved. The employment rate of graduates has always remained at a high level, and it is at the forefront of similar universities in Henan Province. The scientific and innovative application-oriented talent training system has received good implementation results. Since the establishment of the hospital in 2004, it has trained six graduates and three undergraduate graduates, and has delivered a large number of software and technical talents to the society. According to the social survey, the graduates of our college have been widely praised by employers for their solid foundation, simple style, pragmatic work, high comprehensive quality, strong work ability and strong development potential. They are diligent and pragmatic in their respective jobs. The courage to innovate, active and efficient work has been widely recognized and evaluated by all walks of life. They have been highly recognized by the society and enterprises with their own practical actions and outstanding work performance, and have created a resounding “Zhengzhou University Software Technology”. College brand".

#### **4. Conclusion**

With the rapid development of information technology, the human society in the 21st century has entered the information society, and the demand for software talents has increased. At the same time, new requirements have been put forward for the cultivation of talent quality and knowledge structure. Based on the analysis of the characteristics of applied talents and their training, we have defined the goals and orientation of the school, established the "3+1" software talent training model, and built an effective talent training system, practical teaching platform and training. The model, actively exploring and practicing the application software talent training, has embarked on a new path of application software talent training, which has greatly improved the quality of personnel training and trained a large number of excellent software technology talents for the country and the

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