

## Practice and Exploration of "3+1" Training Model in Local Universities

### -- Take the Computer School of Guangdong University of Science and Technology as an Example

Yong Fan, Liwei Tian, Lei Yang, Shasha Liu

School of Computer, Guangdong University of Science and Technology, Dongguan, Guangdong, 523083, China

#### Abstract

In order to adapt to and lead the new normal of economic development and the overall situation of service innovation-driven development, the Ministry of Education has given guidance on promoting the transformation and development of some ordinary undergraduate universities. This article introduces the meaning of the three classification forms of the talent training model and the "3+1" applied talent training model during the transition process. Combined with the problems encountered during the "3+1" practice of the Computer School of Guangdong University of Science and Technology, this article gives corresponding solutions. The effect of the implementation shows that the relevant solutions have a certain effectiveness.

#### Keywords

Talent Training Model; 3+1; Transformational Development.

#### 1. Preface

Founded in 2003, Guangdong University of Science and Technology is a private, full-time general undergraduate college approved by the Ministry of Education of the People's Republic of China to establish a full-time private undergraduate college that focuses on engineering, and manages, economics, literature, and art. The school closely focuses on the regional key development industries in the discipline and professional layout, actively serves the economic construction of Dongguan and the Guangdong-Hong Kong-Macao Greater Bay Area, continuously optimizes the discipline and professional structure, and cultivates professional characteristics. The School of Computer offers 5 undergraduate majors: Software Engineering, Internet of Things Engineering, Network Engineering, Information Management and Information Systems, Data Science and Big Data Technology. There are more than 6000 students in the school, there is a certain tendency to homogeneity, and the quality of employment is uneven. The phenomenon.

In October 2015, the Ministry of Education issued the "Guiding Opinions on the Transformation and Development of Local Undergraduate Colleges and Universities", which requires colleges and universities to adapt to and lead the new normal of economic development and promote the transformation and development of some ordinary undergraduate colleges and universities from the overall situation of service innovation-driven development. One of the tasks of transformation and development is to innovate the training model of applied technical skills talents, establish a talent training model that integrates production and education and collaborative education, and realizes the connection of professional chain and industrial chain, curriculum content and professional standards, teaching process and production process. Solve

the problem that the structure and quality of personnel training are not suitable for economic restructuring and industrial upgrading.

With regard to the current reform of the application-oriented talent training model, its development trend is to connect with the industry and integrate with the enterprise [1]. Typical examples include "order-based training", "modern apprenticeship", "internship", "excellent engineer", etc. Training mode [2]. These models can be summarized in three main forms, namely, a cooperative training model based on "university-based", a school-enterprise collaborative training model based on "enterprise", and the form of "equal cooperation between universities and enterprises". Among them, the form of equal cooperation between institutions of higher learning and enterprises is mainly that institutions of higher learning, enterprises or scientific research institutes invest considerable resources to form an industry-university-research teaching group through which various teaching activities are carried out [3]. In this form, universities, enterprises, and scientific research institutes all have their own different interests and needs. Through cooperation, they can complement each other's strengths, so as to achieve a favorable situation for all parties.

The "3+1" application-oriented talent training model is a form of equal cooperation between colleges and universities and enterprises. It is aimed at undergraduate education with a four-year academic system. In the first three years, the school will develop basic professional knowledge and training according to the talent training plan. Basic theory study and basic ability training, the fourth year of practical ability training in the enterprise. The "3+1" application-oriented talent training model allows students to learn the basic knowledge and basic theories through practice, so as to cultivate applied talents with practical ability and innovative spirit to meet social needs [4].

## 2. Analysis of the Practical Problems of "3+1" Training

In order to improve the quality of talent training, the School of Computer Science has implemented the "3+1" talent training model reform from the 2016 level, sending students to Neusoft Ruidao, Shenzhen Xunfang, Guangzhou Yuehang, Guangzhou Tengke and other groups in the fourth year. Enterprise practice. In the course of practice, there are mainly the following problems:

- (1) The communication and coordination mechanism between schools and enterprises needs to be further improved. Although the School of Computer Science sent teachers and students to practice in the enterprise. However, because these teachers are generally ordinary identities, there are certain difficulties in dialogue when connecting with companies. They need to be reported by the same level of corporate personnel to report the problem. There is a certain lag in the time to solve the problem.
- (2) The students have insufficient understanding of 3+1. Due to the relatively short implementation time, the 3+1 promotion is still not in place, and there is a lack of some typical high-quality employment cases to attract students to participate.
- (3) The cases of some companies are too simple and old. Some students feel that the case is relatively simple and outdated while studying in the enterprise, and there is no newest case, and they feel that there is little difference from studying in school.
- (4) Some students are preparing for postgraduate entrance examinations and civil service examinations, and they feel that there is a conflict in time, so the willingness of these students to participate is low.
- (5) The place where students practice learning is generally in first-tier cities such as Guangzhou, and the expenses incurred in food and accommodation are significantly higher than the expenses in school.

(6) During the practice and study in other places, students often need to go back to school to deal with some things, and often go back and forth between the school and the enterprise, which is troublesome.

### 3. "3+1" Training Practice Problem Solving Measures

In response to the above-mentioned practical problems, the School of Computer Science has taken the following measures to solve the above-mentioned problems.

(1) Established a coordination organization composed of the dean, assistant to the dean of the School of Computer Science, follow-up teachers, counselors, corporate education directors, department managers, and docking leaders to reduce time waste in docking.

(2) Do a good job of publicity reports on the school's website, mini-programs, etc. on students' study, life, and employment in the enterprise, so that more students can understand the characteristics of the 3+1 applied talent training model.

(3) For enterprises, it is necessary to provide some project cases as much as possible to allow students to carry out secondary development and improve their comprehensive practical ability, so that students can clearly feel the difference from studying at school and have a great harvest.

(4) In terms of practical learning, companies should make time arrangements to leave students a certain amount of free time.

(5) Negotiate with enterprises to reduce the cost of food and accommodation for students as much as possible for long-term stable cooperation.

(6) Communicate with the school's academic affairs office to reduce the possibility of returning to school for students of the 3+1 innovation class. It is recommended that some items be completed online.

### 4. Implementation Effect

Among the 30 software engineering students who participated in the practical study of Neusoft Ruidao Education Information Technology Co., Ltd. Innovation Class in 2016, except for one student who took the postgraduate entrance examination, the remaining 29 students all found good counterparts, with an average salary of 7696 yuan.

### 5. Summary

This article takes the School of Computer Science, Guangdong University of Science and Technology as an example, and elaborates on the problems and solutions encountered by applied undergraduate colleges in the implementation of the 3+1 talent training model. The implementation results show that the corresponding solutions are effective.

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