

# Analysis and Research on the Training Mode of Applied Computer Talents in Local Universities

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**Abstract.** Based on the analysis and research on the status quo of applied computer talent training mode in local colleges and universities, this paper discusses the development of talent training plan, curriculum system construction, teacher team construction and practice link setting, The application-oriented computer talent training model with the goal of capacity and comprehensive quality training and employment-oriented.

**Keywords:** Local colleges, applied computer talents, talent training model, teaching reform.

## 1. Introduction

The Ministry of Education clearly pointed out that university education is not mainly to cultivate professionals, but to focus on the quality of science education, and to focus on cultivating skills, including thinking ability, analytical ability, hands-on practice and problem-solving ability and innovative ability [1]. It is especially important to develop students' innovative ability and comprehensive application ability for localized undergraduate colleges. However, influenced by many factors such as the direction of running a university, the level of running a school, and the conditions for running a school, many local universities have improved their computer talent training models, but there are still some shortcomings.

## 2. Current Situation and Problems of the Training Mode of Applied Computer Talents in Local Colleges and Universities

The talent training model is the knowledge, ability, quality structure and the way to realize this structure for students [2].

Under the new situation of expanding computer application, the traditional computer talent training model can no longer meet the requirements of application-oriented computer talent training in terms of talent training objectives, talent training specifications, and implementation methods and means. The specific performance is as follows: 1. The goal of talent training is not clear enough. 2. The curriculum system is not scientific enough. 3. The lack of high-quality teachers. 4. The lack of innovation in the teaching model. 5. The weak practice teaching. 6. The employment guidance is not deep enough.

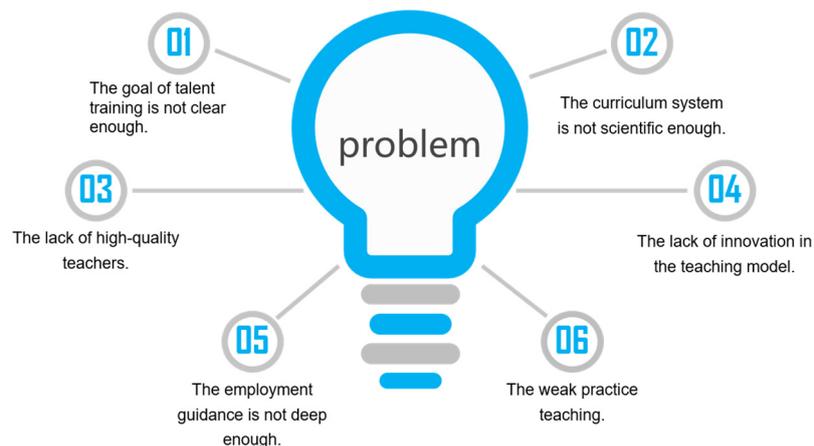


Fig.1 Existing problems in computer teaching

### 3. Research on the Reform of Application-Oriented Computer Talent Training Mode in Local Colleges and Universities

In today's society, there is a diversified demand for computer talents. Computer education in local universities should be guided by the talent market, integrate relevant subject knowledge, cultivate social development and economic construction, and have the application of computer professional skills and software engineering capabilities and information technology practice capabilities [3]. The specific reform plans for the types and engineering talents are as follows:

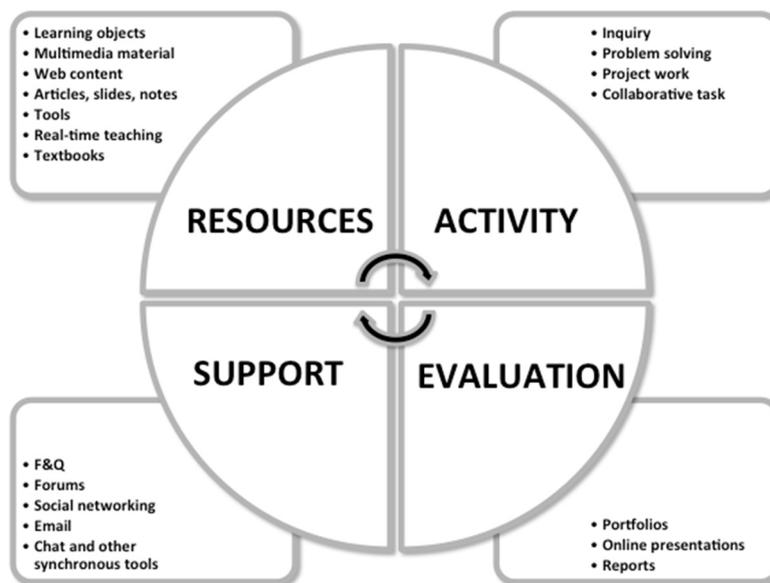


Fig.2 Computer course design ideas

#### 3.1 Optimize the Course Architecture

Local colleges and universities can, according to their own teaching characteristics and development direction, aim at cultivating students' ability to solve practical problems, and gradually integrate the application-oriented computer talent training program into the existing teaching system structure in a planned and step-by-step manner to form complementary functions. Diversified curriculum system. The teaching of computer major courses can be divided into four stages: professional basic course teaching, professional main course teaching, professional direction course teaching and professional course design.

The First stage is the initial stage of computer professional teaching. Students can learn basic theoretical knowledge through professional basic courses such as advanced mathematics, university physics, computer composition principles, etc., emphasizing the importance of basic courses for the future computer major. The study of knowledge lays a good theoretical foundation.

The Second phase of computer main course teaching, such as: computer system structure, software engineering, computer network and other courses should be combined with specific project development cases, during which the relevant lectures can be emphasized to emphasize the applicability and practicality of the course, and stimulate students' enthusiasm for learning.

The Third stage of the professional direction course is based on the Secondly stage, according to the students' interests, specialties and the actual needs of the talent market, select the corresponding course direction, such as: network programming, website planning and information services courses, this stage Auxiliary control can be provided in the form of elective courses.

The fourth stage of curriculum design is the deepening of the Thirdly-stage curriculum learning, and also an important means of cultivating students' application ability. Through the design and implementation of specific projects, the training of students' comprehensive ability and teamwork ability can be strengthened. If conditions permit, they can enter the company. Or internships in enterprises, allowing students to participate in the market competition, find their own shortcomings, accumulate practical experience, and define the future career direction and learning goals.

### **3.2 Strengthen Classroom Teaching Construction**

Reforming classroom teaching is the main way and important means to improve teaching quality. To improve the teaching quality of computer major teaching, the main goal of cultivating students' comprehensive computer application ability should be to build a computer-based classroom teaching mode of "teacher-led, student-centered".

Teaching content should be based on its professional characteristics, combined with typical professional field case design teaching activities and content, to guide and encourage students to actively expand innovative thinking, improve students' ability to ask questions, analyze problems and solve problems. At the same time, teachers must clearly understand that classroom teaching is not just about imparting knowledge, but more importantly, teaching students effective learning methods and independent problem-solving skills.

In terms of teaching methods, we can make full use of modern teaching aids, take advantage of multimedia teaching and network teaching, and combine the latest developments in computer technology, using multiple teaching methods, such as case teaching method, project-driven method, experiential teaching method, etc. Teaching process. Taking the project-driven approach as an example, project-related project cases can be introduced into the course teaching process. Through the design, regulation, and implementation process of the project, students are guided to complete the development process of the entire project step by step, helping students fully understand in practice. Mastering the theoretical knowledge of computer science and experiencing the sense of accomplishment in the process of project development, thus further stimulating students' enthusiasm for learning and strengthening the training and training of their comprehensive application ability.

In the form of assessment, the traditional assessment method should be changed. On the basis of completing the assessment of the basic theoretical knowledge, students can participate in the completion of specific project cases to achieve the assessment of students' practical ability and operational skills. In addition, the test of the teamwork ability of students should also be included in the scope of assessment to cultivate their ability to communicate with others in teamwork.

### **3.3 Strengthen the Construction of the Teaching Staff**

The high-quality and high-level faculty is the key to the successful cultivation of applied talents in local colleges and universities, and is also the core to improve the teaching level of computer majors. In view of the relatively weak teacher resources of local universities, it can be further strengthened from the following aspects:

Firstly, the combination of training and introduction, increase the training and introduction of double-high talents, and constantly improve the professional title and academic structure of the teaching staff.

Secondly, the implementation of the teaching team with the curriculum as the carrier, actively organize the teaching team to apply for various scientific research projects, give full play to the leading role of the old teachers, and build the scientific research team through the construction of the teaching team to form a scientific research team of a certain scale.

Thirdly, strengthen cooperation and exchanges with enterprises and IT training institutions, and select teachers to study, train, and participate in project development in enterprises or IT training institutions, and strengthen the cultivation of teachers' practical ability.

### **3.4 Build a Practical Teaching Environment**

Computer science is a highly practical subject, and practical teaching is an extremely important part of computer science teaching. Therefore, it is possible to build a practical teaching environment through practical curriculum setting, campus laboratory construction, and school-enterprise joint training base construction, and strengthen the cultivation of students' computer application practice ability.

Firstly, adjust the proportion of practical courses in the curriculum, moderately increase the proportion of practical curriculum allocation, and increase students' actual mobile phone meetings. At the same time, in the design of the experimental content of the course, the proportion of design

and comprehensive experimental content is increased, and students are allowed to think independently, analyze problems and comprehensively deal with problems.

Secondly, considering the limited funding of local colleges and universities, you can make full use of the university's own laboratory resources, extensively build campus training bases, encourage students to participate in the construction of the laboratory, and allow students to fully understand and master the theoretical knowledge of the subject in practice.

Thirdly, local colleges and universities can also provide a powerful operating platform for students' practical activities through schools and enterprises. Through the society, the company, and the practical process of learning the professional knowledge, the students fully experience and feel the fun of knowledge learning and their own value.

#### **4. Conclusion**

In short, the cultivation of application ability is an urgent need for the cultivation of talents in local colleges and universities. The guiding ideology of "applying application ability and comprehensive quality as the goal and employment-oriented" is integrated into the computer talent training program to optimize the curriculum system structure. Strengthen the construction of classroom teaching, strengthen the strength of the teaching staff, increase the practice and employment guidance, and cultivate the composite application talents that meet the needs of national information construction, IT industry development and talent market.

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