

# Research on talent training model based on curriculum group and ability oriented training

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**Abstract.** This article in the "Internet plus", for the region, "Independent College" colleges, based on ability oriented curriculum group, and many other constraints, based on how to realize the "theory of knowledge, the tight coupling ability", research, and theoretical course and comprehensive design and practice of curriculum and training of Applied talents with the exploration of application oriented talents training, reflect and embody its trunk and construction of core knowledge and ability of multi course group, the study on course group construction not only has important significance for deepening the educational reform of computer specialty, but also for the construction of groups of other professional courses to provide a reference.

#### 1. Introduction

In the past 20 years, the rapid development of China's higher education, the enrollment scale continues to expand, in the realization of education from the "elite" to "popular education" change at the same time, training a large number of useful talents for the modernization of our country. But the development has gradually exposed some problems: on the one hand, many general colleges and universities, independent colleges and even universities, also appeared to compare with each other, the blind pursuit of "building first-class university"; on the other hand, some schools still maintained a pure theory of classroom teaching mode and reflect the strong social "thousand school side"; many modes of college education in terms of educational ideas, the construction of curriculum materials etc. The "academic" mode and knowledge structure, has been unable to meet our production line services shortage of applied talents, new changes and Internet plus, major strategic innovation and public entrepreneurship peoples and other countries.<sup>[1]</sup>

The cultivation of applied talents of computer majors of Guangdong University of Foreign Studies science, this paper intends to Nanguo Business College of information technology as the research object, explore and practice; in learning, drawing experience of training related domestic research results and applied talents; on the "Internet plus" mode, the regional culture, based on of course group and capacity oriented, independent college of higher school, system research theory and practice of the undergraduate level computer applied talents training, exploration and practice.<sup>[2]</sup>

## 2. The Research Status of Curriculum Group Construction

The current research literature on the cultivation of applied talents of many, but the "Internet plus" mode change to the application type colleges and applied talents training mode. Less relevant research documents in respect of the combination Department of compiling and teaching content of the curriculum group division of research more, but on the "basic knowledge of Applied talents should have. Should have the ability to use the knowledge, comprehensive quality should have" involved "theory, knowledge, ability of three tightly coupled curriculum group construction is rare. Secondly, from the research on the relationship between knowledge and ability, the transformation from knowledge to ability, theory and practical problems of the transformation of comprehensive quality and comprehensive ability to use type to It is rare to study the training of Applied Talents



# 3. Application Value and Academic Value

### 3.1 Application Value

The realization of "change" to the applied undergraduate colleges and universities is a complicated system engineering, at present how to realize "application-oriented talents training college transformation has not formed a consensus. This paper studies the application value and originality is closely combined with the education system of our country" Independent College "in the higher school, focus on the development of higher education in our country, how to cultivate application oriented production line services requirements, compound talents this problem to be solved. Based on the information technology and the cultivation of computer majors related personnel, we research and practice including software engineering, calculation 3 professional computer science and technology and digital media technology. The starting point is the talent training scheme, and the main reaction, construction of core knowledge and ability of multi course group, hold the key to application oriented and improve ability.<sup>[3]</sup>

#### 3.2 Academic Value

What is the application type talents, this is to solve the core problem of change "to the application type. The basic knowledge of computer applied talents should have, should have the ability to use the knowledge of the comprehensive quality of the computer professional to solve the transformation of applied theory and practice. The realization of" change "in universities to application, first of all to achieve the transition to the training program of Applied Universities in every professional talents, and constitute the training scheme of the curriculum system and the construction of laboratory security conditions for the application type, is the key to realize the transformation of universities to application the On the cultivation of applied talents. The theory of "knowledge, ability," three tightly coupled curriculum group construction, relates to different levels of awareness and understanding of different kinds of curriculum characteristics, is an academic research value.

## 4. The Basic Idea of Curriculum Group Construction

In considering the "Independent College" in Colleges and universities, undergraduate computer specialty, "Internet plus" mode, oriented area, ability oriented curriculum group construction, the cultivation of applied talents and other factors on the basis of the adaptation to the "Internet plus" model of computer talents knowledge and ability structure research. [4] Guangdong Province, regional science and technology, knowledge and ability requirement of economic and social development of computer professionals, suitable for the Guangdong area of the "Independent College" undergraduate institutions related to teaching methods, to have basic knowledge, basic theory, application ability "tight coupling characteristics and construction of curriculum group The method of study. The content closely, logical and strong, with a kind of culture belongs to the category of the ability of curriculum as a curriculum group construction, ownership of bank broke the course content, from the distribution and levels of training objectives grasp curriculum implementation, curriculum group construction, which is conducive to the implementation of professional teaching plan that is conducive to the realization of the training objectives.

Curriculum group construction from the following aspects: (1) from the implementation of training target level grasp the distribution, course content, focus on skills training, curriculum concepts weaken personality, strengthen the integration between curriculum content; (2) the curriculum group is a dynamic system, according to the needs of society to adjust the design of curriculum group the course group, closer to the needs of the society; (3) "the cultivation of independent college students should pay attention to comprehensive quality and practical skills in the professional orientation. In computer science and technology major as an example, the construction of ability oriented curriculum group, as shown in Table 1.



Table 1. Curriculum setting of computer science and technology

course group	main courses
Computer theory basic course group	Introduction to discipline, discrete mathematics
Programming course group	Program design basis, object oriented programming, program design, synthesis practice, data structure, data structure synthesis practice
Web-based curriculum group	Computer network, network operating system, computer networking technology, communication principle, network protocol analysis
Embedded systems course	Single chip microcomputer system and application, SCM
group	application system, integrated design, embedded system
Website development	Website design and development, JSP technology foundation,
course group	Internet programming

The stage goal is through systematic research on the training of "independent colleges" College Computer application-oriented talents, it applied talents knowledge structure, the establishment of innovation, with many courses and ability oriented characteristics of the computer applied talents training mode. The overall goal is to achieve the goal of the foundation, framework and implementation mechanism of the cultivation of comprehensive ability and practice ability in the construction of professional characteristics and professional core reaction, for the construction of teachers and the reform of teaching content and teaching methods, the construction of teaching system, experimental practice foundation platform, establish and improve the implementation of the system application oriented Talents Cultivation teaching structure and teaching of the college as soon as possible as soon as possible and strive to make the computer professional into the Guangdong province key construction of professional ranks.

#### 5. Innovations

- (1)for computer in different construction of professional training of a number of supporting the professional knowledge structure and application ability of the curriculum group (theoretical course and comprehensive ability to design and practice of each curriculum curriculum training course), research subjects and course construction of experimental and practical scheme of force conditions and the construction of teachers' team the corresponding training around the design and practice of the cultivation of applied talents, seize the process ability and application oriented key, with innovation and feasibility.
- (2) the content of this paper relates to how to realize the "theory of knowledge, the tight coupling problem", involving knowledge transformation towards the ability of research involves the theoretical course and ability relational curriculum and training applied talents with problems, with basic and certain theoretical.
- (3)"Internet plus" mode, the regional "Independent College" university computer specialty talents should have professional knowledge, professional knowledge and comprehensive ability of design and practice. The construction embody the professional characteristics, comprehensive design and professional knowledge and training of core with knowledge structure and application ability for each course the ability of the group; but also promote the teaching organization of the course group teaching style, the implementation of comprehensive practice training and ability.
- (4)Study on the "Internet plus" mode of "Independent College" college computer specialty knowledge structure and Application. The influence of force and the construction of countermeasures are consistent with the "national strategic strategy", and it is advanced. To study and solve the "Independent College" in Colleges and universities, how to cultivate application oriented production line services requirements, issues related to talents, are the urgent problems in the development of higher education, with the urgency of the research of applied talents training. To construct a regional culture pattern, and the Ministry of education and other ministries issued the guiding part of local colleges and universities to change the application guidance "coincides with the times.



The construction of curriculum group carrying the cultivation of skills, balance the relationship between the coordination of the curriculum, curriculum group construction is a developing direction of college curriculum reform. Through the course of integration and optimization, reduce the overlap between the courses, increase practice class, with increasing knowledge, theory teaching and practice teaching distribution more reasonable, comprehensive design experiment closely between courses, and promote the overall development of coordination and optimization of curriculum system. Through the course of integration, forming a unique professional advantage, promote the teaching plan and the implementation of professional training goals.

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#### Reference

- [1]. Zhongsheng. Construction of computer professional courses in the undergraduate education group applied exploration [J], Journal of Chuzhou University, 2006 (3):31-32.
- [2]. Yang Hongyan, Geng Xinqing. Principle of database system curriculum construction and practice of [J]. Journal of Anshan Normal University, 2010 (6): 73-75.
- [3]. Wu Zhongjiang, Huang Chengliang. Application oriented talents. The cultivation of application-oriented undergraduates. [J]. higher engineering education research, 2014 (2): 66-70.
- [4]. Wang Jiangtao, Yu Qiding. History of [J]. education and occupation occupation ability training, 2013 (3): 18-21.