

## Exploration of Innovative Talents Training Mode in Transformation Pilot of Application-oriented Undergraduate Universities Based on Cross-disciplinary Perspective

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**Keywords:** Applied Undergraduate Colleges and Universities, Training Applied Talents, Innovative Talents

**Abstract:** The structural contradictions in higher education are increasingly prominent, and the tendency of homogenization in running schools is serious. In particular, the problems of unclear orientation of running schools, low efficiency in running schools, difficult employment of graduates and low quality of employment are increasingly prominent. It is an undisputed consensus that application-oriented undergraduate colleges and universities should aim at the training of application-oriented talents due to misplaced competition and differential development. Application-oriented undergraduate colleges and universities will train advanced application-oriented talents with wide knowledge, solid basic theory, strong application ability and good comprehensive quality as their training objectives. If you want to be invincible in the competition, fundamentally speaking, you need to keep innovating, keep innovating thinking, and keep innovating attitude. Application-oriented universities should not only focus on the training of innovative talents, but also reflect on the process of talent training. It is of great theoretical and practical significance for the sustainable development of application-oriented universities to innovate the talent training mode from the perspective of interdisciplinary..

### 1. Introduction

Under the background of the classified development of ordinary colleges and universities and the transformation of application-oriented undergraduate colleges and universities to application-oriented technology. It is an undisputed consensus that application-oriented undergraduate colleges and universities should aim at training application-oriented talents due to dislocation competition and differential development [1]. If you want to be in an invincible position in the competition, fundamentally you need to keep innovation, keep innovative thinking and keep an attitude of continuous innovation [2]. With China's social and economic development entering a new normal, economic restructuring, accelerated industrial upgrading, continuous promotion of social and cultural construction, implementation of innovation-driven development strategy, profound changes have taken place in the relationship between talent supply and demand, and there is a shortage of applied, compound and innovative high-quality technical and skilled talents in the production service line [3]. Colleges and universities shoulder the mission and responsibility of cultivating college students' innovative consciousness and ability. Higher education is an important measure for the country to improve its independent innovation capabilities and implement the strategy of strengthening the country by talents. Higher education is an important stage for students to transform into society. How to train talents that meet the needs of social positions in universities requires continuous exploration [4].

Science is the base for national talent training and scientific research, and contemporary college students are the backbone of China's future scientific and technological development [5]. Application-oriented undergraduate colleges will cultivate high-level application-oriented talents with broad knowledge, solid basic theory, strong application ability and good comprehensive

quality as training objectives. The core of the training transformation is to highlight the application and locality, but this does not mean that the level of schooling and the quality of schooling are reduced. College students are China's future and hope during the transition period of higher education. In order to meet the needs of social development, many colleges and universities are in the process of transformation to application. The history of disciplinary development shows that the intersection of disciplines has brought new scientific growth points and is a breakthrough point for solving major scientific problems [6]. Application-oriented colleges should not only position the school's talent training goal to cultivate innovative talents, but also reflect deeply on the process of talent training. Universities should really understand the meaning of innovative talent training and effectively provide sufficient conditions for the cultivation of innovative talents [7]. To explore the basic theories of interdisciplinary transition in the current application-oriented undergraduate colleges' professional transformation process, to construct a reasonable subject direction, and to propose an innovative training model for applied undergraduate colleges from the perspective of interdisciplinary perspectives Practical significance.

## **2. Problems Existing in the Cultivation of College Students' Innovative Ability**

Social transformation refers to the transformation of human society from one type of existence to another. Social transformation has not only brought about great changes in economic and social structures, but also profoundly affected people's ideas. Theoretical teaching and practical teaching are an organic whole. According to the training requirements of talents in application-oriented undergraduate universities, teachers should not only combine relevant industries, professional knowledge and skills and practical experience in teaching, but also be able to guide students in experimental and practical training, scientific and technological development and innovation and other practical processes. On the basis of mastering the system knowledge system and having strong practical operation and knowledge application ability. To cultivate high-quality application-oriented talents with certain innovative ability and being able to adapt to the rapid development of science and technology in the future should be our talent training goal orientation. To improve the comprehensive practical ability of teachers has become the core issue of innovative personnel training in the transformation pilot of Application-oriented Universities from the perspective of interdisciplinary.

With the increasing enrollment of colleges and universities, the innovation ability and scientific research quality of college students have been criticized and questioned. The transformation and development of local colleges and universities should be supported by high-quality disciplines and specialties, reflecting the functions of universities. Strive to become a talent training and technological innovation base to support the upgrading of local industries. Knowledge and technology innovation, as two main driving factors, need to cultivate financial management talents with good scientific and cultural literacy, solid professional foundation, strong self-study ability and innovation ability. Figure 1 shows the network structure system of talent information integration management.



Figure 1 Talent information fusion management network structure system

The training objectives of applied undergraduate talents determine the training objectives of information literacy for such talents. The goal of training applied talents' information literacy is to make information literacy a comprehensive problem-solving tool for students. The cultivation of innovation ability cannot be solved by setting up an entrepreneurship course or several innovation experiments. Scientific and reasonable teaching methods and means are more important links to cultivate and improve the students' multi-level practical innovation ability. Application-oriented undergraduate courses are mainly geared to the needs of the society to set up specialties and cultivate students' ability to solve practical problems by using specialty theories. In the process of running a school, application-oriented undergraduate colleges should continue to carry forward the traditional spirit of running a school, but they should not be complacent. In order to construct a new teaching system and cultivate the scientific and technological innovation ability of college students, application-oriented undergraduate colleges should first start with changing the cultivation concept [8]. The innovation ability comes from the repeated exploration of practice, but the exploration of practice depends on the platform of teaching and research and engineering practice. Scientific and technological innovation has become the key driving force to promote economic development, and the construction goal of an innovative country also puts forward higher requirements for industrial innovation. Practical teaching is not the assistance of theoretical teaching, but the simple verification of theory. It is the extension of theoretical teaching, to some extent, the sublimation of theoretical teaching. The goal of application-oriented undergraduate colleges is to cultivate front-line application-oriented and management oriented talents.

### 3. The Training Model of Scientific and Technological Innovation Ability of College Students in Applied Undergraduate Colleges

Influenced by traditional education, many college students think that they only need to study professional knowledge seriously during their school days, and nothing else needs to be involved. In the innovation of teaching concept, it is the most urgent and crucial to break through and surpass the original mode of thinking. The expansion of technical skills and interpersonal skills of application-oriented talents requires information technology support. In order to gain social recognition, application-oriented undergraduate colleges and universities must find a correct orientation, choose a correct direction, highlight their characteristics and determine their goals. Only in this way can they occupy a certain position in the ranks of other colleges and universities. Reflecting the guidance and cultivation of innovative consciousness and ability in theoretical teaching requires teachers to have profound professional theoretical knowledge and rich scientific research and innovative work experience. It is difficult to keep up with the guidance of teachers in the corresponding practice of scientific and technological innovation. As the local talent highland and

intelligence highland, the application-oriented undergraduate colleges should actively adapt to the needs of regional economic development, establish professional talent training system with the goal of professional skill posts, and strengthen technical theory, pay attention to technical application and highlight practical teaching in interdisciplinary subjects. The important goal of setting up a university is to meet the talent demand of local economic and social development. The traditional structuralist school also points out that innovation structure affects enterprise behavior, so the degree of innovation force can be observed through innovation concentration.

The modern education concept should be combined with the actual development of the discipline to make corresponding changes in the curriculum structure, professional setting, teaching mode, training objectives and other aspects, which is not only a realistic requirement but also a rational choice to update the old concept. If the training of modern applied talents is lack of information literacy education, it will break away from the development of the times. It is inevitable that the standards and objectives required for talent training cannot be achieved. After integrating a lot of cutting-edge technology analysis and teachers' own scientific research experience into the actual teaching, the teaching effect has changed a lot. Innovative talents education emphasizes interdisciplinary and integration, discussion and solution of practical problems, and transforms to the cultivation of students' practical application ability [9]. In the teaching activities of financial management specialty guided by the promotion of innovation and entrepreneurship, more innovative teaching modes should be introduced. The general education of college English in most schools is independent and not closely combined with students' professional needs, which cannot meet the needs of students' professional skills training. To improve students' personal professional skills and accomplishment is helpful for students to understand the interdependence between social environment and engineering application, and to improve students' working ability in enterprise multidisciplinary project implementation and team cooperation. In order to improve the enthusiasm of students to participate in scientific and technological innovation and competitions, it is necessary to increase publicity on the significance of participating in scientific and technological innovation activities. At present, world science and technology are developing rapidly. Without innovation, there is no room for enterprises to survive and the national economy cannot develop.

#### **4. Conclusions**

Today, with the rapid development of science and technology, the construction of an innovative country is the primary task of China's current higher education transformation period, and it is also a key issue raised by the national higher education transformation period to the higher education training mode. In order to train students to have solid theoretical knowledge of inorganic chemistry, at the same time, they must have the ability to innovate and compete in the workplace, so teaching reform is imperative. Undergraduate students can participate in the teacher's scientific research project, first carry out the basic study of research, and cultivate students' scientific research ability. Colleges and universities have also made use of their own advantages and characteristics to develop a reform system adapted to the actual situation of their own universities, so that talent cultivation can be implemented in line with social and economic development. Perfect guarantee mechanism can ensure the scientific and good operation of science and technology competition. We should set up our own characteristic teaching according to the local situation, and promote the cultivation of College Students' multi-level practice and innovation ability. Application-oriented universities should pay more attention to the cultivation of students' innovation ability and skills. Therefore, in the formulation of the training program, we should strengthen the practical experiment course and encourage students to be diligent in thinking and carry out innovative research.

#### **5. Foundation Item**

The research is supported by Research Project on Shaanxi higher education teaching reform of Education Department of Shaanxi Provincial Government (19BY069); Supported by Research Project on Teaching Reform of Yan'an University (YDJGZD18-03).

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