

Exploration and Practice of the Reform of the Cultivation Mode of Agricultural Innovation and Entrepreneur Talents

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Abstract: The traditional talent training mode of colleges and universities is gradually incompatible with the development of contemporary education, and cannot meet the requirements of high-level innovative talents in the economic society. So how should colleges and universities respond to the needs of the society's talents, reform their talent training model according to their own teaching characteristics, and commit themselves to cultivating high-quality talents with innovative spirit and innovative ability in the agricultural science specialty of the university. This is a problem worth exploring. In accordance with the requirements of cultivating students' innovative spirit and cultivating students' entrepreneurial ability in contemporary higher education, through the research on the connotation of innovation and entrepreneurship education, a "double-creative" talent training system was constructed. On the basis of a series of research and practice, a group of innovative and entrepreneurial talents have been cultivated, and a useful discussion on the training mode of agricultural colleges under the new situation has been carried out.

1. Introduction

Throughout the education reforms of all countries in the world, we all focus on improving the national innovation ability and cultivating innovative talents. Many countries regard the establishment of a national innovation system as an important strategic task of the government. How to adapt the agricultural colleges to the needs of the development of the situation, organically combine innovative education and entrepreneurship education, and form a relatively complete talent training system is worthy of serious consideration and research. Improving the capacity for independent innovation and building an innovative country is the strategic core of national development and the key to improving overall national strength. To implement the requirements of improving independent innovation capability and building an innovative country, we must vigorously cultivate a culture of innovation and form a social environment and atmosphere that

encourages innovation and entrepreneurship, so that the innovation and wisdom of the whole society can compete and the innovative talents of all fields emerge vigorously. Higher agricultural education has a strong industry and developmental particularity. It is responsible for providing the dual mission of providing talent support and knowledge contribution for the development of agriculture and rural modernization. It is the intellectual support and innovation base for agricultural development. It not only plays a fundamental role in knowledge innovation, teaching, dissemination and application, but also plays an irreplaceable role in cultivating innovative agricultural science and technology and management talents who master advanced productivity and create advanced productive forces.

2. Analysis of the Concept of Agricultural Science and Innovation Entrepreneurship Training

To cultivate agricultural science and innovation entrepreneurial talents, we must innovate the concept of agricultural science education. We must use advanced agricultural education concepts to guide our talent training reform. First of all, the soul and core competitiveness of higher agricultural colleges emphasizes the students' professional and technological innovation ability. In order to fulfill the functions of social tasks, colleges and universities must cultivate a group of high-level talents with innovative entrepreneurship and innovative entrepreneurship. Local colleges and universities must lead the development of higher education and the construction of the university itself with the spirit of innovation. It is necessary to change the traditional concept of simply popularizing knowledge and inculcation, establish an educational concept that combines the development of intelligence and ability, and change the concept of inheritance education that is purely based on the transfer of knowledge, and establish the concept of focusing on cultivating the spirit of innovation. In summary, the concept of agricultural innovation education is to enhance the students' innovation ability in agricultural science as the main line of undergraduate training, and to strengthen the training of innovative undergraduate talents.

Chinese universities should pay attention to the following aspects when cultivating innovative talents: Firstly, the goals must be diversified. Secondly, create a good environment in the discipline construction and personnel training of the school. The last point is to play an important role in the development of college education. It is difficult to cultivate top-notch innovative talents in traditional education. To persist in education innovation, we must work hard in the following aspects: focus on teaching to cultivate students' innovative spirit and exercise students' practical ability, teach students in accordance with their aptitude, advocate individualized teaching, and cultivate a good teaching style, study style, and school spirit, and create a good environment for the growth of top-notch innovative talents. The basic quality characteristics of innovative talents have a reasonable knowledge structure, strong innovation and practical ability, and good non-intellectual factors. She pointed out that as an important base for the cultivation of top-notch innovative talents, the university must strive to implement educational innovation, focus on individuality training, and actively explore innovative mechanisms for top-notch innovative talents to stand out.

3. The Necessity of Training "Double Creation" Talents in Agricultural Science

1. Cultivating innovative talents is fundamental to the construction of an innovative country. Improving China's independent innovation capability and building an innovative country's important goals is a major strategic move to fully implement the scientific development concept and create a new situation in socialist modernization. To achieve this goal, we must create a large, independent and innovative talent team, and strive to become the creators of new knowledge, the inventors of new technologies, the founders of new disciplines, the leaders of new paths, the advocates of new institutions, and the builders of new atmospheres in the journey of building

innovative nations. Inspire the innovative spirit of the whole society and jointly build an innovative country. Talent resources are the first resource, and creating a large, independent and innovative talent team is the foundation for building an innovative country.

2. The reform of the talent model is the need of the real society. Higher education has entered a new stage of the "Twelfth Five-Year Plan", and the talent training model has also ushered in a new development opportunity. It is a new development trend to train talents according to the needs of the society and to set courses based on market demand and student employment. How to improve the quality of education and teaching in the existing educational background, cultivate innovative and entrepreneurial talents that are welcomed by the society, and achieve new training goals are all urgent problems to be solved.

3. Colleges and universities shoulder the important task of cultivating innovative and entrepreneurial talents. Colleges and universities are important bases for the cultivation of innovative and entrepreneurial talents. The main task of higher education is to train high-quality talents who can adapt to economic and social development as well as lead economic and social development. With the continuous development of the economy and society, the relationship between higher education and the economy and society is getting closer and closer, and schools must meet the needs of economic and social development to the maximum extent. On the one hand, it is necessary to cultivate talents that meet the needs of economic and social development by disseminating knowledge and culture; On the other hand, we must create knowledge and technology, strive to stand at the forefront of the times, continuously transmit new knowledge and new achievements to the society, and cultivate "double-creative" talents that can lead the economy and society.

4. Fuzzy KNN algorithm

Dissimilarity measure. The similarity between multidimensional data objects usually uses distance to represent the standard of distance between data samples.

First obtain the Euclidean distance according to the test sample, select the 1 sample with the smallest distance from the sample to be classified; then assign a large weight to the neighbors of the model sample; finally determine according to the membership function of the model sample. A direction of agricultural innovation and talent training. Calculating the gap in training "double innovation" talents in agricultural science. The detailed expression is as formula (1):

$$V_a(y_i) = \frac{\sum_{l=1}^L V_a(p_l) / \|y_i - p_l\|^2}{\sum_{l=1}^L q / \|y_i - p_l\|^2} \quad (1)$$

Logistic regression uses a linear function to calculate the deviation between the data prediction result and the actual value. The smaller the deviation, the more accurate the prediction function is. The specific formula is:

$$j_c(y) = o(c^n y) = \frac{1}{1 + f^{-c^n y}} \quad (2)$$

LR has a very small amount of calculation during classification, fast speed, and low storage resources, but it has a great advantage in model training time.

4. Discussion on Cultivating Innovative and Entrepreneurial Talent Models

4.1. Transforming the Concept of Education and Teaching, and Establishing the Correct Concept of Innovation and Entrepreneurship Education in Colleges and Universities

What kind of innovative talents need to be cultivated in the new century, and we must understand the new requirements of education from the development of science, technology, economy and culture in the new century. For colleges and universities to cultivate high-quality innovative talents, we must reflect on the traditional educational concepts and establish the correct concept of innovative education in colleges and universities. One is the student-oriented philosophy. The main body of education is teachers and students. Teachers as the main body are embodied in the whole process of education, and students as the main body are embodied in the process of education. Teaching should be based on the concept of "preaching, accepting, and answering the question", emphasizing the central position of teachers in the educational process, highlighting the leadership of teachers and the subjectivity of students, and allowing students to learn to learn actively.

4.2. Practice-focused ideas

Innovation and entrepreneurship education is based on practice. Innovative entrepreneurship education should cultivate students' innovative spirit and innovative ability in accordance with the combination of education and production labor, and the combination of education and social practice. The education of traditional ivory towers is closed and lags behind economic and social development. Focusing on practice, it requires higher education to strengthen practical links and cultivate students' practical ability; it requires colleges and universities to focus on the combination of production, learning and research, and then provide the society with the innovative and entrepreneurial talents needed. The third is the idea of achieving talent. Innovative entrepreneurship education is to cultivate high-quality innovative and entrepreneurial talents. Success is the purpose of education and the responsibility of teachers. With the goal of becoming a talented person, it is required to carry out various tasks of the school around the fundamental task of cultivating innovative and entrepreneurial talents, and it is necessary to form a systematic and effective system for training innovative and entrepreneurial talents. Lu Dengting, president of Harvard University, said that in the process of moving towards the new century, one of the best education is to help people become more innovative, to make people more considerate, to pursue ideals and insights, to become more perfect and more successful people. This passage shows that the best education is education with the goal of becoming talented. Therefore, the concept of achieving talents has put forward new requirements for the education reform of colleges and universities. Promoting innovation and entrepreneurship education is to create an atmosphere of innovation.

5. The Construction of "Double-Creative" Talent Training System

The so-called "double-creative" talent training model is to combine innovation and entrepreneurship education. On the premise of cultivating students' awareness and spirit of innovation and entrepreneurship, with the aim of forming innovative entrepreneurial character and improving their ability, the educated individual's personality is continuously developed and the comprehensive quality is continuously improved.

In order to build a "double innovation" talent training system, this paper selected 70 agricultural students and teachers to conduct a questionnaire survey. From their willingness to learn, to their construction opinions, etc., an integrated analysis was carried out.

Among the 20 teachers, half of them think it is necessary to carry out double innovation courses, while only one person disagrees with it. Among the 50 students, more than half believe that it is worthwhile to carry out innovation and innovation training, but still 20% are indifferent to it. As shown in table 1:

Table 1. Attitudes of students and teachers to innovation and innovation training

	Teachers	Students
Necessary	10	16
General	6	18
Don't Care	3	10
No Need	1	6

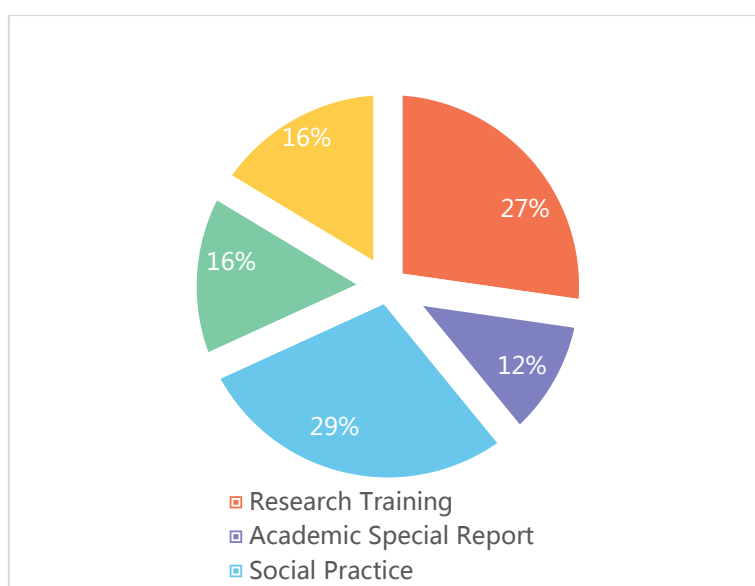


Figure 1. The choice of students and teachers on the direction of innovation and innovation training

As shown in Figure 1, 29% of people think that the social practice of entrepreneurship and innovation is the most worthy of development. Of course, the training of innovative talents is indispensable to scientific research training, which is supported by 27%. In addition, there are 32% of people who choose to double-creatively follow their pre-determined goals or preferences.

Therefore, how to implement it is very important. You can refer to the following methods:

1. Improve the training program so that the “double innovation” education runs through the whole process of teaching.

Establishing the requirements for the training of talents with “wide caliber, thick foundation, fine theory, strong ability and high quality”, and determined “segment training, module combination, basic foundation, teaching according to material resources, paying attention to each other, three points of support, and four points of double need ” talent training model. Students can choose the course module according to their personal hobbies and ambitions, which reflects the principle of satisfying the students' individualized learning needs and satisfying the society's demand for talents, and meets the diversity of talent demand for social and economic rapid development. At the same time, students' scientific research training, academic special reports and social practice are included in the teaching plan, credits are calculated, and students are encouraged to participate in innovative and entrepreneurial practice such as teacher research.

2. Optimize the curriculum system and set up the innovation and entrepreneurship education module

The curriculum system is the basis for achieving the training objectives. Therefore, in the curriculum system setting, the compulsory courses are set according to the mode of “three opens, one special” and “three identical and two excellent”. The “three opens and one special” means that the public classes are opened to the whole school, the basic courses are opened according to the major categories, the professional basic courses are opened according to the professional groups, and the professional courses are special. The “three identical and two excellent” means that the public-study standards are the same in all majors. The basic courses are the same in the same subject class. The professional basic courses are the same as the same professional group. The professional courses should be of high quality and succinct, and the practice links should be of high quality and reasonable. Elective courses, in terms of curriculum, each major must have at least two course modules, namely the innovative education module and the entrepreneurship education module. Students can choose a module based on social and personal development needs, or combine to organize their own learning. The innovative education module aims to strengthen basic theoretical education, expand and deepen the professional theoretical level of students, and create conditions for further study. The entrepreneurship education module aims to develop students' pioneering spirit and entrepreneurial ability, and lay a good foundation for students to adapt to the society immediately after graduation and dare to self-employ and quickly adapt to society. The Integrated Education module is designed to develop students' comprehensive abilities. According to the needs of the society and their actual situation, the students choose two modules of courses to form a new curriculum module, which has both basic theory courses and practical application courses to maximize their potential and prepare for employment. It will lay a good foundation for further study in the future.

5. Summary

After the 21st century, the world has gradually entered the era of knowledge economy. On the one hand, the rapid development of economic globalization and the upgrading of science and technology have led to innovation and entrepreneurial talents becoming the key training targets of education in various countries, and have become an important part of the country's comprehensive national competition. On the other hand, since the reform and opening up, the party and the state have always attached great importance to the cultivation of high-quality scientific and technological talents, and put forward the basic strategy of strengthening the country with talents, especially in order to meet the needs of the development of agriculture, rural areas and farmers, and to require agricultural and professional talents with innovative and entrepreneurial qualities. However, in recent years, although the total number of high-quality scientific and technological talents in China has indeed improved, compared with the international level, the proportion of innovative undergraduate talents in China is still very low, especially in the agricultural sciences. Therefore, according to the analysis of the above research, it is inevitable to cultivate agricultural talents with innovative thinking.

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Conflict of Interest

The author states that this article has no conflict of interest.

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