

# Exploration and Practice on the Reform of the Training Mode of Agricultural Innovation and Entrepreneurship Talents

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**Abstract:** With the changes of the times, in order to adapt to the "innovative and entrepreneurial country" construction goals and the "development of innovation and entrepreneurship" strategic goals, colleges and universities must take the cultivation of innovative and entrepreneurial talents as the basic training of their own value orientation and intellectual qualities. Throughout the past and present, both at home and abroad, technological progress and innovation are the inevitable products of our independent innovation and the realization of corporate culture. Innovation and entrepreneurship are the product of continuous progress and development of society, is the main engine to promote economic and social development, and the root of innovation and entrepreneurship lies in cultivating talents. As a demonstration camp for talent training, colleges and universities have assumed the mission of rejuvenating the country through science and education and building a strong country with talents. How to accelerate and deepen the reform of the talent training model? It is particularly important for the country to train more talents with innovative and entrepreneurial skills. This article mainly focuses on the exploration and practice of personnel training and management model system reform in comprehensive innovative agricultural enterprises in China. Based on the summary of relevant literature and information, the article summarizes at this stage, there are problems in the training model of innovative entrepreneurs in agricultural sciences, and on this basis, the principles for the construction of talent training models are put forward to provide some basis for the design of the questionnaire below. The questionnaire is used to investigate the training model of innovative entrepreneurs in agricultural sciences. The status quo is obtained through the analysis of the results of the questionnaire. First, the students are not satisfied with the current agricultural innovation and entrepreneurship talent training model. The dissatisfied people account for more than 42%, and the average person accounts for about 32%. From this point of view, it is necessary to reform the current training model. Second, more than 45% of the students and teachers in the middle school believe that the school should cultivate talents based on the needs of the enterprise, rather than divorce the actual talent needs.

**Keywords:** Agricultural Sciences, Innovation and Entrepreneurship, Talent Training, Model Reform

## 1. Introduction

After the reform and opening up, although our country has made great progress in the innovation and entrepreneurial technology training of agricultural technical experts[1-2], we have provided a group of high-level personnel with specific production and management practical work experience for our agricultural administrative personnel. Hierarchical and comprehensive innovative technology experts[3-4], and provide them with technical support, but due to their unique advantages, in terms of our agricultural administration field, our country's innovation and technical training of agricultural technical experts there are still many shortcomings in the current development of agriculture [5-6], especially in terms of its distinctive characteristics, there are still many difficulties that need to be resolved in agricultural technology innovation and corporate technology training [7-8].

Aiming at the research on the training model of innovative and entrepreneurial talents in agricultural sciences, some researchers start with the needs of practical teaching, introduce VR technology into the teaching, develop a series of practical teaching software, develop integrated solutions for the construction of training halls and experience centers, and aim at innovation and the needs of entrepreneurial education promote practical training and experimental teaching [9]. Some

researchers suggest that, according to the innovation and entrepreneurship practice training model, teachers can use virtual reality technology to guide students from traditional linear thinking to different thinking, and focus on encouraging students to propose different solutions according to the actual situation [10]. No longer uniformly based on standard answers, teachers and students creatively propose solutions to problems based on virtual reality based on actual conditions, and effectively liberate their minds in practical teaching and find truth from facts [11]. In view of the problems in the construction of innovation and entrepreneurship courses in colleges and universities, especially combining the practical measures of the construction of university innovation system and entrepreneurship courses, the "three platforms" and "two links" system framework: these three platforms are knowledge training platforms, vocational training platform and online course service platform, the two links are the two links of innovation and entrepreneurship training activities, combining practical teaching and social practice[12].

This article explores the exploration and practice of the reform of the training model for innovative and entrepreneurial talents in agricultural sciences. Based on the literature research method, summarizes the current problems of the training model for innovative and entrepreneurial agricultural talents, and then proposes the construction on the basis the principle of the talent training model is to prepare for the questionnaire survey. Through the questionnaire survey the current situation of the agricultural innovation and entrepreneurship talent training model, and draw relevant conclusions based on the results of the questionnaire survey.

## **2. Research on the Training Model of Innovative and Entrepreneurial Talents in Agricultural Sciences**

### ***2.1. The Current Problems in the Training Model of Innovative Entrepreneurs in Agricultural Sciences***

The coverage is small, the level is not deep, and the cooperation efficiency is poor. Practicality, openness, and professionalism are the key characteristics of agricultural innovation and entrepreneurship education, and an important platform for talent training. However, some professional reforms are still prominent with low level, small coverage, and poor efficiency. It is mainly manifested in the following aspects: First, from the perspective of cooperative enterprises, cooperative enterprises are only limited to enterprises that have talent needs and business needs for the school, and other enterprises rarely participate. From the perspective of cooperation, cooperation is only limited to establishing bases and visiting schools. Lectures, teacher-student internships, etc. do not involve the entire process of curriculum development, scientific research and development, teaching organization and other talent training; from the perspective of cooperative projects, the agricultural innovation and entrepreneurship education group-based schooling, modern apprenticeship, etc. involve institutional mechanisms, mixed the ownership reform project has only one major; from the perspective of the participation of the parties, the cooperation field is not wide, the cooperation depth is not enough, the cooperation coverage is small, and the effectiveness of cooperative education is not brought into play.

The actual goals of teaching innovation and entrepreneurship in colleges and universities are not yet clear, and it is difficult to formulate courses that meet the needs of the market. There are differences between the current academic and closed talent training models of Chinese universities and the market demand for open and practical innovative and commercial talents. This is the fundamental reason why colleges and universities provide students with innovative and practical business education. However, due to the lack of social practical experience in Chinese universities, the practical teaching objectives are not clear, and the teaching plan does not match the market demand.

The existing practical classroom teaching methods are too outdated, and it is difficult to effectively interact with students, resulting in low enthusiasm for classroom learning. Traditional practical courses are restricted by objective conditions such as space and equipment. Most of them are done by teachers and students are also watching, called exercises, but in fact this is just an observation. In such a practical classroom teaching mode, the interactive ability between teachers and students is insufficient, and it is difficult to mobilize and arouse the enthusiasm of students for independent learning. In fact, the teaching fails to achieve the expected results.

Because of the limitations of our country's current education system, some college students relax their minds after graduating from secondary vocational colleges and give up the classroom. This has resulted in the low level of professional quality and poor professional and technical capabilities of our

country's current university graduates. At the same time, due to the relatively small amount of time for Chinese college graduates to interact with the society in the enterprise, their social practical experience and the ability to recognize market risks are also seriously lacking, making their innovative spirit and entrepreneurial spirit even stronger difficult.

The existing teaching and research platforms of practical colleges and universities are outdated and do not reflect professional differences. In order to meet the current market needs for college graduates, our country's higher education still needs to focus on market integration. However, at the same time, education and scientific research have their own internal laws, especially for college students' independent innovation and scientific research entrepreneurship education and practice must strictly abide by the internal laws of scientific research and teaching in order to get twice the result with half the effort.

## ***2.2. Principles of Constructing a Training Model for Innovative and Entrepreneurial Talents in Agricultural Sciences***

### ***2.2.1. Adapt to the Principles of Agricultural Development***

The training of agriculture-related talents must be oriented towards the rural areas and the agricultural industry to meet the needs of the development of the agricultural industry. Providing excellent high-quality innovative and entrepreneurial talents for agriculture and rural areas is the fundamental purpose of agriculture-related talent training. Therefore, the construction of an agricultural talent training model first requires that it can meet the needs of future talent development in rural areas and the agricultural industry.

### ***2.2.2. Position Ability is the Core Principle***

Innovation and entrepreneurship education is the education of entrepreneurial talents. The main function of entrepreneurial talents in agro-related industries is to use their own production skills to complete relevant production, management, development, and operation tasks in relevant positions. Therefore, when establishing a training model for agriculture-related talents, colleges and universities should take the cultivation and improvement of students' entrepreneurial and innovative ability as the core criterion of the model, and insist on improving students' innovative ability and technical level as the main reform direction.

### ***2.2.3. Practical Principles***

The most important aspect of entrepreneurial ability is the ability to operate in front-line positions. Higher vocational education focuses on the cultivation of entrepreneurial talents, establishes a scientific and systematic training system for innovation and entrepreneurship and evaluation standards, and emphasizes the cultivation of entrepreneurial and innovative ability.

### ***2.2.4. Systematic Principle***

The purpose of higher vocational education is to cultivate students' innovative and entrepreneurial ability, and innovative and entrepreneurial ability is the general term for all qualities that must be possessed by entrepreneurial talents. It contains a logical relationship and is a unified whole, that is, professional qualities and skills. The organic unity of level, moral quality, innovation ability, and professionalism are interrelated and restrict each other. Therefore, colleges and universities must build a systematic education system when establishing a talent training model, and do a good job in the coordination of teaching content and teaching subjects.

## **3. Research on the Training Model of Innovative and Entrepreneurial Talents in Agricultural Sciences**

### ***3.1. Purpose of the Investigation***

Investigate the current situation of the training model for innovative and entrepreneurial agricultural talents through questionnaires, mainly centering on the satisfaction of the current training model and the suggestions for the current training model, through the analysis of the results, provide relevant data basis for the reform of the training model of innovative and entrepreneurial talents in agricultural sciences.

### 3.2. Questionnaire Survey Development Steps

#### 3.2.1. Establishment of the Survey Site

This survey is aimed at the status quo of the cultivation model of innovative and entrepreneurial talents in agricultural sciences. In order to reduce the difficulty of carrying out survey activities, this survey is mainly carried out in this city, in order to facilitate the development of survey activities and ensure that the survey results have enough data. As a support, the location of the survey was determined to be the agricultural major of the university in this city, and three universities with different reputations were randomly selected for the survey. Since this activity was mainly aimed at universities in this city, the results were not universal, so this the second results can not explain the current situation of the training model of agricultural innovative and entrepreneurial talents in other regions.

#### 3.2.2. Determination of Relevant Parameters

The establishment of the number of questionnaires is the most basic step of the survey activity, because the number of questionnaires is related to the validity of the survey results. If the number of questionnaires is set too low, the results of this survey will be questioned because the base of the data is not large enough and the results of the survey will not be large enough. It is universal. The number of questionnaires is set too high, and the difficulty of the questionnaire survey activity increases. Therefore, the number of questionnaires this time is set to 200 according to the minimum sample size proposed by the experts and the technical conditions of this survey.

#### 3.2.3. The Distribution Process of the Questionnaire

The issuance of this questionnaire is mainly divided into two stages. The first is the issuance of the questionnaire, and the second is the recovery of the questionnaire. In order to ensure that the results of this survey have greater authenticity, the recovery of the questionnaire will be completed after the questionnaire is issued. Recovered in the next six days, given time to fill out the questionnaire completely. 189 questionnaires were recovered, and the recovery rate this time was 95%.

### 3.3. Data Processing

When performing correlation analysis on the collected data, the data must be classified and sorted. This will not only increase the utilization rate of the data, but also promote cross-data analysis. Therefore, the main consideration is the completeness and accuracy of the data. First of all, about data integrity. When the questionnaire is delivered to the sample subject for completion and collection, some sample items are arbitrarily completed, or their selection cannot be completed, which will cause some data sorting problems, but because the retrieved data accounts for the majority, so deleting the lost data means deleting the lost data. Secondly, the precision and accuracy of the data. When conducting an audit, the main consideration is to check whether these data are inconsistent with other choices, or the principle that conflicts with them should be selectively removed but as much as possible should be retained.

The main meaning of a correlation relationship in the objective correlation analysis method is to generally refer to a certain relationship between various objective phenomena, but they are not strictly corresponding to each other in quantity. There are two main forms of determining the relevant properties of objective phenomena here: qualitative analysis and quantitative analysis. The main purpose of qualitative analysis is to rely on the scientific theoretical knowledge and practical experience of the researcher to accurately judge whether there are correlations between various objective phenomena. Or what kind of factor, the subjectivity of this analysis method is relatively strong. Among them, the commonly used calculation formula is expressed as:

$$r = \frac{S^2_{xy}}{S_x S_y} = \frac{\sum(x - \bar{x})(y - \bar{y})/n}{\sqrt{\sum(x - \bar{x})^2/n} \sqrt{\sum(y - \bar{y})^2/n}} \quad (1)$$

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum \bar{x})^2} \sqrt{(n \sum y^2 - (\sum \bar{y})^2)}} \quad (2)$$

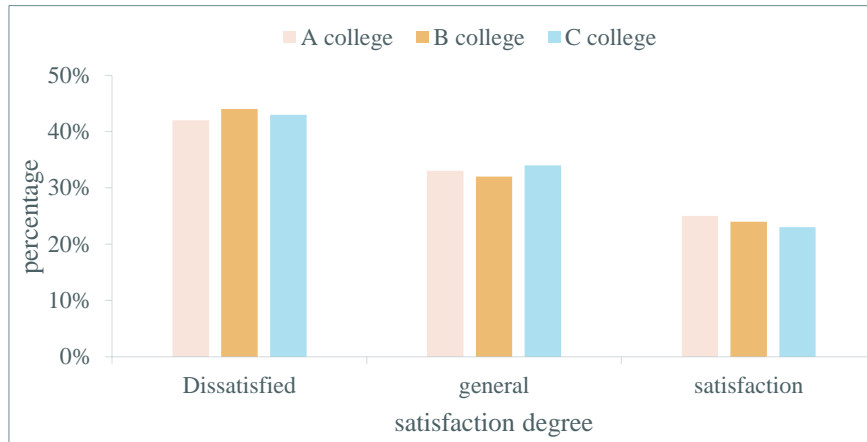
**4. Analysis of Survey Results**

**4.1. Satisfaction with the Current Training Model**

The questionnaire is used to investigate students' satisfaction with the current training model. The results of the survey are shown in Table 1:

*Table 1: Satisfaction with the current training model*

	A college	B college	C college
Dissatisfied	42%	44%	43%
general	33%	32%	34%
satisfaction	25%	24%	23%



*Figure 1: Satisfaction with the current training model*

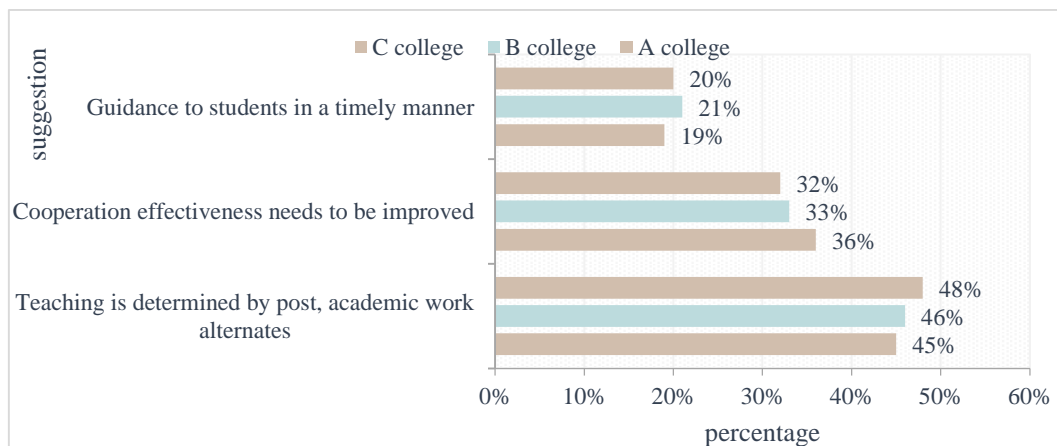
It can be seen from Figure 1 that the students are not satisfied with the current agricultural innovation and entrepreneurship talent training model. Those who are dissatisfied with it account for more than 42%, and those who think it is average account for about 32%. From this it appears that the reform of the current training model is necessary.

**4.2. Suggestions for the Current Training Model**

Through the questionnaire survey of students and teachers' suggestions on the reform of the training model, the results of the survey are shown in Table 2:

*Table 2: Suggestions for the current training model*

	A college	B college	C college
Teaching is determined by post, academic work alternates	45 %	46%	48%
Cooperation effectiveness needs to be improved	36%	33%	32%
Guidance to students in a timely manner	19%	21%	20%



*Figure 2: Suggestions for the current training model*

It can be seen from Figure 2 that more than 45% of the students and teachers in the suggestions given believe that schools should train talents based on the needs of the enterprise, rather than divorce the actual talent needs and emphasize theory and ignore practice.

## 5. Conclusions

Our country's innovation and entrepreneurship education has brought great opportunities for growth. The theoretical research on innovation and entrepreneurship education has become more mature and complete, and the understanding of the overall thinking has gradually improved. The state has issued detailed and comprehensive top-down policies and guidance measures, and the environment for students to pursue innovation and entrepreneurship has gradually improved. At the same time, it is suggested that colleges and universities should establish a student-centered innovation and entrepreneurship education system, combined with artificial intelligence technology, and establish an innovation and entrepreneurship education model with its own characteristics.

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