

Research Article

Research on Cultivation of Innovative Talents in Colleges and Universities Based on Fuzzy Evaluation Model

Zhe Tang 

Civil Aviation Flight University of China, Guanghan, Sichuan 618307, China

Correspondence should be addressed to Zhe Tang; tangzhe123@cafuc.edu.cn

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Since the 21st century, the main goal of talent training in China has gradually changed from cultivating compound talents to cultivating high-quality talents with typical innovative spirit and innovative ability. In order to give full play to the value of human resources in college and university function and improve the level of human resource management, this paper used the analytic hierarchy process, fuzzy evaluation model constructed, and the education and management of data analysis, together with the present situation of university human resources development and management, and explored the effective ways to optimize the human resource management in colleges and universities, college should shift from understanding, putting forward to optimize the structure, clear management responsibility, and improve the incentive mechanism and other innovative ideas.

1. Introduction

Fast-paced economic development has been achieved at the cost of environmental degradation, loss of biodiversity, and ecosystem services, resulting in the exacerbation of poverty and diminished benefits for future generations. According to the MA (Millennium Ecosystem Assessment), reversing ecosystem degradation while meeting increasing demands for their services can only be met by a change in policies, institutions, and practices. In an era of fierce competition in the education and training market, brand advantages are a core of competition. After listing, New Oriental, for example, began a strong offensive in the fields of early childhood education, vocational education, and middle and high school exams (microblogging) tutoring and personalised tutoring, using New Oriental's brand advantages to expand in various fields, and Giant Education Group began a strategic deployment for development in the country before financing, and after financing acquired. After the financing, it acquired some large local training institutions across the country and soon realised a group operation model. Meanwhile, Giant's early childhood education and tutoring have been developing rapidly and have now formed a comprehensive

brand pattern. According to the National Language Commission, the Ministry of Education is formulating a standard for Chinese character writing for primary and secondary school students, requiring students not only to recognise and write but also to write in a standardised and beautiful manner. The new syllabus for the college entrance examination, which stipulates that "one point will be deducted for each wrong character" and the increased writing requirements for computerised marking, is a warning and a spur to the current basic language teaching. In this regard, the market has seen some new opportunities in the changing education market.

As human beings enter the current period-the 21st century information age, the rapid development and dissemination of relevant technologies such as big data, cloud education, and Internet have formed a typical symbol of measuring national competitiveness for the development of the quality related to national innovation. Building an innovative country is usually the core of China's development strategy, which is also the key to further enhancing the overall national strength. To realize the strategic target, the most important thing is to cultivate a large number of innovative talents, not only to produce world-class scientists and

science and technology talents but also should vigorously develop a line of innovative talents; the process of development of higher education in contemporary China is the most important historical mission. Reviewing the traditional teaching model, redefining the main purpose of modern education, scientifically planning related courses of modern teaching, and creating innovative and diversified teaching methods have gradually developed into a solid foundation for building an innovative country. Innovation ability is usually the ability to provide new ideas, theories, methods, and inventions with typical economic value, social value and ecological value rapidly in the fields of technology and various practical activities. Innovation often requires the use of existing thinking patterns to further propose insights that are different from conventional or ordinary people's ideas, making full use of existing relevant knowledge and material, in a specific social environment, in an idealized way or to meet the needs of social undertakings, to improve or create new things (mainly including product, method, path, element, and environment), and you can also get some beneficial effects.

History has amply proved that every major economic crisis usually breeds great innovations, and major scientific and technological innovations usually become a powerful driving force for the continuous recovery and prosperity of the world economy [1]. From the second half of 2008 until now, the global financial crisis caused by the US subprime mortgage crisis has made innovation a hot topic again. As a typical carrier of innovation activities, innovative talents are the fresh force driving the development of a country or region. At the same time, which type of talents belong to innovative talents and how to measure an innovative talent are also the first problem we need to solve. First of all, innovative talents should have a very solid language foundation and a very reasonable interdisciplinary professional knowledge and skill structure. On this basis, it is necessary to have the capacity for relatively comprehensive development: the bright enterprising and the innovation spirit, and also require a strong sense of responsibility to society and the ability to learn throughout life.

For a long time, the traditional Chinese employment mechanism has further stayed at the static level of the evaluation criteria for talents, with academic qualifications, titles, and qualifications. This method is often simple and easy, but it usually ignores the talent factor of the talent, which will prevent innovative talents from standing out. In the process of formulating relevant talent evaluation standards, it is necessary not only to fully consider the comprehensive conditions, such as academic conditions, professional titles, achievements, and influences, but also to consider its basic qualities: comprehensive quality, knowledge quality, and innovation ability. Invisible conditions. Therefore, evaluating the performance of innovative talents usually requires a more scientific set of standards. The analytic hierarchy process is often adopted. After qualitative and quantitative analysis, an innovative talent evaluation system is established to provide important disciplinary basis for people to discover and cultivate innovative talents [2–5].

As for the research content of innovative talents, the domestic and educational circles and the psychological circle

have basically formed a consensus; that is, in addition to having relatively normal intellectual factors, there must be typical quality of original innovation. The main reason for innovative talents to surpass others lies in their outstanding consciousness features such as motivation, interest, and attitude of themselves and the world, which are obviously non-intellectual factors [5–8].

Wexler, a famous American psychologist, once collected a large number of intelligence data of Nobel Prize winners in their teenage years and found that many of them were not of high intelligence but of medium or medium intelligence. However, these people usually have very strong curiosity and interest and, at the same time, high self-confidence. The quality of their creation, intrinsic motivation, hard work, and tenacious are very typical [9–11].

Guildford and Sternberg are the two famous people in the study of innovative personality. In the 1970s, the famous American psychologist Guildford wrote two books, "creative talent" and "new theory on creativity and innovative thinking," which made people's study of creativity become a hot topic. Guildford [12] believes that human creativity and human intelligence are not always equal and that the perception of problems, fluency of thinking, flexibility of thinking, originality, recombination ability, and complexity of conceptual structure are all playing key roles in the structure of human creativity. In 1967, he presented eight important features, including a high degree of self-consciousness and independence; a voracious thirst for knowledge; strong curiosity, deep motivation to the motion mechanism of things; extensive knowledge and good observation; be organized, accurate and strict; rich imagination, keen intuition, be fond of abstract thinking, have extensive interest in intellectual activities and games; have a sense of humor and show excellent artistic talent; and superior will and quality, eliminate external interference, and long time to focus on a certain interested problem.

Steinberg [13] believes that people's creativity is often deeply influenced by many factors such as intelligence, knowledge, style, and environment, among which personality and environment are two factors that cannot be ignored. In 1986, he outlined seven typical features: tolerance for ambiguity; willing to overcome obstacles; be willing to make one's own views sustainable; activity driven by intrinsic motivation; a moderate sense of adventure; expect to be recognized; and be willing to work hard for recognition again.

There is a lot of research on innovative talents; usually concentrate upon the following two aspects.

1.1. First: Research on the Quality of Innovative Talents. Zhong [14] believes that innovative talents should have the typical characteristics of a combination of knowledge, developed intelligence and ability, free development personality, positive life value orientation, relatively noble dedication, and strong body.

Liu [15] believes that the quality of scientific and technological innovation talents in enterprises is mainly reflected in three aspects, namely, typical cognitive features, thinking features, and individual psychological features.

1.2. Second: Research on the Evaluation of Innovative Talents. Liao [16] believes that the evaluation of innovative talents in modern China should include two main aspects: intellectual factors and nonintellectual factors. Intellectual factors mainly include knowledge, intelligence, aptitude, practical experience, and other factors. Nonintellectual factors often include political quality, achievement motivation, social adaptability, and physical conditions, and the principles, contents, and related implementation plans of the evaluation are also expounded. Yuan et al. [17] rebuilt the scientific and technological innovative talent evaluation index system from the five aspects of the constitution, morality, knowledge, ability, and performance of innovative talents.

There is no specific conclusion as to which of the indicators used in the evaluation of innovative talents belong to the more important type. Chen [18] pointed out that innovation ability often belongs to new fields related to the comprehensive application of knowledge development that he has already possessed, mastering, absorbing and integrating knowledge of all aspects, transforming knowledge, and also making the activities in which he is engaged have relatively novel ability. The research results of Lin [19] directly show that the innovation ability is fully reflected in the sharp insight, strong exploration ability, good innovative thinking and the ability to transform achievements. Yao [20] pointed out that innovation ability is the comprehensive performance of practical ability, cooperative ability, and strain capacity.

2. Materials and Methods

2.1. Methodology

2.1.1. Analytic Hierarchy Process. Analytic hierarchy process (AHP) mainly refers to a systematic and hierarchical analysis method combining qualitative and quantitative analysis based on the decomposition of elements related to decision-making problems into several levels [21]. Characteristics of this kind of method are usually in terms of factors affecting the target decision after thorough analysis, constructing a typical hierarchical structure model; then make full use of relatively little quantitative information, the decision makers of experience judgment to quantification, thus to complex decision system providing a relatively simple analysis.

The multilevel analysis method can be fully applied to solve the problem. This method can be generally divided into four key steps: analyzing the various relationships among the factors in the system, so as to establish a hierarchical structure of related problems; the importance of a criterion in the upper layer of the elements already contained in the same level is compared accordingly, and a typical comparative judgment matrix is established; people use the judgment matrix to calculate the relative weights contained in the compared elements and also need to perform consistency check; the weight relation of each element after combination is calculated, and the consistency test is further concluded.

2.1.2. Evaluation Index System of Innovative Talents. Innovation-oriented talents usually belong to a talent model that can be fully developed and with relatively free personality. They can usually break some fixed conventional thinking and have certain discoveries, inventions, breakthroughs, and creations on the original knowledge and technology foundation. Therefore, innovative talents often possess very extensive knowledge information, very unique professional knowledge, and relevant skills. Generally speaking, innovative talents are required to have high research and development ability and strong ability to apply new technologies; they also need to have a strong interest in things and the innovative quality of perseverance and courage. In order to further ensure the scientific evaluation of innovative talents, the indicators are generally determined through questionnaires, expert consultation, and other methods. The main content of the questionnaire survey generally includes the knowledge structure, ability, and quality of innovative talents. For example, as shown in Figures 1, 60 questionnaires were issued by the workers in the survey, among which 58 valid questionnaires were returned, 20 for management research, 20 for education research, and 18 for middle and senior managers in enterprises and institutions. The number of questionnaires needed for reasonable evaluation is satisfied. After the collected questionnaires are sorted out and summarized, the evaluation index system of innovative talents can be obtained, and they can be divided into three levels, namely, target level, criterion level, and indicator level. The specific situation is shown in the figure below:

3. Results and Discussion

3.1. Innovative Talent Evaluation Index Judgment Matrix. A typical hierarchical structure model of evaluation indicators is established, and then, a pairwise comparison can be made among the elements of each layer to determine the relative importance of related influencing factors. In order to measure the indexes of the importance of further, here is introduced to the proportion of 1~9 scale to express. By comparing the relative importance of each element, a very typical pairwise comparison judgment matrix can be obtained. Each element represents the importance of the horizontal indicator to each column of indicators, as shown in Table 1.

A 1, A 2, and A 3 are, respectively, adopted to represent knowledge, innovation ability and innovation quality. B 1, B 2, and B 3 are used to represent cultural literacy, professional knowledge and work experience. C 1, C 2, C 3, C 4, C 5, C 6, C 7, and C 8 are used to represent the observation ability, judgment ability, memory ability, imagination ability, innovative thinking, hands-on ability, learning ability, and organizing and coordination ability. D 1, D 2, D 3, D 4, D 5, D 6, D 7, and D 8 are adopted to represent the innovation consciousness, enterprising consciousness, research spirit, interest and hobbies, will perseverance, risk awareness, courage and boldness, and team spirit. By issuing questionnaires to experts, the results of the questionnaires are sorted out and summarized. After the corresponding processing of the

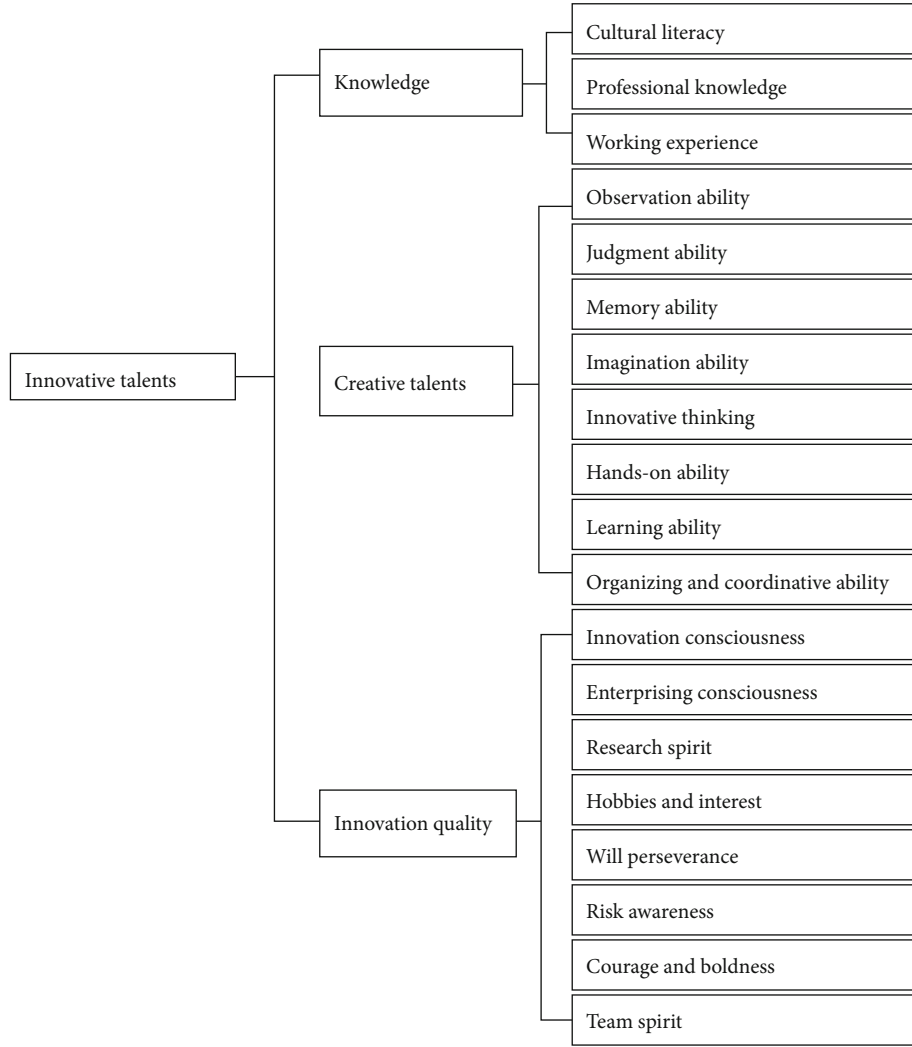


FIGURE 1: Evaluation system of innovative talent cultivation.

TABLE 1: Definition of scale.

Comparison of indexes A and B	Utmost importance	Very important	Important	A little important	Equally important	Little bit different	Not important	Not so important	Very unimportant
Evaluation of index A	9	7	5	3	1	1/3	1/5	1/7	1/9

PS: Take 8.6.4.2.1/2.1/4.1/6.1/8 as the intermediate value of the above review value

survey results of each expert, the following judgment matrix can be obtained.

The following is the evaluation matrix of innovative talents:

$$A = \begin{bmatrix} 1 & \frac{1}{2} & \frac{1}{3} \\ 2 & 1 & \frac{1}{2} \\ 3 & 2 & 1 \end{bmatrix}. \tag{1}$$

The following is the knowledge comparison judgment matrix:

$$B = \begin{bmatrix} 1 & 3 & 2 \\ \frac{1}{3} & 1 & \frac{1}{2} \\ \frac{1}{3} & 2 & 1 \end{bmatrix}. \tag{2}$$

The following is the innovation ability comparison judgment matrix:

$$A = \begin{bmatrix} 1 & 1 & 2 & \frac{1}{2} & \frac{1}{2} & 1 & 2 & 2 \\ 1 & 1 & 2 & \frac{1}{2} & \frac{1}{2} & 1 & 2 & 2 \\ \frac{1}{2} & \frac{1}{2} & 1 & \frac{1}{3} & \frac{1}{3} & 1/2 & 1 & 1 \\ 2 & 2 & 3 & 1 & 1 & 2 & 3 & 3 \\ 2 & 2 & 3 & 1 & 1 & 2 & 3 & 3 \\ 1 & 1 & 2 & \frac{1}{2} & \frac{1}{2} & 1 & 2 & 2 \\ \frac{1}{2} & \frac{1}{2} & 1 & \frac{1}{3} & \frac{1}{3} & \frac{1}{2} & 1 & 1 \\ \frac{1}{2} & \frac{1}{2} & 1 & \frac{1}{3} & \frac{1}{3} & \frac{1}{2} & 1 & 1 \end{bmatrix}. \quad (3)$$

The following is the comparative judgment matrix of innovation quality:

$$D = \begin{bmatrix} 1 & 2 & 3 & 1 & 3 & 2 & 3 & 3 \\ \frac{1}{2} & 1 & 2 & \frac{1}{2} & 2 & 1 & 2 & 2 \\ \frac{1}{3} & \frac{1}{2} & 1 & \frac{1}{3} & 1 & \frac{1}{2} & 1 & 1 \\ 1 & 2 & 3 & 1 & 3 & 2 & 3 & 3 \\ \frac{1}{3} & \frac{1}{2} & 1 & \frac{1}{3} & 1 & \frac{1}{2} & 1 & 1 \\ \frac{1}{2} & 1 & 2 & \frac{1}{2} & 2 & 1 & 2 & 2 \\ \frac{1}{3} & \frac{1}{2} & 1 & \frac{1}{3} & 1 & \frac{1}{2} & 1 & 1 \\ \frac{1}{3} & \frac{1}{2} & 1 & \frac{1}{3} & 1 & \frac{1}{2} & 1 & 1 \end{bmatrix}. \quad (4)$$

3.2. Establish the Index Set of Innovative Talent Evaluation.

For the evaluation of innovative talents, we need to consider from various aspects, such as the main factors including education background, job title, work background, achievements, innovation ability, and knowledge quality. We separately record the factors and call them the indicator set of talent evaluation $U = \{U_1, U_2, \dots, U_n\}$. It is noted that the relevant evaluation indicators are usually not equally important for the centralized evaluation indicators, so it needs to be weighted. According to the AHP (Analytic Hierarchy Process) created by the famous American expert of operations at the university of Pittsburgh, we can usually obtain the evaluation index weighting matrix easily:

$$\omega = (\omega_1, \omega_2, \dots, \omega_n), \quad \sum_{i=1}^n \omega_i = 1, \quad \omega_i \geq 0. \quad (5)$$

For the evaluation of relevant talents, the corresponding nonsingular evaluation results are often obtained. On the contrary, multiple evaluation results are generally obtained, but these evaluation results usually have typical ambiguity. For example, a talent often belongs to a typical innovative talent. In fact, we cannot find out which kind of talent is an innovative talent. It is generally said that a certain talent belongs to an innovative talent. So we assume that the comment set is a fuzzy set $V = \{v_1, v_2, \dots, v_m\}$.

The fuzzy evaluation matrix $P = (P_{ij})_{n \times m}$ is constructed, where P_{ij} represents the i th index of someone and belongs to the membership degree of the j th comment. Because the evaluation indexes often need to be weighted, the comprehensive evaluation matrix can be obtained by making full use of the weighted index matrix and the fuzzy evaluation matrix, that is, B :

$$B = (\omega_1, \omega_2, \dots, \omega_n) \otimes \begin{pmatrix} P_{11} & P_{12} & \dots & P_{1m} \\ P_{21} & P_{22} & \dots & P_{2m} \\ \vdots & \vdots & \ddots & \vdots \\ P_{n1} & P_{n2} & \dots & P_{nm} \end{pmatrix}. \quad (6)$$

The comprehensive fuzzy evaluation matrix usually depicts the membership of a person in each comment. It is important to note that the matrix multiplication listed here is not a tensor product of matrices, but a fuzzy one.

For the comprehensive evaluation matrix B , the normalization is carried out; that is, we may assume that the calculation is obtained, which is the normalized vector of B .

$$B = (b_1, b_2, \dots, b_n)B' = \frac{1}{b_1 + b_2 + \dots + b_n} (b_1, b_2, \dots, b_n). \quad (7)$$

We can get a fuzzy comprehensive evaluation of someone with B' .

3.3. Cases of Fuzzy Comprehensive Evaluation of Innovative Talents. There are so many types of innovative talents, and innovative talents with different divisions of labor tend to have poor comparability. Therefore, when evaluating innovative talents, it is necessary to compare the same types of talents. The following is mainly the corresponding data analysis for the teacher group of the university, using the above formula. The teacher has a master's degree, assistant professor title, and one-year working time and published a paper in this year. We need to fully consider the following indicators: education, job title, work background, achievements, social achievements and influence, innovation ability, comprehensive quality, knowledge quality. Using the AHP method, the comparison matrix as shown in Table 2 is constructed.

Use modern mathematics software Matlab, calculation, and feature vector method to obtain the weight matrix! = (0.0278, 0.278, 0.0559, 0.2321, 0.1152, 0.1874, 0.1803, 0.1735), and then use the consistency index to test the data, and calculate the random consistency ratio of $CR = CI/RI =$

TABLE 2: Comparison matrix of university teachers.

	Education	Job title	Working background	Achievements	Social achievements and influence	Innovation ability	Comprehensive quality	Knowledge quality
Education	1	1	1/2	1/8	1/4	1/7	1/7	1/6
Job title	1	1	1/2	1/8	1/4	1/7	1/7	1/6
Working background	2	2	1	1/4	1/2	1/4	1/3	1/3
Achievements	8	8	4	1	2	2	1	1
Social achievements and influence	4	4	2	1/2	1	1/2	1/2	1
Innovation ability	7	7	4	1	1	1	1	1
Comprehensive quality	7	7	3	1/2	2	1	1	1
Knowledge quality	6	6	3	1	1	1	1	1

0.0011, which is much smaller than 0.01. Therefore, the above comparison is also quite satisfactory. Therefore, fuzzy evaluation is further constructed, as shown below.

$$(0.0278, 0.278, 0.0559, 0.2321, 0.1152, 0.1874, 0.1803,$$

$$0.1735) \otimes \begin{pmatrix} 0.70 & 0.05 & 0.00 & 0.00 \\ 0.70 & 0.20 & 0.15 & 0.05 \\ 0.60 & 0.26 & 0.10 & 0.05 \\ 0.47 & 0.33 & 0.15 & 0.05 \\ 0.50 & 0.50 & 0.20 & 0.00 \\ 0.20 & 0.20 & 0.50 & 0.10 \\ 0.70 & 0.20 & 0.10 & 0.00 \\ 0.60 & 0.20 & 0.10 & 0.10 \end{pmatrix} = (0.2321, 0.2321,$$

$$0.1874, 0.0500),$$

$$B' = \frac{1}{0.7016} \times (0.2321, 0.2321, 0.1874, 0.0500) \quad (8)$$

$$= (0.3308, 0.3308, 0.2671, 0.0713).$$

Therefore, we can see that the fuzzy comprehensive evaluation of B' value of the person is obtained, as shown in Table 3.

This method of mathematical model evaluation can effectively combine various types of soft and hard evaluation indicators, which provides a more scientific and reasonable

standard for our evaluation of innovative talents, and is more conducive to creating innovative talents to stand out and further develop and mobilize the enthusiasm and initiative of talent creation.

From the above analysis, we can know that from the perspective of standards, innovation quality is often the most important index to evaluate innovative talents, which in turn belongs to innovation talent and knowledge. Viewing from the index level and innovative consciousness, spirit of weight is the highest, it is fully illustrate the point, these indicators is actually evaluation of innovative talents which are the most important indicators, among them; for the innovative talents of literacy, imagination ability, innovative thinking, and enterprising consciousness, the interest of the weights is secondary, which means they belong to the important indicator; the weight of other indicators is relatively low, but it is also an indispensable index for evaluating innovative talents. The suggestions for improving the competitiveness of innovative talents are as follows.

3.4. Improve the Innovation System Environment. In the modern society, we will give full play to the main status of the eight leading industries and the eight emerging industries and further combine the typical situation of modern industrial structure in terms of layout and actual development and vigorously cultivate and introduce some high-level talents suitable for regional economic development. At the same time, it is also necessary to further optimize the structural layout of innovative science and technology, further stimulate the innovation capacity of the whole society, and greatly promote the transformation of the innovation achievements of modern society into productive forces. The main role of the government in this is to increase the expenditure on education funds, attract a large number of relatively good young teachers and scholars, actively participate in the modern education cause, and strive to build a development that is very conducive to the development and progress of innovative talents. Cultivate the system, and improve the ability of innovative talents in innovation. Combining the situation and tasks faced by China's modern economic development, from the perspective of promoting

TABLE 3: Fuzzy comprehensive evaluation of college teachers B' .

	Education	Good	Average	Poor
Education	0.95	0.05	0.00	0.00
Job title	0.70	0.20	0.15	0.05
Working background	0.60	0.25	0.10	0.05
Achievements	0.47	0.33	0.15	0.05
Social achievements and influence	0.50	0.30	0.20	0.00
Innovation ability	0.20	0.20	0.50	0.10
Comprehensive quality	0.70	0.20	0.10	0.00
Knowledge quality	0.60	0.20	0.10	0.10

the cultivation and growth of innovative talents, we will continue to improve the innovative talent policy of modern society. At the same time, it is necessary to further establish and improve relevant policies on the cultivation, introduction and use of differentiated and innovative talents and strive to create an open, transparent, fair, and impartial mechanism for appointment and employment.

3.5. Strengthen the Construction of High-Level Innovative Talents. We will vigorously improve the cultivation of high-level innovative talents in China, further deepen the construction of a talent team dominated by schools, enterprises, and scientific research institutions, strive to improve the education and management capabilities of core technical talents in enterprises, and constantly improve the overall human resource composition in society.

By analyzing the development status of high-level talent flow, a reasonable and scientific talent flow and supply and demand forecast system is established to further promote the rational and orderly flow of innovative talents within and outside the region and realize the optimal allocation system of innovative talent resources. At the same time, an early warning system for the change of supply and demand of innovative talents was explored to prevent the accumulation and loss of high-level innovative talent resources.

3.6. Explore the Establishment of a High-Level Innovative Talent Gathering Mechanism. Following the basic laws of the development and growth of modern innovative talents in China, according to the continuous development of regional leading industries and related needs, we will do a good job of corresponding talent planning for the development of modern industries and accelerate the development of higher education on the basis of modernization. On the basis of accelerating the development of higher education in modern times and rapidly promoting the training of continuing education, vocational education, and skills, we should give full play to the important role of modern universities in cultivating talents in China and further strengthen reforms in terms of professional settings and curriculum. Adjustments will further deepen the school-enterprise cooperation project in modern society and also need to focus on cultivating talents for scientific and technological innovation by selecting some outstanding scientific and technological innovation talents to go abroad for study or visit. To change the innovative development tendency of "only education"

and "only papers," on the basis of objective evaluation, it is also necessary to give better incentives to talents. Through the establishment of an incentive system linked to its job responsibilities and job performance, a more reasonable talent compensation mechanism, income distribution system, improvement of the innovative talents' approach to material rewards, and spiritual rewards, breaking the traditional rigid bonus system, the employer can allocate its bonus more flexibly.

3.7. Policy of Education Focus on Creating a Good Cultural Atmosphere for Innovation. Innovation culture usually takes innovation as the dominant value, which is conducive to the development of innovation behavior in many aspects such as spiritual level, institutional level, and material level. The education site needs to carry out the governance mode of the educators' own school-the professor school, and further cloning the bureaucracy to the university in the process of social development is a key sticking point in the current innovative culture of education in universities.

Educators born under the bureaucratic education system are often unassuming, and "educational products" are congenital dysplasia in terms of innovation. Since education is not just about imparting relevant knowledge, it is more important to develop students' learning and creativity. Interdisciplinary and student bypass mainly emphasize the integration of talents and knowledge, pay attention to the ability to lengthen the discipline chain, vigorously cultivate independent subject groups, form a new discipline growth point, and create a typical innovative discipline ecology. Universities often belong to a place that truly produces academic masters. It trains and brings together outstanding educators of typical masters and has also developed into a typical leading force for building innovative culture.

Modern society has further created a relatively good academic environment, which is very beneficial for cultivating modern and innovative talents in China. We should respect differences among people, tolerate diversity, seek harmonious coexistence among differences, seek change and unity among diversities, and cultivate a free, tolerant, open, honest, and vigorous academic environment ecosystem. The academic environment requires freedom and tolerance, not democracy, not dictatorship. This is because the truth is usually first in the hands of a few people. Therefore, academic truth cannot be decided by democratic voting.

4. Conclusions

This paper starts with the research on the current situation of human resource development and management in colleges and universities, explores effective ways to optimize human resources management in colleges and universities, and proposes that colleges and universities should change their understanding and optimize the structure of teachers, clarify management responsibilities, and improve incentive mechanisms and other innovative ways.

In order to meet the needs of social development and economic construction, China's higher education institutions have become an important position for talent cultivation. However, due to the influence of planned economy and the inherent characteristics of colleges and universities, they once became a "haven" from the tide of socialist reform, and the far-reaching impact of deep reform on colleges and universities is not very obvious yet. However, with the deepening of reform, facing the globalization of economy and China's accession to WTO, it is an urgent requirement for higher education institutions, as an important part of China's institutional reform, to speed up their reform and development to meet the overall socioeconomic development, the needs of the times and their own development, and the reform and deepening of the personnel system of higher education institutions is one of the important contents. The reform and deepening of the personnel system of colleges and universities is one of the important contents, and accelerating the management and development of human resources in colleges and universities has also become inevitable. This paper starts from the external environment affecting the personnel management and human resources development of colleges and universities and analyzes the current situation of China's higher education development under the conditions of socialist market economy, the reform of the national system, the knowledge economy, and the expansion of the autonomy of running schools, which bring hopes and challenges to colleges and universities. Finally, in the light of the specific situation of a certain university, a large number of index surveys and analyses of human resources are carried out, and the factors influencing the development and management of human resources in a certain university are identified from the survey results, and finally measurements and methods for human resource management in this university are proposed.

Data Availability

The data used to support the findings of this study are included within the article.

Conflicts of Interest

No competing interests exist concerning this study.

References

- [1] B. Fazlioglu, B. Dalgic, and A. B. Yereli, "The effect of innovation on productivity: evidence from Turkish manufacturing firms," *Industry and Innovation*, vol. 26, no. 4, pp. 439–460, 2019.
- [2] K. Dai, "Research on laboratory construction and cultivation of innovative talents in colleges and universities," *Experimental Technology and Management*, 2014.
- [3] X. Wang and Q. Du, "Evaluation on cultivation of innovative talents in engineering universities based on PSO-SVM algorithm," in *International Conference on Intelligent Computation Technology & Automation*, pp. 271–274, Changsha, China, 2009.
- [4] H. Wang, X. S. Zhang, and H. J. Liu, "Research on the personality cultivation of innovative talents at colleges and universities based on super's career development theory," *Journal of Northeastern University*, 2011.
- [5] Q. Wei, P. Lei, W. U. Chen-Yang, and University, S, "Research on the cultivation of innovative talents in colleges and universities from the perspective of artificial intelligence," *Overseas English*, 2019.
- [6] C. Wang, "Research on undergraduate innovative talents cultivation in higher agricultural colleges and universities," in *International Conference on Economics.*, pp. 698–703, Changchun 130118, China, 2017.
- [7] J. Zhang and Y. Zhou, "A research on the cooperative cultivation of innovative and entrepreneurial talents in colleges and universities," *Journal of National Academy of Education Administration*, 2016.
- [8] G. H. Wang, "Research on the cultivation of innovative talents in colleges and universities in the new era based on triple helix theory," *Journal of Anhui Electrical Engineering Professional Technique College*, 2018.
- [9] R. Zhai, B. School, and University, A X, "Exploration of cultivation of innovative ability of college students in local applied colleges and universities: on the basis of the second classroom report card of local colleges and universities of Anhui".
- [10] L. Lan, T. Gao, and L. Cheng, "Research on the cultivation of innovative and entrepreneurial talents in local universities," *Pioneering with Science & Technology Monthly*, 2018.
- [11] L. U. Qing, "Research on the cultivation of innovative talents of higher normal universities in China," *Journal of Chongqing University (social science edition)*, 2012.
- [12] J. P. Guildford, "Three faces of intellect," *American Psychologist*, vol. 14, no. 8, pp. 469–479, 1959.
- [13] L. Steinberg, *Adolescence*, McGraw-Hill, New York, 2005.
- [14] B. L. Zhong, "Coordinating reform, coordinating exploration, efforts to cultivate innovative talents," *Journal of National Academy of Education Administration*, vol. 1, pp. 7–10, 2011.
- [15] X. N. Liu, "Analysis on the connotation and quality characteristics of enterprise science and technology innovation talents," *Productivity Research*, vol. 162, pp. 129–131, 2008.
- [16] B. B. Liao, "Design of evaluation system for innovative talents," *Forum on Contemporary Education*, vol. 9, pp. 55–57, 2006.
- [17] K. X. Yuan, C. H. Niu, and Q. X. Li, "Construction on evaluation index system for innovative talents of science and technology in Shanxi province," *Human Resource Management*, vol. 6, pp. 37–38, 2009.
- [18] Z. L. Chen, "An analysis of the quality structure about innovative talents," *Journal of Zhongzhou University*, vol. 25, pp. 105–107, 2008.
- [19] R. Lin, "On the quality characteristics of innovative talents," *Chinese Talents*, vol. 19, pp. 28–29, 2008.

- [20] L. J. Yao, "Application of project teaching method in teaching," *Journal of Education Institute of Taiyuan University*, vol. 2, pp. 80–83, 2007.
- [21] Z. J. Liu, R. Li, F. Q. Chen, and Y. S. Tan, "Research on the certification teaching system based on SEEQ and analytic hierarchy process," *Journal of Henan Normal University (Natural Science Edition)*, vol. 47, pp. 32–38, 2019.