Discussion on the Training Mode of Top Notch Innovative Talents in the Universities

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Abstract: Training top innovative talents is the key to improve the core competitiveness of the country, and it is also the urgent need to improve the quality of higher education and take the road of connotative development. The quality of talents should meet the needs of the society and the development of human beings. Many colleges and universities have adjusted their talent training programs, enrolled students in different categories, and students are free to choose majors. The school has carried out corresponding curriculum reform and improved the policy of changing majors. Many colleges and universities actively explore the top innovative personnel training mode and have achieved ideal results. There is no doubt that the cultivation of top innovative talents for local colleges and universities is still in the exploration stage, and the training program still faces many problems and contradictions in the specific practice. Therefore, we must objectively analyze the deep-seated reasons, and build a top-notch innovative talent training mode suitable for colleges and universities from the aspects of training objectives, training methods, teaching methods, assessment methods, management systems, etc., in order to provide a strong talent support for promoting the health of China's modern agriculture.

In the 21st century, the competition of the comprehensive national strength of all countries is the competition of talents in the final analysis. Training top-notch innovative talents has become the key factor to improve the core competitiveness of the country, and it is also the urgent need for higher education to improve the quality and take the connotative development path. In recent years, many colleges and universities in China have begun to try to cultivate top talents, such as "Yuanpei College" of Peking University, "zhukezhen College" of Zhejiang University, mathematical basic science class of Tsinghua University, talent training experimental class of Renmin University of China, etc. From 2009 to 2010, the Education Department launched the "experiment plan for training top students in basic disciplines" in 19 key universities across the country. The training plan for top innovative talents has achieved preliminary results in many high-level universities. Many universities have gradually formed scientific education concepts and continuously promoted talent training system [2]. In order to respond to the call of the Party Central Committee and provide talent guarantee for national development, many colleges and universities have also launched the "top talent training pilot plan". However, due to the constraints of the system and its own conditions, colleges and universities cannot completely copy the model of other colleges and universities. Schools themselves must integrate the existing resources and explore the top-notch innovative talent training model in line with their own reality. By analyzing the problems existing in the training of top-notch innovative talents in Colleges and universities, this study focuses on building a training mode of top-notch innovative talents in line with the orientation of colleges and universities.

1. Current Situation and Effect of Training Top Innovative Talents in Colleges and Universities

1.1Current Situation of Top Talents Training

In recent years, in order to meet the needs of the society for the quality of talents and the development of human beings, many colleges and universities have been constantly adjusting their talent training programs, exploring the strategies of classified enrollment and students' free choice of majors. Each school has been constantly reforming and improving the corresponding curriculum and professional transfer methods. Each school has made great efforts to adhere to the principle of taking students as the foundation, facing the majority of students, and establishing a teaching that is conducive to the success of students System, so as to realize the maximization of students' success. The training modes of these universities often have the following characteristics:

1.1.1 Remove the restrictions on major selection and really tap students' professional interests

As we all know, colleges and universities first recruit students by means of examination scores, and well-known universities are bound to have various advantages. Local colleges and universities with relatively low status are faced with the phenomenon of insufficient student resources. Many candidates often choose these colleges out of "necessity". Many students are not familiar with their major before they enter the school. However, the original education system of our country is often "one examination decides one's life". The major students are going to study has been decided before they enter the University. After entering the University, they can't choose another major. Even if some students have the opportunity to choose a major, these opportunities are often only top students. In order to improve students' love and interest in major, many colleges and universities have cancelled the restrictions of major transfer, and some even allow multiple major transfer.

1.1.2 Flexible design of training programs and personalized training

In order to further improve the comprehensive quality of students to meet the needs of the society for composite talents, many colleges and universities have not only liberalized the restrictions on specialty selection, but also reformed the current enrollment mechanism, gradually changing from enrollment by specialty to enrollment by discipline. At the same time, according to the characteristics of students, the curriculum system is updated, and the school flexibly designs training programs and implements personalized training. After the students complete the general education of the first and second grade, according to their own interests, the school provides students with a variety of optional personalized curriculum modules to meet their growth needs. At the same time, students can design their own training programs for the second major to make their own development more competitive and become cross compound talents, that is, "cross compound path". In order to ensure the quality of teaching and students' individualized demand for professional learning, some colleges and universities have also carried out "small class teaching". Combined with the students' own learning level and needs, the class teaching can improve the students' comprehensive quality.

1.1.3 Improve the content design of the practical teaching system, and solve the problem of students' being fastidious but incompetent.

Many college graduates are faced with a problem after work: low ability, high self-esteem, which is due to the lack of practice in school. The reason for this phenomenon is that the students' practical ability is too weak, and the school practical teaching system is imperfect and unscientific. Students do not have the opportunity to practice, students do not have the opportunity to apply the theory they have learned to practice. Therefore, in order to solve the problem of students' poor practical ability, many colleges and universities are constantly improving their own practical teaching system. Students can also take "employment and entrepreneurship courses", participate in innovation and entrepreneurship projects, and receive "double teacher" expert guidance, so as to lay the foundation for future employment or independent entrepreneurship.

1.1.4 Create undergraduate academic research funding plan to help top talents grow

In addition to the cultivation of students' comprehensive quality, professional knowledge and practical ability, the cultivation of top-notch innovative talents also includes the improvement of students' research ability, so as to ensure that every student who is interested in learning has the ability to explore. In order to cultivate the research ability of students, the state and local governments will allocate certain funds to support the entrepreneurship projects of students every year, and implement the "scientific research plan for supporting undergraduates", which integrates scientific research and teaching, and transforms high-quality scientific research resources into teaching resources.

1.2 Effectiveness of Personnel Training

Many colleges and universities have been exploring the training mode of excellent talents for many years, and have achieved relatively ideal results. Colleges and Universities guide excellent students to accurately position their career direction, and maximize the potential of students. The vocational development ability, employment competitiveness and scientific research ability of students have been greatly improved. At the same time, the teaching output level of the school has also been improved. The school and students have achieved a win-win situation

1.2.1 Improve the professional cognition and learning interest of top talents

Through the exploration and implementation of the top talent training mode, colleges and universities have stimulated students' interest in learning and learning motivation, effectively solved the shortcomings of the original teaching mode, and satisfied students' cognition of the major they have learned and the excavation of learning interest.

Since the implementation of "free to major transfer", the number of applicants, the number of successful applicants and the success rate of major transfer have increased year by year. After many students transfer to their favorite majors, they cherish the hard won learning opportunities and make more efforts to achieve excellent results. The transfer of majors has greatly stimulated the students' enthusiasm for learning and displayed the "plus code" effect on talent training. Take the award of Guo Moruo scholarship, the highest honor of University of science and technology of China as an example. In 2013, 9 of 33 award-winning students were transfer majors; in 2014, 6 of 32 award-winning students were transfer majors.

1.2.2 Training the practical ability of top talents

Through the improvement of the practical teaching system, the practical innovation ability of college students has been significantly improved. The number of students who have won the national "Challenge Cup", the National Mathematical Modeling and the scientific research achievement award of college students has increased significantly. Graduates' solid professional ability has been widely praised by employers. It has played its due role in all posts. Many students choose to become village cadres and devote themselves to the construction of beautiful countryside.

1.2.3 Increase the employment and entrepreneurship rate of top talents

After the implementation of the top-notch innovative talent training program, the employment rate of graduates has increased significantly, the number of students who have worked in the world's top 500 enterprises such as IBM and China Merchants Securities has increased significantly, and the proportion of graduates who have been admitted by graduate schools of "211" and "985" universities has also increased significantly. There are also a lot of students who are on the road of starting their own businesses after graduation. Many graduates have won social praise and are considered as "comprehensive in quality, solid in specialty, excellent in skills and distinctive in characteristics".

1.2.4 Enhance the research ability of students

In order to better cultivate top-notch innovative talents with super research ability, many colleges and universities have begun to pilot the "top students training plan of basic disciplines". Some

colleges and universities have begun to try to choose tutors for top students, through "small class" teaching, in order to apply for research and other forms of scientific research, to comprehensively cultivate and improve the research ability of students.

2. Problems in the Training Mode of Top Innovative Talents in Colleges and Universities

Although colleges and universities have made some achievements in the cultivation of top-notch innovative talents, local colleges and universities are still in the exploration stage, facing many problems and contradictions in specific practice.

2.1 The Training Goal is Divorced from the Social Need

In the process of training top talents, the university has invested a lot of human, material and financial resources, which makes graduates have a high level of Ideological and cultural level, and should become the main body of employment in today's society. However, the reality is that many college graduates soon become unemployed. The reason is that the school pays too much attention to standardization in the process of talent training and ignores the characteristics of students' own development, and the social evaluation standard of talent value is too single. Although some colleges and universities are aware of the importance of talent training system and practical teaching, many colleges and universities still pay too much attention to basic theory teaching in the process of talent training, ignoring the cultivation of students' practical ability, resulting in students' failure to meet the requirements of employers when they are employed [3].

2.2 Single Selection Method

Many local colleges and universities in the selection of innovative talents in the form of a single, old-fashioned model, nothing more than a written examination combined with interviews, are emphasizing student performance. The phenomenon of test scores as selection criteria is common in Colleges and universities all over the country, which to a certain extent reflects that colleges and universities ignore the evaluation of talents' comprehensive ability [4].

2.3 Relatively Backward Management System

The talent training plan formulated by local colleges and universities is lack of corresponding implementation rules, and there are many difficulties in the implementation of the plan. Although some schools use academic salons, interest groups, seminars and other methods, but in practice, there are no coping strategies for organizational methods, tutors' responsibilities and security mechanisms.

2.4 Mechanization and Dogmatization of the Evaluation System of Training Mode

Many institutions of higher learning still adopt the traditional concept of higher education, still give priority to the traditional teaching form and assessment form, and the professional learning mode is old. To a great extent, this limits the students' innovation ability and demand. Many colleges and universities have adopted the old education mode and low efficiency evaluation method so far, so the training mode of top talents is mechanized and dogmatic

2.5 Practical Teaching has not been Given Due Attention

Practical teaching is an important means to help students transform knowledge into ability effectively. For a long time, practical teaching has been in a secondary position. It has always been a big problem for local colleges and universities to attach importance to theory, practice, knowledge teaching and ability training. The basic reason lies in the lack of "double teacher" teachers. In addition, there are many reasons, such as insufficient investment in practical teaching funds, insufficient depth of cooperation in teaching and scientific research, and less contact between teachers and students and society. As a result, the comprehensive practical ability of talents has not been effectively exercised, and the innovation ability of talents is not strong.

3. Factors Restricting the Cultivation of Top Innovative Talents in Local Universities

3.1 School Education System Restricts Students' Innovative Thinking

Restricted by the current education system and examination system, examination is still the main standard to test learning effect and evaluate knowledge level. Examination results determine graduation and degree, which makes students, have abnormal worship of examination results. There is a common phenomenon that the ability is despised. Test questions require standard answers, and the design of test questions lacks openness and discussion, which affects students' questioning ability and innovative thinking.

3.2 Teachers' Teaching Methods Restrict Students' Creativity

Although some colleges and universities try to reform their teaching methods, they are still not strong enough. Some teachers still adopt the indoctrination teaching method in the classroom, with less heuristic and discussion methods. In the teaching process, middle school students lose their dominant position and rely on teachers excessively. Such a teaching method is not conducive to the cultivation of students' independence and creativity.

3.3 The Effect of the Gap between the Source of Students and the Quality of Students

Some parents and examinees discriminate against colleges and universities which are not well-known and popular majors, which leads to a certain gap between colleges and universities in the quality of students. In some schools, students' autonomous learning ability and cognitive ability are poor, which restricts the talent training effect of some schools.

3.4 Insufficient Capital Investment Restricts the Overall Development of Talent Training

The reform of top-notch and innovative personnel training mode needs certain financial support. The investment of funds creates a good environment for talents to stand out. Compared with most 211 or 985 universities, many local universities have less funds for personnel training and lack of project funds support from the Ministry of education. Many local colleges and universities only rely on limited funds to carry out the training of innovative talents, which is not conducive to the overall spread of talent training.

4. Construction of Training Mode of Top Innovative Talents in Local Colleges and Universities

Although some colleges and universities have made initial attempts in personnel training and achieved positive results, in order to break through the limitations of system, teachers, students, funds and other aspects, and creatively carry out the training of innovative talents, we need to build the training mode of innovative talents from the following aspects:

4.1 Update Education Concept

Thinking determines behavior. In order to break through the previous innovative personnel training mode, we must innovate the concept in the aspects of teaching subject, knowledge imparting, educational content, professional education, school running mode, and realize the transformation. For example, from teacher centered to student-centered, fully respect the initiative and creativity of students; from knowledge inheritance centered to knowledge creation centered, guide students to create and change knowledge; from science education centered to the integration of science education, humanities education and quality education, and attach importance to the overall development of students; from single professionalism Education has been transformed into a comprehensive education of interdisciplinary integration to broaden the development path of students; from a closed school model to an open, competitive and international school model to expand the vision of talent training [5].

4.2 Clear Training Objectives

The goal of talent training determines the nature and development direction of educational activities. Local colleges and universities need to combine their own reality and characteristics, formulate scientific and reasonable training objectives for innovative talents, and clearly define the level of knowledge, ability, skills and other qualities required for training innovative talents. Personnel training should meet the social needs of the school location. Colleges and universities should focus on training scientific and technological talents according to the advantages of the school location.

4.3 Innovation of Training Methods

Local colleges and universities have more than 10 majors, each of which has different discipline foundation, industry background and talent training mode. It can't be generalized. We should follow the principle of based on the needs of the industry and highlighting professional characteristics to establish a diversified talent training mode, and actively explore the mode of school, society, enterprise cooperation and open education [6].

4.4 Optimize Teaching Methods

The traditional way of education is mainly to teach knowledge by teachers, and students are subordinate. This way is easy to imprison students' thinking in the existing knowledge system, which is not conducive to the development of individual students and the cultivation of creative thinking [7]. In the process of training innovative talents, local colleges and universities should encourage teachers to change traditional teaching methods, actively carry out heuristic and research-based teaching, highlight the main position of students in the teaching process, cultivate students' self-study ability, guide students to actively explore, think and practice, stimulate students' potential, and cultivate students' innovative thinking and creativity. In the design of the curriculum system, we should make clear the relationship between the training objectives and the curriculum, and stress the practicality and innovation. In terms of teaching content, teachers combine teaching and scientific research organically, grasp the frontier of subject development, and update teaching content in time.

4.5 Improve the Assessment Method

For the selection and assessment of innovative talents, local colleges and universities should abandon the single standard of evaluating students' learning effect by examination results, establish a comprehensive and diversified evaluation system for students, and attach importance to students' academic interest, learning potential and innovation ability. Using a variety of evaluation methods, such as lectures, experimental papers, reports, discussions, practical operations, etc., to scientifically evaluate the ability of students to think, analyze and solve problems, so as to help innovative talents stand out.

4.6 Improve the Management System

Scientific and perfect management system is indispensable for the smooth implementation of the training of top innovative talents. Local colleges and universities should formulate rules and regulations for the training of top innovative talents to normalize the training of talents. The detailed rules of talent selection, teachers allocation, process management, effect evaluation and other work should be made clear, so as to provide a strong guarantee for the implementation of the training of top innovative talents. At the same time, we should establish a dynamic management mechanism and access exit mechanism, encourage reasonable and orderly competition, and promote the survival of the fittest, so as to maintain vitality and vitality in the training of top innovative talents.

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