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Study on the Mechanism of Master's Education for Undergraduate Students in Ordinary Agricultural and Forestry Universities

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Abstract: ***With the development of society and the economy, the program of talent cultivation plans is becoming more important. The introduction of strategies such as "rejuvenating the country through science and education", "strengthening the country through talent" and "innovation-driven development" further highlights the Central Committee's emphasis on talent training. Based on this background, this work focuses on the Master's training mechanism of undergraduate students in ordinary agriculture and forestry universities. Firstly, it expounds the orientation of the undergraduate training scheme and then lists the problems in the current undergraduate training scheme of ordinary agriculture and forestry universities. It also summarizes the reform way of the undergraduate training scheme of ordinary agriculture and forestry universities, to promote the quality of undergraduate training of ordinary agriculture and forestry universities.***

Keywords: Agricultural and forestry Universities, Undergraduate Students, Master Training.

1. Positioning of the Undergraduate Training Scheme

1.1 Difference between the Training Scheme of Undergraduate Students and High School Students

The purpose of our students receiving high school education is to participate in the college entrance examination and have the admission ticket to receive higher education, which is simpler in training students. While undergraduate training objectives and training schemes are more complex. In terms of learning motivation, high school students learn passively, with teachers assigning learning tasks and students rigidly completing them. Teachers set up learning tasks, students stereotypically complete, while the majority of undergraduate active learning. Students have a greater choice of space, free to choose to go to their interest in the course and field of in-depth study and research. Secondly, in the study curriculum, the curriculum of high school students is set by the requirements of the college entrance examination, a large number of cultural courses, no experiments, and social practice, all courses are compulsory, single learning knowledge, insufficient cultivation of ideological and political content, and students' thinking is more rigid. On the other hand, undergraduates' courses are diversified, including compulsory courses and elective courses, which involve culture, military, ideological education sports, etc., realizing diversified cultivation. Compared with high school students, after the stage of higher education, undergraduates have a great improvement in comprehensive quality, humanistic consciousness, social consciousness, and knowledge reserve [1].

1.2 Difference between undergraduate and Graduate Training Schemes

From the point of view of cultivation objectives, undergraduates and postgraduates have obvious differences in foreign language requirements and research ability. Such as foreign language, undergraduates most of the foreign language level only need to reach CET4 or close to CET4 when they graduate, and can simply read some English articles. For postgraduates, their foreign language level needs to reach the CET6 or even higher, and they must have the ability to read foreign magazines in the field of specialization. In addition to this, some schools have certain requirements for postgraduates to write in foreign languages. In terms of scientific research, undergraduates only need to master the basic laws of nature, and there is no requirement for their scientific research level, while postgraduates need to grasp the deep-level reaction mechanism, and are required to have certain scientific research ability and be able to achieve some new results or make strong contributions to the field. In terms of cultivation, undergraduates' cultivation is mostly filler-type, with the teacher teaching the students as the main cultivation method, and with the specialty or class as the basic unit of cultivation, while undergraduates' cultivation is mostly filler-type, with the teacher teaching the students as the main cultivation method. Classes as the basic unit of training, while postgraduates are mainly tutorial systems. At present, domestic postgraduates are mainly single tutor training or double tutors, which is a kind of master and apprentice relationship, mainly through self-study and discussion and other integration of training methods. The same specialty also has the difference. For the credit requirements and curriculum, undergraduates compared to postgraduates graduate credit requirements, more courses, undergraduates need to take a lot of basic courses, while postgraduates need to take a large number of terms of credit requirements and course curriculum, undergraduates have higher credit requirements and more courses than graduate students, who need to take a lot of basic courses during their undergraduates and a lot of specialized courses during their graduate studies. Postgraduates are more demanding than undergraduates in choosing the topic for their dissertations, and they are required to make their dissertations of greater value to society, promote the progress of science and technology, and put forward their new insights in the

corresponding subject areas. On the whole, postgraduates are more active in learning knowledge, more diversified in the field, and more rigorous in the process of comprehensive quality cultivation compared with undergraduates. In short, the cultivation programs of undergraduates and postgraduates are very different [2].

1.3 Differences in Training Scheme between Ordinary Colleges and First-Class Colleges

There are 147 double first-class universities in China, but there are 1,270 undergraduate universities in China, with key colleges and universities accounting for only 11.6%, and ordinary colleges and universities still account for a large proportion of undergraduate education in China. It is of great significance to study the cultivation differences between ordinary colleges and domestic first-class colleges and universities to improve the parenting program of ordinary colleges and universities. Students from "Double First-Class" university are more prominent in their innovative spirit compared to students from ordinary university. Students in ordinary colleges and universities do whatever the teacher says, and listen to whatever the teacher says. And even in classroom communication, students do not take the initiative to ask questions and are not active in answering questions. While key universities in the training of undergraduates will be added in the classroom to cultivate a sense of innovation, the use of new forms of teaching such as flipped classrooms, science, and innovation teaching, etc. Students studying before class, classroom thinking, and teacher discussion of their confusion, practice, or participation in scientific research are very conducive to enhancing the ability of autonomy. In addition, compared with the big competitions held by all colleges and universities, key colleges and universities will also organize different competitions according to their characteristics and college features to improve students' professionalism and ability, such as the undergraduate speech contest, experimental innovation competition, experimental design competition, and creator competition. Students not only improve their professionalism by participating in the competitions but also cultivate their innovative consciousness and enhance their professional ability while participating in the competitions. Key universities have sufficient funds for scientific research and attach great importance to the cultivation of undergraduates' hands-on practical ability, and the requirements for the practical part of the class are as high as the theoretical part, aiming to enhance students' ability to link theory with practice and to master theoretical knowledge while applying it to real life, although some colleges and universities have set up the practical class. Because the teachers do not pay attention to it, the students are tired of practice and the financial problems, and the practical part is not well implemented. Although some colleges and universities offer practical courses because teachers do not pay attention to them, students are tired of practicing and financial problems, the practical links are not well implemented, and students' hands-on ability is weak. It is valuable to learn from the training schemes of key colleges and universities, summarize the experience, and reform and innovate the training schemes of ordinary colleges and universities.

1.4 Differences between Ordinary Universities and International First-Class Undergraduate Training Schemes

As a result of the Enlightenment and the First Industrial Revolution, foreign modern universities have a long history of modern education, such as the famous University of Oxford, and New York University, its level of education and academic level among the best. The undergraduate training scheme of China's ordinary colleges and universities and foreign first-class universities for comparison, drawing on foreign new training concepts is conducive to the success of China's college and university students. Ye Hong has a comprehensive study of Stanford University, Pennsylvania State University, and the Massachusetts Institute of Technology, three world-famous schools of electronic engineering professional training schemes, that the United States colleges and universities to train undergraduates at the same time taking into account the theoretical knowledge of teaching and scientific research ability to cultivate the importance of the humanities and sciences, based on the general education courses and professional courses are the same, that both are equally important. In the cultivation of the spirit of innovation, famous foreign universities also pay considerable attention. Yang Wenbin studied at the University of California at Berkeley stipulates that students should have an understanding of the arts, mathematics, and natural sciences, be able to understand the research process and how to create new knowledge, and have the skills necessary to solve problems and make decisions. The University of Tokyo requires students to have an international perspective along with a keen imagination and insight. Foreign universities also attach great importance to the personalized training of students. The introduction of a tutor system, whereby students choose their tutors according to their interests. In addition, the school does not only offer the usual quality courses but also a wide variety of courses in music, humanities, society, art, and nature. They even organize cross-disciplinary teaching methods to broaden students' knowledge, stimulate them to think across disciplines and guide them out of inertia and barriers to thinking. In the practical aspect, foreign universities also have their special training schemes. Switzerland's "ternary system" training mode will enterprise, school, and training centers organically combined, after the enterprise has more formal training links, students can be well adapted to the work of society, and the school can be a good understanding of the supply and demand for social labor to adjust the training scheme promptly, which is conducive to the students to adapt to the environment and find their interests as soon as possible. Adapt to the environment, find their interests, and choose a good employment direction. In the internship, Wharton and Haas Business School do not take the internship as a necessary practical link. Its teachers have a wealth of real-world experience, through the teacher or the enterprise to conduct research can enhance the students for the knowledge of the practice of understanding. In the way of student learning, compared to domestic colleges and universities, it's mainly inquiry-based teaching. Students can apply for admission to the school research assistants and other positions, and even some of the students entered the tutor's group for scientific research early, weekly scientific research group meetings. Students in the research to learn the knowledge, think about the solution, and cultivate a sense of innovation at the same time also have basic scientific research

literacy.

2. Problems of the Current Undergraduate Training Scheme in General Agricultural and Forestry Universities

2.1 Continuation of High School Training Scheme

The current undergraduate training scheme is rigid and old is the main reason for the low quality of undergraduate training in China. In most undergraduate teaching modes is still the teacher speaks and students listen, students do not think, do not understand the knowledge, and just rigidly receive knowledge. In the assessment method, in addition to internship courses using open report, undergraduate course assessment is still mainly a closed-book examination, students do not listen to lectures in class, the teacher circle key points before the examination, and students only need to memorize the corresponding knowledge points by rote before the examination can be passed. On the surface to improve the pass rate of students the student's professional knowledge, psychological quality, and so on have not been exercised and improved, resulting in a long time the overall quality of students is poor. Colleges and universities train students rigidly by the minimum requirements of the training scheme, a single training of students, resulting in a great difference between ordinary agriculture and forestry undergraduates and undergraduates of first-class colleges and universities [3]. This is the result of the continuation of undergraduate training in high school teaching mode.

2.2 Disconnection of the Follow-Up Training Scheme

The backwardness of the cultivation program leads to the phenomenon of disconnection between the cultivation and subsequent cultivation of local general agricultural and forestry colleges and universities. Students seldom participate in scientific research, only to score qualified as a requirement, have no class time to stay in the dormitory, have no idea of scientific research, most students do not have the basic ability of experimental operation, and professional knowledge is not solid. It is very likely that the scientific research in the thinking of solidification, in postgraduate school, is due to the weak receptive ability. It is difficult to adapt to the content of the subject matter of the study group, and lack the most basic experimental ability, for the field of drilling is very shallow. It is difficult to use innovative thinking. It is difficult to apply innovative thinking to think about problems. It takes a lot of time to re-cultivate graduate students' learning and scientific research quality, which is not conducive to postgraduates' success. Secondly, this kind of training scheme has a great lag in adapting to society. At present, we are in the era of rapid social progress, knowledge and skills are constantly updating and progressing, but the quality and ability of students can not be well matched with their social needs. Take the accounting profession as an example, students graduate into the accounting position, required to be familiar with the rules of accounting bookkeeping, but the solidified cultivation program of colleges and universities led to the students' weak basic knowledge, not clear the basic bookkeeping links, the emergence of enterprises do not dare to recruit graduates, can not be recruited to have the ability and the department needs to match the graduates and other issues. Further triggering a chain reaction, student employment is more difficult. Furthermore, some engineering positions, such as wind energy and biomass utilization enterprises, need to recruit appropriate engineers, but the undergraduate study is not enough to be qualified for the position, the students have not done the corresponding design, do not know the steps and basic process of design, enterprises need to spend a lot of manpower and financial resources to train their staff. It is difficult for undergraduates to adapt after graduation no matter whether they go to graduate school or work, and the disconnection is serious.

2.3 Passive Knowledge Learning of Undergraduates

Students need to exert their subjective initiative and learn independently when learning, but at present, the teaching in China's general colleges and universities still follows the mode of teacher teaching and student listening, which is a traditional force-feed teaching method. Subject to the influence of exam-oriented education, students receive knowledge by sitting and waiting for the teacher to teach, this single type of indoctrination leads to students learning completely ignoring the process of their digestion and absorption of knowledge, the curiosity of the students for learning as well as the enthusiasm for learning in such a mode is completely wiped out. Students passively receiving knowledge leads to students not remembering, poor foundation, not memorizing, without thinking about the knowledge that can not be flexibly applied. Subjective initiative is a unique ability that human beings have, which is different from other creatures, and it can change the environment and even transform the world by fully exploring and exerting this ability. Students who exert their subjective initiative in learning can continuously realize their goals, and improve their ability and knowledge reserve in the process of acquiring new knowledge again and again. Students will take the initiative to learn only if they are interested in knowledge, and the efficiency will be higher. Students with subjective initiative are conducive to cultivating students' interest in learning, boosting the development of students' learning potential, and improving students' academic performance while greatly enhancing their comprehensive literacy. Good learning mode should be a two-way teaching, students put forward doubts and thinking, the teacher for the problem to solves the problem, and students in the search for knowledge in the process of active thinking about the problem, put forward doubts and take the initiative to look for knowledge to solve the problem, and the teacher's communication should not be just a teacher one-way delivery of knowledge, but the collision of thinking. In the training, undergraduates must abandon the original concept of exam-oriented education, to develop students' active learning ability, so that students change the original passive acceptance of the concept of knowledge into active learning. Students master the ability of active learning for knowledge faster, more profound understanding of knowledge, learning efficiency will be greatly improved.

3. Reform of Undergraduate Training Scheme in General Agricultural and Forestry Universities

3.1 Strengthen the Weight of Scientific Research in

Undergraduate Training Scheme

General Secretary Xi Jinping said at the General Assembly of Academicians of the two academies, "Knowledge is power, talent is the future. To be at the forefront of the world in scientific and technological innovation, our country must discover talents in the practice of innovation, cultivate talents in innovative activities, gather talents in innovative undertakings, and vigorously cultivate and create innovative scientific and technological talents of a grand scale, reasonable structure, and excellent quality." The participation of undergraduates in innovation training can not only improve the transformation of students from passive learning to active learning, but also improve the scientific and technological innovation ability of students, which fundamentally implements the goal of the national education of moral education, and responds to the national education concept of "Three-Whole Parenting". China's mentorship boom originated at the beginning of the 20th century, Peking University and Zhejiang University took the lead in practicing the role of mentorship in undergraduate teaching, and then the rest of the colleges and universities scrambled to follow suit, and the mentorship implementation mode and the problems existed in the research and discussion. Scientific research is of great significance for undergraduate training. At present, students are discouraged from scientific research by such concepts as scientific research is far away from them or their knowledge reserves are unable to conduct scientific research. As most undergraduate colleges and universities mainly implement the credit system, students aim to achieve the goal of credits, as well as passing grades for the pursuit of knowledge is not an in-depth understanding of scientific research, cutting-edge technology lectures naturally have no interest. Students' learning knowledge is mostly a passive behavior, they lack their active thinking process, and there is no desire to learn, this way of learning will be more and more obvious as time goes by. Students choose scientific research according to their interests, take the initiative to consult the literature, participate in experiments, and think about the experimental phenomena bold innovation, students in scientific research in the active search for knowledge can improve the students' independent learning ability, in-depth understanding of the basics of the accompanying study, skillful, with the ability to solve relevant scientific research problems, after many uses, but also strengthened students for the theory of the basic disciplines of the mastery of the. The student's ability to operate in practice is the most important factor in higher education. The weak practical ability of students is a common problem in higher education, and it is common for students not to know how to use or do the phenomenon of practical teaching. Studies have shown that society more generally accepts students who repeatedly think about how to solve scientific problems in scientific research because they have excellent hands-on skills. The essence of including scientific research in undergraduate research is to enhance students' practical application ability. Therefore, it is necessary to increase the proportion of scientific research in the training process of undergraduate students.

3.2 Strengthen the Proportion of Innovation and Entrepreneurship in Undergraduate Training Scheme

Innovation and Entrepreneurship Training Program for College Students (IETPC) began to be implemented nationwide in 2012, and the state issued a document requiring students to strengthen their practical ability in the process of participating in IETPC and cultivating students to become high-level scientific and technological innovation talents. Innovation and entrepreneurship have extraordinary significance for undergraduate education, and if we want to carry out undergraduate mastering education, we need to increase the strength of innovation and entrepreneurship in undergraduate education [4]. In the era of rapid exchange of information, innovation, and entrepreneurship is the key for everyone to stand out in the fierce market competition. In the process of participating in the IETPC, students form teams on their own, choose their favorite topics and fields, find suitable teachers to guide them and innovate a small invention or a production method through the process of experimentation, research, and practice. A diversified composition of members allows students to find their relevant role positions and take up their tasks while carrying out the project. In some projects, they even need to dock with social enterprises and the government to conduct interviews, inquiries, questionnaires, etc., which effectively exercises students' communication skills and team spirit, and improves students' comprehensive quality. Adding innovation and entrepreneurship content into the training scheme for students is conducive to the integration of teachers' teaching and practice, and helps students to combine learning and practice[5]. By participating in various innovation and entrepreneurship competitions, students' passion for learning is well stimulated, which is conducive to the germination of innovative ideas. The process of students' participation in the IETPC is also the process of practice, in which students continue to find problems and solve them by practicing over and over again. Constantly adjusting their proposals, and gaining the ability to deal with complex problems, thus improving the quality of innovation. Although many schools are holding corresponding innovation and entrepreneurship competitions. There are still problems such as students not knowing about the IETPC, IETPC mentors being homogenized, and team members being disconnected from the team formation. This requires that colleges and universities explore a way to integrate innovation and entrepreneurship into teaching and innovate a complete mentoring method at the beginning of the project, the implementation of the project, and the end of the project [6].

3.3 Strengthen the Proportion of Enterprise Practice in Undergraduate Training Scheme

With the rapid progress of society, enterprises are paying more and more attention to the quality of talents, but at present, higher education institutions emphasize teaching over practice resulting in a mismatch between the quality of talents and the development needs of enterprises, and it is imperative to strengthen university-enterprise cooperation in the cultivation of undergraduates. Enterprises and colleges and universities are the relationship between talent demand and talent supply, and colleges and universities cultivate talents and deliver them to enterprises. Colleges and universities have more educational resources compared to enterprises, and enterprises have more practice opportunities compared to colleges and universities, students need to participate in practice in enterprises for their success. Strengthening enterprise practice promotes professional construction,

improves the quality of talents, and promotes the development of schools. Schools and enterprises through joint construction, provide students with a wealth of practice positions, students through the enterprise practice to guide the needs of society, will be more aware of their shortcomings in learning; schools through the student's enterprise practice feedback can know what kind of talent society needs for the profession, timely adjustment of the training scheme for the community to deliver the talents in line with the needs of the community; and the enterprise through the cooperation with the school can also be the adjustment of the functions and tasks, timely adjustment of the work, update the quality of talent, and promote the development of the school. The enterprise through cooperation with the school can also make adjustments to the functions and tasks, and update the job conditions promptly. Can also create a "corporate title class", such as Henan Pastoral Economics College, its corporate title class, and enterprise docking, to achieve employment zero adaptation, and great savings in human resources costs, tailored for the enterprise delivery of talent. This efficient "order-type training" not only alleviates the problem of teachers with little experience in the enterprise, but also jointly designates the training scheme with the enterprise, improves the practical ability of students, and greatly promotes the development of colleges and universities. Students through enterprise practice teaching, can promote the combination of theory and practice, but also can bring the new technology into the enterprise products, to realize the rapid progress of enterprises and individuals.

3.4 Strengthening the Proportion of Humanistic Ideology and Politics in an Undergraduate Training Scheme

Carrying out education in philosophy and politics, creating high-quality professionals, and cultivating builders and successors of socialism are the inevitable requirements to ensure that our country is invincible in the fierce international competition and realize the great rejuvenation of the Chinese nation. The most important thing in the study of philosophy is to establish correct values and distinguish right from wrong. The study of philosophy is not only to make students understand what society is like but also to understand the determination of the correct scale of social values. The ideological and political problems of college students are not only related to values but also to national security, and even have an important significance for the choice of future leaders of the country. Marxism-Leninism is the basic ideology of the party, and Xi Jinping's new era of social thought with Chinese characteristics is a leap in the Chineseization of Marxism. The study of Xi Jinping's new era of thought can enable students to have a deep understanding of the latest achievements of the party's practice and also enable students to use philosophy to solve the confusion in the economy and life, to achieve the goal of educating people for the party. In addition to bringing Marxist-Leninist thought into undergraduate teaching, it is also extremely important to establish students' patriotic consciousness. The Implementation Outline of Patriotic Education for a New Era was released in 2019, pointing out that students in colleges and universities are the future builders of socialism, and they are in a special period of the establishment of the three outlooks. So patriotic education is conducive to abandoning the negative thoughts of the international community and firming up the patriotic heart of the country. Learning patriotic education in the undergraduate stage is conducive to enhancing students' national pride, and obtaining a sense of achievement and self-satisfaction in the process of learning patriotism. After learning patriotism, students have confidence in the country and are more willing to devote themselves to the great construction of socialism, which is of practical significance to the realization of the Chinese dream. Military thinking also has advantages for the training of undergraduate students. At present, although in the era of peace, our country is still persecuted by foreign evil forces, some European and American hegemonic countries use the Internet to spread bad information, affecting the thinking of college students and even shaking the students' national self-esteem, eroding the thinking of our students. The Internet is a new battlefield in our country, and teaching students military thinking better helps students to identify the truth of information and understand the true face of European and American forces. After receiving military education, students' patriotic fervor is stimulated, and they can establish the overall national security concept, study the international situation, and take the initiative to safeguard our national security.

4. Conclusion

At present, the popular education methods and education concepts in our society are not perfect and scientific enough, and it is very easy to bring about problems such as failure to cultivate talents and burying of talents, which will lead to social problems, economic problems, and even national problems. Along with the improvement of people's education level and the openness of thought. Our society is now in favor of encouraging the cultivation mechanism of master's degrees for undergraduates of general agricultural and forestry colleges and universities, and the cultivation mechanism of master's degrees for undergraduates is not unattainable. It can form a benign cycle through the joint efforts of schools, enterprises, and society. Based on the comparison of undergraduate and high school students, postgraduate training schemes, as well as the comparison of ordinary colleges and universities and international first-class undergraduate training schemes. To find out the shortcomings of the specific solutions provided, mainly from the scientific research, innovation and entrepreneurship, enterprise practice, humanistic ideology, and politics of the four aspects of the development of undergraduate masters of the mechanism of the specific methods and significance of the introduction of the problem to the solution of the problem, the formation of a more complete. The core of the research results has always been to deeply promote the strategy of developing the country through science and education and strengthening the country by talents, to lay a solid foundation for the prosperity and development of the country, the long-term stability of the society and the good life of the people.

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