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Innovation and Reform of Agricultural Specialty Course System in Local Agricultural Colleges and Universities

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Abstract—China attaches great importance development of agriculture. Local agricultural colleges and universities should adapt to the changes of the times, carry out reformation and innovations about the original curriculum system of agricultural specialty according to the characteristics of the times. They should make the orientation and training direction of agricultural specialty clearer, innovate and reform the curriculum system of agricultural specialty by setting clear objectives, increasing teaching content and practical courses. This can not only improve the curriculum structure scientifically and rationally, but also improve the teaching content in an allround way, so that colleges and universities can cultivate highquality agricultural talents in line with the social requirements. By analyzing the current situation and problems in the teaching of agricultural courses in local agricultural colleges and universities in China, this paper explores the specific methods for innovation and reform of agricultural courses in local agricultural colleges and universities.

Keywords—Higher Agricultural College; Agricultural Specialty; Course System; Innovation and Reform

I. INTRODUCTION

Agricultural colleges and universities are a special part of China's colleges and universities. Except for a few agricultural colleges and universities transformed into undergraduate colleges, most of the other agricultural colleges and universities have a fairly long history. With the continuous advancement of the times, the state and society pay more and more attention to the teaching of local agricultural colleges and universities. Local agricultural colleges and universities are also facing many new challenges in the new era. In the past, the teaching system of agricultural specialty courses in local agricultural colleges and universities has been unable to meet the requirements of the present era for the professionals. Therefore, local agricultural colleges and universities in China should keep pace with the times in the teaching mode and system of agricultural courses, innovate and reform them, so as to achieve the goal of training relevant talents in line with social requirements. Innovation and reform of the teaching mode of agricultural specialty courses in local agricultural universities can not only enhance the competitiveness of local agricultural

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universities in the market, enable them to develop steadily for a long time, but also cultivate high-quality talents for the society, so as to meet the needs of society.

II. WHAT IS THE CURRICULUM SYSTEM?

The so-called curriculum system means that different courses of the same major are arranged in the order of categories. It is the overall core of the teaching content and the General Commander of the teaching process. The order of curriculum content determines what kind of knowledge structure is formed in the minds of college students after they are trained to accept knowledge. The curriculum system is a guiding ideology of higher education talents and a specific method and means to achieve the goal of training talents in Colleges and universities. The determination of curriculum system directly determines the purpose of training talents in Colleges and universities and the specific plans and schemes that should be made to achieve this goal.

III. CURRENT TEACHING SITUATION OF AGRICULTURAL SPECIALTY COURSES IN LOCAL AGRICULTURAL COLLEGES AND UNIVERSITIES IN CHINA

At present, there is a great gap between rural and urban areas in the teaching practice of agricultural specialty courses in Local Higher Agricultural Colleges in China. Local agricultural colleges and universities in rural areas can take advantage of the advantages of the countryside to train the students in agriculture-related aspects. Although the daily learning conditions in rural areas are very difficult, it can fully cultivate students' ability to apply theory to practice. In the teaching process of cultivating agricultural specialty courses in local agricultural colleges and universities in cities, due to the lack of corresponding environmental conditions, agricultural students lack practical training. This leads to the phenomenon that many agricultural students are unemployed after graduation because they cannot meet the needs of society. At the same time, whether in rural or urban local agricultural colleges and universities, they are mostly influenced by the traditional education model in the process of teaching Agricultural students. Educators and college administrators lack innovative thinking, which leads to students' learning knowledge is not in line with social needs.

^{1.} Education Teaching Scientific Research Project of Chinese Agricultural Society (PCE1615).

^{2.} The Pilot Project of Education Training Program Reform for Practical and Skilled Outstanding Agricultural and Forestry Talents



IV. PROBLEMS EXISTING IN THE TEACHING OF AGRICULTURAL SPECIALTY COURSES IN LOCAL AGRICULTURAL COLLEGES AND UNIVERSITIES IN CHINA

Local agricultural colleges and universities always put the cultivation of students' innovative spirit in the first place in the process of cultivating corresponding agricultural professionals. Agriculture is a very practical subject. Therefore, besides teaching students the theoretical knowledge of agriculture, the school should also strengthen the cultivation of students' practical ability. With the advancement of the times, China has paid more and more attention to agricultural teaching in recent years. This has prompted some local agricultural universities to carry out corresponding reforms in the teaching process. They put forward the reform teaching path of "attaching importance to foundation and focusing on specialty". However, the local agricultural colleges and universities have been affected by many factors in the process of reforming the teaching of agricultural specialty. They lead to the fact that most local agricultural universities still attach importance to theory and neglect practice in the process of teaching students majoring in agriculture. For example, some local agricultural colleges and universities are more inclined to verifying experiments in the teaching content setting of agricultural specialty. However, they have relatively few teaching contents on innovative experiments; some local agricultural colleges have not introduced advanced technology in the process of training students in practical courses, which has resulted in students' poor integration into society for development; some local agricultural colleges and universities teach agronomy specialty. In the process, too much attention is paid to students' starting scores. This leads to fewer opportunities for students to engage in social production. In addition, although some local agricultural colleges and universities can keep pace with the times and establish off-campus practice bases for students, offcampus practice bases are generally far away from schools. And some enterprises give students very poor treatment, and even cannot meet the needs of students in life. This leads to the low enthusiasm of the students majoring in Agronomy in local agricultural colleges and universities, which directly affects the teaching quality of Agronomy in local agricultural colleges and universities [3].

V. THE METHODS OF REFORMING AND INNOVATING THE CURRICULA SYSTEM OF AGRONOMY SPECIALTY IN LOCAL AGRICULTURAL COLLEGES AND UNIVERSITIES IN CHINA

A. Define the learning goal and orientation of Agronomy Specialty

The core content of teaching reform is to reform the teaching system. The curriculum system of a specialty can directly reflects the orientation and training objectives of the specialty, determine the areas and scope of knowledge students need to master, plan the characteristics of the knowledge structure of the specialty as a whole, and even directly affect whether the specialty meets the needs of social employment. The main goal of agricultural specialty in local agricultural colleges and universities in China is to meet the needs of local agricultural economic development, promote the modernization of agriculture, and serve agriculture, rural areas and farmers.

With the continuous advancement of the times, local agricultural colleges and universities should put forward new training objectives when facing the new situation. This new goal must conform to the development characteristics of the times and meet the needs of the society for talents. For example, cultivate professional theoretical knowledge and practical ability in crop production, crop genetics and breeding, agricultural management and other aspects; cultivate outstanding talents who can carry out research, production, promotion, development, management and service in agriculture and related fields. In the face of the new situation, colleges and universities should pay more attention to the cultivation of students 'basic knowledge and innovative ability. Only in this way can students find problems in time, analyze problems adequately and solve problems by various methods. This is conducive to the cultivation of innovative and practical talents in Colleges and universities [5].

B. Optimizing the curriculum system and content of Agronomy

If local higher agricultural colleges want to innovate in the training objectives of agricultural specialty, they must revolve around the existing curriculum system and structure of agricultural specialty in Colleges and universities to carry out corresponding innovation and reform. Local agricultural colleges and universities must adjust their curriculum system according to the needs of "agriculture, countryside and farmers" and the development of science and technology when they innovate and reform the curriculum system of agricultural specialty. They should make the curriculum system of agricultural specialty more perfect. This is conducive to local agricultural colleges and universities to cultivate talents adapted to social development. For example, in recent years, Wuhan University has adjusted its own curriculum system according to the characteristics of the times. Compared with the previous curriculum system, the new curriculum system reduces the total credit of agricultural specialty from 165 to 160, the basic credit of discipline from 48 to 45.5, the professional course from 42.5 to 37, and the practical course from 32 to 35. In terms of course content, they removed Agricultural Entomology and Plant Pathology, and added General Introduction to Plant Protection and Agricultural Information Technology. At the same time, they also add elective courses for students; students can choose their own knowledge according to their own interests, which is conducive to improving the overall quality of students [6].

C. Continuous updating of teaching contents

With the continuous development of science and technology in our country, agricultural science and technology are also changing with each passing day. In the past, the teaching content of cultivating agricultural professionals formulated by local colleges and universities has been unable to meet the needs of modern students. If we continue to follow the previous teaching model, it will be difficult for students to understand the new agricultural science and technology. This will lead to serious derailment between students and society, and make it difficult for students to find jobs. Therefore, local agricultural colleges and universities should constantly update their own teaching contents according to the development of



agricultural science and technology, and comprehensively promote research-based teaching. What is research-based teaching? Research-based teaching is a kind of teaching mode in which teachers guide students to use creative thinking and combine their knowledge to study and explore on the basis of curriculum content. In this way, we can cultivate students' innovative spirit and ability. For example, one of the main courses in agricultural specialty is crop cultivation. With the renewal and replacement of agricultural products, cultivation techniques are also developing in the direction of mechanization, simplification and informatization. Previous books on the cultivation theory and cultivation techniques have lagged behind the development of society. In order to enable students to have access to the latest knowledge and to be in line with the society, local colleges and universities should constantly update the teaching content, and impart the most advanced knowledge and technology in order to ensure the teaching quality of local agricultural colleges and universities. Only in this way can we cultivate talents in line with social development for the society.

D. Strengthen Practical Teaching

The subject of Agronomy has a strong demand for practicality. Students majoring in agronomy should not only master the theoretical knowledge of agronomy, but also have strong practical ability. They should fully apply theory to the process of practice. With the continuous changes of the times, agricultural professionals should have higher agricultural production capacity and certain management capacity. Nowadays, the society urgently needs such comprehensive and compound talents. In order to occupy a certain competitive advantage in the market, local agricultural colleges and universities must comply with the requirements of the development of the times and vigorously cultivate such comprehensive talents in line with social needs.

E. Improving the Quality of Teachers

Teachers also play an important role in the process of innovation and reform of agricultural courses in local agricultural universities. In the process of teaching and training students, teachers should not only impart theoretical knowledge of agriculture to students, but also give practical guidance on students' practice and employment. Nowadays, colleges and universities should cultivate students' moral, cultural, psychological and professional qualities in an all-round way. Therefore, it puts forward higher requirements for teachers of local agricultural colleges and universities. In order to fundamentally improve the teaching quality of local agricultural colleges and universities, in the process of training teachers, schools should always strengthen the teachers of local agricultural colleges and universities as the principle, and constantly expand the influence of teachers of local agricultural colleges and universities. Only in this way can more students be attracted to learn agricultural knowledge, so as to enable local agricultural colleges and universities to cultivate more complex talents in agriculture in line with social development.

VI. CONCLUSION

Agriculture is one of the traditional majors in agricultural colleges and universities in China. With the continuous development of China's social economy, the state pays more and more attention to agricultural education. Therefore, the educators of agricultural colleges and universities must have a comprehensive understanding of the current teaching situation of agricultural courses in local agricultural colleges and universities in China, as well as some problems in the teaching process. They should work out targeted solutions to these problems. With the continuous development of the times, the society has put forward more requirements for the teaching of agricultural specialty in local agricultural colleges and universities in China. Agriculture is a very practical subject. In the process of innovation and reform of agricultural teaching in local agricultural colleges and universities in China, agricultural colleges and universities should pay more attention to the content of reform and innovation of practical teaching. In today's era, the society not only requires students to grasp the theoretical knowledge of agriculture, but also requires them to have deep attainments in practical ability. In order to adapt to the development of the times, colleges and universities should formulate a scientific curriculum system for agricultural specialty in the light of the development of agricultural science and technology and the latest social requirements for agricultural specialty talents. Only in this way can the agricultural teaching of local higher agricultural colleges form its own school-running characteristics, and cultivate more excellent agricultural talents adapted to social development.

REFERENCES

- [1] Ma Shiying, Li Cundong, Li Yanming, Tao Peijun, Chen Jingtang. Research and Practice on the Benign Interaction Mechanism between Agricultural Education Reform and Subject Construction [J]. Journal of Hebei Agricultural University (Agricultural and Forestry Education Edition), 2004, 6 (2): 30-35.
- [2] Wang Fang. A New Way to Improve Innovation and Entrepreneurship Ability of Agricultural College Students [J]. Laboratory Science, 2011, 14 (1): 1-3.
- [3] Chen Hongtao, Cao Liying, Wu Xidong. Reflections on the Practical Teaching Reform of Agricultural Specialty [J]. Journal of Northeast Agricultural University (Social Science Edition), 2010, 8 (3): 48-50.
- [4] Qi Shaobin, Liu Xun and Tu Naimei. Constructing a new practical teaching system for agricultural specialty [J]. Higher Agricultural Education, 2001, (4): 55-57.
- [5] Yuan Ying. Exploration of Botany Practice Teaching Reform in Plant Production Specialty [J]. Anhui Agricultural Bulletin, 2011, 17 (24): 112-113.
- [6] Cao Minjian, Guo Yuhua, Liu Encai, Chen Zhenwu and Li Jiandong. Reform and Implementation of Practical Teaching of Agriculture Specialty [J]. Higher Agricultural Education, 2004, (2): 66-68.
- [7] Shao Xiaozhong, Du Xinmin. Preliminary study on the construction and development of intramural teaching practice base for agricultural specialty [J]. Agriculture and Technology, 2008, (04): 128-129.
- [8] Zhang Xirong. Problems and reform measures in practical teaching of agricultural specialty [J]. Journal of Yichun University, 2002, (06): 70-73.