

Research on the operational mechanism and connotation construction of teaching team construction of agronomy specialty in colleges and universities

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Abstract: The construction of excellent teaching teams in agricultural colleges and universities is of great significance to the professional development of teachers and the improvement of talent training. With the development of higher education in China, colleges and universities have invested more and more human and material resources in teaching. In order to ensure teaching quality, various colleges and universities have taken the construction of teaching teams as the driving force of teaching reform. Under the new situation, how to further deepen the teaching reform, establish an effective team cooperation mechanism, strengthen the discipline construction and teacher team construction, speed up scientific and technological innovation, and cultivate high-level talents for the country to adapt to the development of modern agriculture still needs in-depth research and exploration. This paper analyzes the team building, operation mechanism and connotation construction of crop science teaching team in a university.

1. Introduction

The quality of personnel training, especially that of agronomy professionals, tends to decline[1]. At the same time, with the change of society and the establishment of market economic system, the status of agronomy specialty is artificially weakened. The environment for the development of agriculture and forestry education in China has undergone profound changes, the service areas have been expanded rapidly, and the requirements of service targets have been increasing[2]. At the same time, however, the importance of higher agricultural education has been neglected, and its position in the national higher education system has continued to decline. There is a serious shortage of high-quality students in agricultural colleges and universities, and the situation of "bottom" students has not been fundamentally changed[3]. The contradiction between school-running conditions and development needs is very prominent, and the cultivation of students' practical ability has been weakened. It is increasingly difficult for graduates to find jobs in agriculture and forestry. The institutional obstacles of higher agricultural and forestry education have not been eliminated. Industry support has been weakened. Agriculture and forestry education itself also has some problems, such as the lag of the renewal of educational ideas, the inadequate implementation of the combination of theory and practice, the inadaptability of discipline and specialty structure, the lack of innovation in talent training mode, the outdated teaching contents and methods, etc[4].

The development of higher education should serve and adapt to the needs of social economy, and cultivate high-skilled talents facing the front line of production, construction, management and service. It must be employment-oriented, speed up specialty construction and promote curriculum reform[5]. The most important means is to strengthen the construction of teaching team. Teaching team in colleges and universities is an important organizational form of teaching work in colleges and universities, and it is also one of the important contents of "quality engineering" construction issued by the State Council, Ministry of Education and Ministry of Finance, which is of great significance. Education shoulders the important mission of training several high-quality

professionals and a large number of top-notch innovative talents. Improving the quality of higher education is not only the need of its own development, but also the need of improving students' employment and entrepreneurial ability, and also the need of building a harmonious socialist society[6]. The implementation of the undergraduate teaching quality and teaching reform project of the Ministry of Education has important historical and practical significance for realizing the comprehensive, coordinated and sustainable development of China's economy and society, and provides an important guarantee for comprehensively improving the teaching quality of higher education[7].

2. Teaching team building

2.1. Teaching team concept

Team is a concept in human resource management, especially in enterprise human resource management. It refers to a community composed of employees and management[8]. The community makes reasonable use of the knowledge, skills, information and other resources owned by each member to work together, solve problems and achieve common goals. Its constituent elements are 5P, as shown in Figure 1. The application of this human resource management theory to the teaching and scientific research management of colleges and universities can lead to such concepts as "teaching team" and "academic team innovation team".

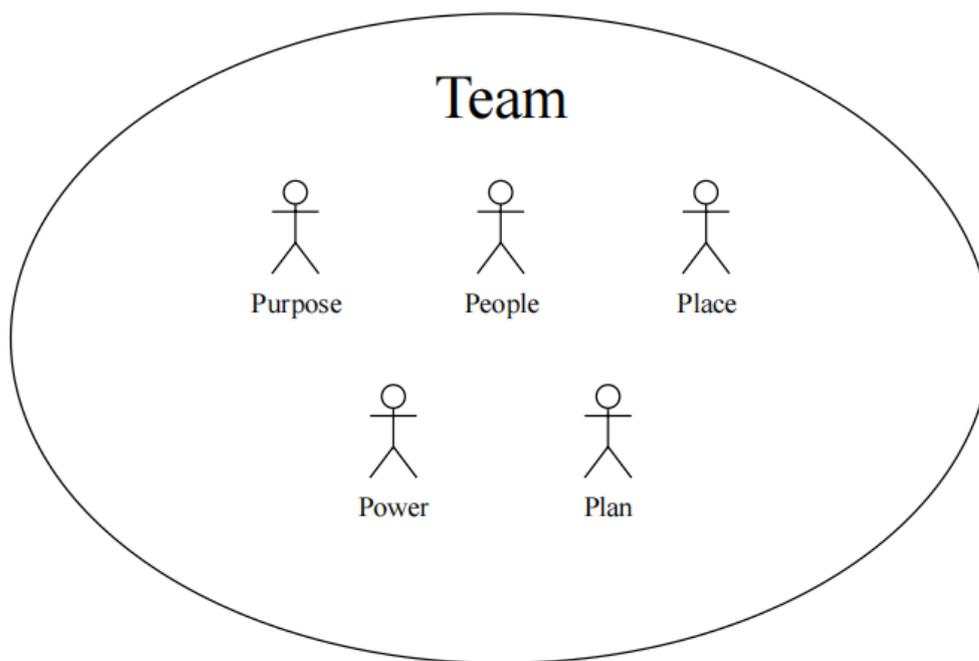


Figure 1 Elements of Teaching Team

2.2. Exploring the mode of constructing teaching team

First of all, the relationship between teaching team building and scientific research team building should be handled well in the process of teaching team building. Scientific research team refers to a group that takes scientific and technological research and development as its content, and is composed of a small number of scientific research personnel who have complementary skills and are willing to take responsibility for common scientific research purposes, objectives and working methods. The research team has a clear research direction and goal. The research direction is the frontier problem of the dominant discipline development which has been accumulated for many years. The goal is to produce scientific research results, integrate academic echelon and cultivate scientific talents. The functions of universities are teaching, scientific research and social service.

Teaching and scientific research are two indispensable parts of the development of colleges and universities[9].

Secondly, deal with the relationship between teaching and scientific research. Teaching team is centered around teaching, but teaching must be combined with scientific research. Only teachers who often conduct scientific research can stand at the forefront of the discipline and constantly update their knowledge and establish new academic viewpoints. Therefore, scientific research is the deep-seated motivation to improve teaching level. An excellent teaching team with sustainable development and competitiveness must be supported by high-level scientific research, so that the teaching team can continue to develop.

Third, the structure of the teaching team. At present, according to the current situation of colleges and universities in our country, generally, a "three-level and six-category" teaching team is constructed. Its structure is shown in Figure 2.

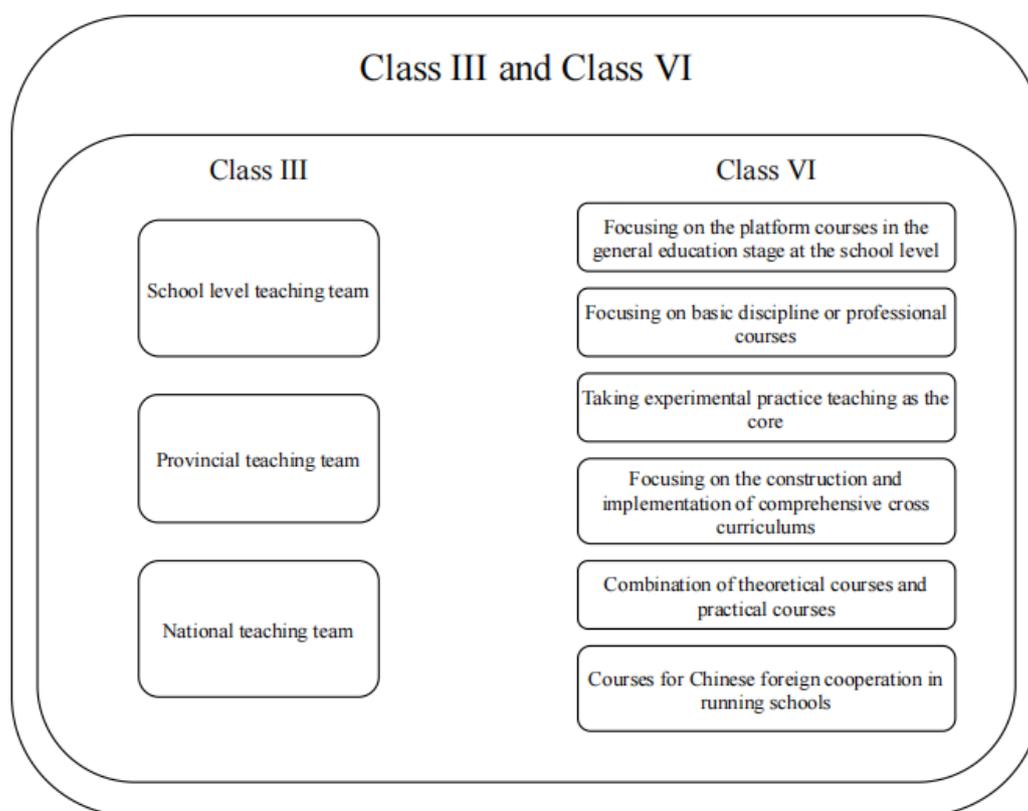


Figure 2 Teaching team structure

Fourth, build a lean team size. The team theory of organizational behavior holds that the secret of a good team lies in thinking small. With the increase of team members, the problems in personnel cooperation are increasing geometrically, the cohesion and mutual trust of the team will decrease, the phenomenon of social inertia will increase, and more and more people will do less and less work. Therefore, when designing an efficient team, managers should try not to exceed people.

Finally, the diversity of personnel composition. The specific personnel structure mainly includes the professional ability structure and age hierarchy, and at the same time, the personality traits of personnel should be considered. A complete teaching team is made up of many people with different personality characteristics. It is considered that the pyramid structure is reasonable. Old, middle-aged and young people are matched with each other, so that young teachers can quickly grow up to adapt to teaching through helping, leading and spreading, and strive to bring a group of young teachers well, unite and unite a group of academic backbones, and build a cohesive and fighting team. This will not only improve the teaching quality, but also improve the overall teaching

staff in colleges and universities.

2.3. Construction content

Through the measures of active training and introduction, we will improve the overall quality and ability of team members, improve the age structure, increase the percentage of doctors and senior professional title members, promote interdisciplinary integration, achieve knowledge and skills complementation, and improve the comprehensive quality and teaching and research level of teaching team members. In terms of the construction of teaching team echelon, build a team of teachers with high professional level, strong innovation ability, and mastering modern education concepts and teaching skills, and strive to build a teaching team with the level of national teaching team through 3-5 years of efforts.

Based on the goal of cultivating high-quality and highly skilled talents, we should re-examine higher education in the cultural perspective and establish special teaching and research projects for educational reform. We should integrate new ideas into teaching reform and textbook construction, and renew teachers' teaching ideas. Carry out teaching reform and educational science research, take team echelon construction as the core, carry out the reform and practice of the teaching content, curriculum system, teaching methods and means of a series of courses such as economics and management majors, and establish the teaching system and teaching mode of a series of economic and management courses that organically combine theoretical teaching, experimental teaching and innovative practice. Actively carry out teaching research, apply for provincial and ministerial education and teaching reform research projects, and obtain a number of teaching achievements. Actively make progress in scientific research, actively declare, undertake national, provincial and ministerial scientific research projects, obtain more scientific research achievements, and timely transform scientific research achievements into teaching.

In terms of personnel training, the teaching team should improve the teaching quality, improve the training program, optimize the curriculum structure, integrate the teaching content, form a perfect curriculum system, strengthen the teaching of basic theoretical knowledge, strengthen the teaching of practical links, and improve the comprehensive quality and practical ability of students. Through the course construction, improve the teaching skills of the teaching team and improve the teaching quality. According to the new educational concept, the teaching objectives should be adjusted as follows: to enable students to master the most basic knowledge and methods; Cultivate students' scientific literacy and thinking quality; Provide tools for students' subsequent learning. The main features of updating the teaching content are to increase application cases, increase intuitive explanations, increase the application of teaching software, delete too many and too complicated proofs and calculations, and reduce the theoretical difficulty.

3. Operation mechanism and connotation construction

The purpose of building a teaching team is to establish a team cooperation mechanism, promote the combination of teaching work, help, and teaching, and improve teachers' quality, teaching ability and teaching level. Cultivate a sustainable teaching team, research and reform teaching content, develop teaching resources, carry out teaching method reforms such as heuristic teaching, discussion teaching and case teaching, and promote teaching seminars and exchange of teaching experience[10].

3.1. Operation management mechanism

The construction goal of the university crop science teaching team is to make the university crop science teaching team have the first-class teachers and school-running conditions of similar majors in China through construction. According to the characteristics of disciplines and the needs of social development, it is necessary to constantly revise and improve the professional talent training plan, speed up the reform and promotion of this major with modern biotechnology, information technology and management technology, strengthen the construction of teaching materials, constantly carry out teaching reform, establish a student-oriented educational concept, and

gradually complete the transformation from teaching research to research major.

The development of the team needs the active participation of every member, and the construction of the team provides a good platform for the development of every member. Only through joint efforts can the team become a vibrant and energetic teaching and research team with proper quantity, excellent quality and reasonable structure, which can meet the needs of educational modernization. Under the leadership of the competent department of the school, a committee of crop science teaching team will be set up to manage the daily affairs of the teaching team, and major affairs will be discussed and decided by all members of the team. Strive for funds for team building from the state and schools, and realize the regular training system for team members. All kinds of ways are used to regularly train team teachers, update their knowledge, improve their comprehensive quality and level, enrich the teaching content, and promote the stability and development of teaching and learning.

3.2. Connotation construction

Teaching team is a type of team, which is a team built around teaching. Due to various reasons, the teaching team has not yet formed a unified concept. The teaching team is a team composed of a small number of individuals with complementary knowledge and skills, who take teaching and educating people as the common vision goal, and make clear the division of labor and cooperation and assume mutual responsibility to achieve a certain teaching goal. The teaching team is a group of teachers who take the main task of improving teaching quality and effect and promoting teaching reform, and assume mutual responsibility to achieve the common goal of teaching reform.

The crop science teaching team of the university is a teaching team with young teachers as the backbone, high academic level and reasonable academic relationship structure. It has developed for many years based on the original crop science discipline of the Agricultural College. The teaching team pays attention to improving the quality of talent training, aiming to cultivate 'application-oriented talents who can behave, learn and work', cultivate new farmers who 'understand agriculture, love the countryside, and love farmers', and become a high-level talent training and scientific research innovation base in South China. Guangdong is located in the East Asian monsoon region, with rich solar and thermal resources and obvious regional characteristics. For a long time, the team has combined the characteristics of large-scale operation and mechanized production in crop high-yield physiology and cultivation research, precision agriculture and information technology, innovation and utilization of crop planting resources, etc. For a long time, the school's crop science teaching team has adhered to the people-oriented talent strategy, taking training and attracting high-level and high-quality academic leaders and young academic backbones as the primary task of team building, and constantly increasing the efforts to attract and stabilize outstanding young and middle-aged talents.

4. Conclusions

Building an excellent teaching team is a long-term project, which requires unremitting efforts and struggle. This research aims at the requirements of the Ministry of Education for the construction of teaching teams, summarizes the development law of the crop science teaching team in a university, studies the connotation and operation mechanism of building a first-class teaching team for agronomy majors in colleges and universities, analyzes the impact of modern science and technology on the construction of traditional agronomy majors and team building, and provides support for the construction and development of crop science teaching teams. The high-level teaching team ensures that the talent training program, teaching content, teaching methods and means, curriculum system and practical teaching links of agronomy are more in line with the needs of the society for talent quality under the new situation. The next construction goal is to have the first-class teaching staff and school running conditions of similar majors in China. According to the needs of social development and agricultural economy, we will constantly revise and improve the professional training program, accelerate the transformation and upgrading of our profession with modern biotechnology, information technology and management technology, strengthen the

construction of teaching materials, constantly carry out teaching reform, establish the student oriented education concept, and gradually complete the transformation from teaching and research oriented to research oriented.

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2) Guangdong Province Graduate Education Innovation Project "Agricultural Informatization Theory and Theory Technology Development" (Guangdong Education Research Letter [2021] No. 2);

3) School-level "Course Ideological and Political" demonstration project "Crop Cultivation Course Ideological and Political Demonstration Course" (Zhong Jiao Zi [2021] No. 10);

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