

# Reform and Practice of Grass-Roots Teaching Organization for First-class Majors Construction

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**Abstract:** Combining the importance of the grass-roots teaching organization in the construction of first-class majors, this paper analyzes the relevant problems in the current grass-roots teaching organization. Taking the actual scene of the cross-integration of multiple computer majors as an example, the reform measures and practical results of the grass-roots teaching organization are discussed.

**Keywords:** First-class Professional; Grassroots Teaching Organization; Reform and Practice

## 1. Introduction

Under the background of increasing emphasis on connotative development and quality improvement in today's higher education, the construction of first-class majors has become an important starting point to promote the reform of higher education and teaching. As the cornerstone of the teaching system of colleges and universities, the reform and innovation of the grassroots teaching organization are directly related to the success or failure of the construction of first-class majors. Therefore, in order to meet the needs of first-class professional construction, deepening the reform of grass-roots teaching organization, optimizing the allocation of teaching resources and improving the quality of education have become the important tasks of current teaching work in colleges and universities. [1-4]

This paper aims to explore the necessity, path and strategy of grassroots teaching organization reform under the background of first-class major construction. We will deeply analyze the existing problems and shortcomings of the current grass-roots teaching organization, and put forward a series of targeted reform measures and suggestions in combination with the goals and requirements

of first-class professional construction. We believe that the implementation of these reform measures will effectively promote the construction and development of grassroots teaching organizations in colleges and universities, and provide a strong guarantee for training more high-quality and innovative talents.

## 2. The Role of Grassroots Teaching Organizations in The Construction of First-Class Specialties

In the construction of first-class major, the role of grass-roots teaching organizations in colleges and universities cannot be ignored. They are not only the basic unit of education and teaching activities, but also the key force to promote education and teaching reform and improve teaching quality.

(1) the core of teaching implementation and management

Grassroots teaching organizations are directly responsible for the implementation of teaching plans, including the formulation of curriculum syllabi, professional training programs, etc., to ensure the orderly conduct of education and teaching activities. As the basic unit of teaching management, they undertake the responsibilities of teaching progress control and teaching quality supervision to ensure that the teaching quality reaches the first-class level.

(2) the teaching organization on the first level is responsible for the construction and development of teachers

The grass-roots teaching organization is the grass-roots unit of the teacher team, which promotes the professional quality and teaching ability of teachers by organizing teacher training, teaching research and other activities. In the construction of first-class majors, grassroots teaching organizations need to have a stable and high-level team of teachers, and improve teachers' teaching enthusiasm and innovation ability through team building and

incentive mechanisms.

(3) Practical promoters of education and teaching reform

Grassroots teaching organizations are an important driving force for teaching reform. They need to pay close attention to the forefront of the development of education and teaching, and actively introduce new teaching concepts, methods and means. By carrying out teaching reform practices, such as promoting online teaching platforms and carrying out interdisciplinary teaching, grassroots teaching organizations provide strong support for the construction of first-class majors.

(4) the important power of student training

Grassroots teaching organizations are the most direct education and training units for students. They are not only responsible for the assignment of teaching tasks, but also bear the important responsibility of coordinating the relationship between teachers and students and promoting the communication between students and teachers. They are responsible for guiding students to establish a correct world outlook, outlook on life and values. Through classroom teaching, practical teaching and student scientific research, grassroots teaching organizations cultivate students' innovative spirit, practical ability and social responsibility, so as to cultivate first-class talents for society.

(5) Improving the quality of education and teaching

Efficient grass-roots teaching organizations pay attention to the professional development of teachers and the improvement of teaching and teaching ability, and constantly improve the teaching level and innovation ability of teachers by organizing teacher training and carrying out teaching and research activities.

At the same time, they also pay attention to the learning effect of students, and continuously improve the learning experience and performance of students by optimizing teaching methods and improving teaching facilities.

### 3. Problems Existing in Grassroots Teaching Organizations in Colleges and Universities

Grassroots teaching organizations play a key role in the construction of first-class majors, but they still face some problems and challenges at present. They can be summarized in the following aspects:

(1) the management and service level is not high

The management and service level of grassroots teaching organizations needs to be improved. There are problems such as uneven distribution of resources and weak academic atmosphere, which have affected the quality and effect of teaching. the lack of a clear construction system and management rules and regulations, and the unclear responsibilities and rights of the two levels of institutions such as schools and colleges, lead to grassroots teaching organizations in a weak position in the organizational structure.

In addition, the rules and regulations of grassroots teaching organizations are absent, and the norms of power and responsibility are chaotic and unclear. Most basic teaching organizations do not have clear working rules and regulations, and even if there are relevant regulations, they are not seriously implemented. This has led to a lack of standardization and effectiveness in the operation of basic teaching organizations.

(2) Unreasonable structure and insufficient training of the teaching staff

Grassroots teaching organizations have problems in the construction of the teacher team, and the unreasonable structure of the teacher team and the insufficient training of teachers have led to uneven teaching and education abilities of teachers. the lack of special training plans and resources for teachers in grassroots teaching organizations can not effectively improve the professional quality and teaching level of teachers.

(3) Lack of innovation in education and teaching methods

Grassroots teaching organizations lack innovation in education and teaching methods, still follow the traditional teaching model, and lack of teaching methods and means to keep pace with the Times. This not only affects students' interest and enthusiasm in learning, but also limits the improvement of education and teaching quality.

(4) Conflict between scientific research and teaching

In the construction of "double first-class" universities, the quality of scientific research has become the goal pursued by universities and teachers, leading to the gradual marginalization of teaching. Colleges and universities devote more of their limited

educational resources to discipline construction and scientific research projects, while grassroots teaching organization construction lacks fixed budget and material support. As a result, the grassroots teaching organizations are less active in their work, and their work is just a formality or even a virtual one. This phenomenon of attaching more importance to scientific research than teaching makes it difficult for grassroots teaching organizations to get enough attention and support, which affects their play in the construction of first-class majors.

#### 4. Grassroots Teaching Organization Reform Measures

At present, our university has five computer majors, including Computer science and technology, information security, data science and Big Data technology, artificial intelligence and software engineering. These majors have common general courses, professional basic courses, and their own courses. In order to better build each major toward the first-class goal, it is necessary to make overall reforms and take precise measures.

##### (1) Formulate relevant rules and regulations

In order to strongly support the construction of first-class majors, relevant management systems such as "construction and management Measures for grassroots teaching organizations", "procedure and decision-making system", "teaching and research activity system", "listening and evaluation system", and "Young teacher mentor system" have been formulated.

The "Measures for the Construction and Management of Grassroots teaching organizations" fundamentally clarify the positioning and responsibilities of grassroots teaching organizations, and standardize the management and operation of grassroots teaching organizations. the "deliberative decision-making system" defines the corresponding deliberative decision-making bodies and personnel, sets the scope of deliberative decision-making, including teaching plans and curriculum Settings, teaching methods and means, teaching quality monitoring, teacher team construction, and formulates deliberative decision-making procedures to ensure the operation of grassroots teaching organizations in colleges and universities. the "teaching and research

activity system" is designed to ensure the orderly development of teaching and research activities, from the aspects of professional construction, curriculum construction, teaching mode reform, textbook construction, laboratory and training room construction, teachers' teaching ability improvement and other relevant plans and requirements. the "Listening and evaluation system" standardizes the specific operation level of teachers' mutual evaluation in listening to lectures to improve their teaching ability, formulates the listening requirements and course evaluation process, and emphasizes the supervision and feedback of course evaluation opinions and the continuous improvement of course teaching ability. the "Young Teacher Tutor system" starts from standardizing the process of teacher guidance, strengthens the rapid integration of young teachers, and provides guarantee for the improvement of teachers' professional construction.

(2) The teaching department responsible for professional construction should be established one-to-one

Establish the entity teaching department, and carry out the professional construction in a targeted way. Based on the existing five majors, the corresponding teaching departments have been re-organized and constructed, namely, the Department of Computer Science and Technology, the Department of Cyberspace Security, the Department of Data Science and Big Data Technology, the Department of Artificial Intelligence and the Department of Software Engineering. In the form of one department corresponding to one major, each department is responsible for the construction and daily operation of the major.

(3) The system of two persons in charge of the professional department is implemented, and the Party and government share the same responsibilities, and the person in charge of the professional construction is clearly defined

The system of well-known professors as honorary heads of majors and young professors as executive heads of majors is implemented in each specialty department. Give full play to the academic authority and reputation of well-known professors to guide the overall situation and direction of professional construction, and use the executive power and efficiency of young and

middle-aged professors to implement relevant measures for professional construction. At the same time, each department will set up a deputy director and teaching secretary, responsible for the daily operation of the department.

#### (4) Reorganizing the teaching staff

According to the needs of first-class professional construction and the teaching and research direction of teachers, the teaching team will be formed. Related courses with close knowledge points will be formed into a cross-disciplinary teaching team, and nearly 100 courses originally distributed in 5 majors will be formed into 22 teaching teams. By setting up the teaching team, the unreasonable structure of teachers in the teaching department can be effectively alleviated, the opportunities for related teachers to communicate and learn can be further improved, and the organic convergence of knowledge points and the mutual complement of the teaching team can be promoted.

#### (5) Establish the incentive mechanism of first-class professional construction

On the one hand, the professional construction fund and the operating funds of the professional department should be set up separately at the level of the first-class professional construction. Second, at the course construction level, a special fund is set up for each course construction team to provide support for course teaching and research activities. the third aspect, set up special awards for high-quality teaching research papers, teaching competition awards, teaching reform achievements, etc., to encourage the majority of teachers to produce more results and produce good results.

### 5. Reform Achievements

Since the reform of grassroots teaching organizations was implemented in 2020, corresponding results have been achieved in professional development, curriculum construction and teachers' abilities. the major of Computer Science and Technology and the major of Information Security have been selected as national first-class majors, and the major of Data science and Big Data Application Technology has been selected as Jiangsu first-class majors. In addition, 3 courses have been selected as national first-class courses. Eighteen national innovative

training programs for college students were approved, two of which were exhibited during the 15th National Annual Meeting. One of them was awarded the outstanding teacher of the Ministry of Education - Huawei "Intelligent Base". One won the Outstanding Youth Fund of Jiangsu Province, one won the first prize in the Teaching Competition of Jiangsu Province, and one was hired as a "Xiangjiang Scholar". 1 achievement was identified as the international advanced level, and won the second prize of China Coal Industry Science and Technology Progress. In 2023, there will be 42 papers of CCF-B class or above, an increase of 40% over the previous year. 1 achievement was identified as the international advanced level, and won the second prize of China Coal Industry Science and Technology Progress.

### 6. Conclusion

Under the background of first-class specialty construction, the construction of grassroots teaching organization faces many challenges and opportunities. Based on the background of the grass-roots teaching organization of computer majors, this paper discusses the reform practice of the grass-roots teaching organization from the aspects of establishing rules and regulations, setting up specialized teaching departments, implementing the two-person system, reorganizing the teaching team, and implementing the multi-level incentive mechanism, etc., so as to provide strong support for the construction of first-class majors. In the future, colleges and universities should continue to strengthen the construction of grassroots teaching organizations, constantly explore new construction models and methods, and promote the sustainable and healthy development of higher education.

### Acknowledgements

This article is supported by educational reform projects in Jiangsu Province and China University of Mining and Technology (2021JSJG017, 2023JSJG178, 2021TS22, 2023ZX47) and Industry and Education Integration Base Project.

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