

# Research on Management and Operation Mechanism of Four-in-one Discipline competition Based on Talent Training

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**Abstract:** In order to improve the level of discipline competition in the college, realize the long-term development of discipline competition and give full play to its role in talent training, the management and operation mechanism of discipline competition in the college were studied. Firstly, this paper analyzed the management and operation mode of the discipline competition in our university, and analyzed the statistical data of students and teachers participating in the discipline competition in the college in the past five years. It summarized the problems existing in the discipline competition in the college, such as the Lack of top-level design and overall Arrangement, teacher responsibility system and lack of standardized management, low enthusiasm of teachers and students and so on. Finally, some reform measures were put forward, such as improving the management mechanism, reward and punishment system of subject competition, establishing a continuous teacher team and realizing the self-management of student associations, in order to realize the continuous improvement and sustainable development of the level of subject competition in our hospital.

**Keywords:** discipline competition; management mechanism; operation Mechanism; talent training

## 1. Introduction

In 2008, the Ministry of Education and Finance jointly promulgated the *Opinions on the implementation of Undergraduate Teaching Quality and Teaching Reform Project in Colleges and Universities*, which clearly required that the national colleges and universities should widely carry out the discipline competition for college students and finance the discipline competition with great influence and wide participation [1]. In recent years, with the joint efforts of administrative departments and universities, the discipline competition activities have developed into different levels at the international level, national level, provincial and ministerial level, and university level. More and more colleges and students participate in the discipline competition [2].

The discipline competition is a series of activities for the majority of college students, which combines theoretical knowledge with practice, integrates practical

teaching resources inside and outside class, takes practical problems in social production and life as the research object, and uses competition mode to enable students to discover, analyze and solve problems through practice, and cultivate students' independent cooperative inquiry ability. The discipline competition is an important carrier to cultivate and improve students' innovative ability and practical ability, which has a special innovative education function that cannot be achieved by conventional teaching, and has a unique irreplaceable role in optimizing the process of talent training and improving the quality of education. As the main position of undergraduate education in local university and secondary colleges, how to take talent training as the goal, improve the management and operation mechanism of discipline competition, improve the level of competition, promote the construction of disciplines and talent training, and form brand characteristics is an important issue in its development [3-8].

## 2. Management Mode of Discipline Competition in Our University

In order to promote the all-round development of students and carry out discipline competition in an all-round way, according to the spirit of *Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Hebei University of Science and Technology* and *Opinions of Hebei University of Science and Technology on Revising Undergraduate Training Program*, our university specially formulated *The Management Method of Undergraduate Discipline Competition in Hebei University of Science and Technology*.

According to the different nature of the host unit, the university divides the discipline competition into three types of competition. The first type of discipline competition is funded or hosted by the Ministry of Education and other State administrative bodies ministries or commissions; The second kind of discipline competition refers to the university students' discipline, science and technology competition which is hosted by the teaching steering committee of various disciplines, interdisciplinary majors of the Ministry of Education or by the Hebei Provincial Department of Education. The third discipline competition is organized by various

societies, associations, industry organizations or regional academic organizations and some provincial administrative bodies. The Department of Education, the Youth League Committee and the College Students' Innovation and Entrepreneurship Center are responsible for the macro management of the college students' discipline competition, and are mainly responsible for formulating the management methods of the discipline competition, raising and supervising the relevant funds for the competition activities.

At the same time, the university implements the "one college, one competition" system, and subsidizes each college to undertake a competition related to itself. The competition host college is responsible for the publicity and specific organization and implementation of the competition, including organizing students to participate, appointing and selecting high-level teachers to guide and train the students, organizing the proposition and evaluation of the university selection contest, providing necessary equipment, materials, venues, creating good soft and hard conditions for students to participate in the competition.

With the continuous holding and development of the discipline competition in our university, most colleges have achieved good results and trained many excellent graduates. However, there are also some problems such as unbalanced development of discipline competition, imperfect overall planning and small participation of students, the problem of discipline competition in our college is more prominent.

### 3. Problems of Discipline competition in Our College

#### 3.1. Lack of Top-level Design and Overall Arrangement

At present, there are lots of discipline competitions. Although the university has issued a series of discipline competition management methods, the overall management and operation mechanism are not perfect, the process control and quality control of discipline competition are not strict, the development of discipline competition mainly depends on secondary colleges. However, there is no overall discipline competition plan and overall arrangement in our college, and there is no obvious distinction between the objectives and priorities of the first, second and third types of competitions. As long as the competition is organized by the superior or the enterprise, teachers and students are organized to participate, resulting in a lot of waste of competition resources. At the same time, the competition effect is often not ideal, especially it is difficult to achieve excellent results in high-level first and second discipline competitions. As can be seen from table 1, students received fewer national awards in the past five years in the first and second discipline competitions, and even the number was zero in some years.

**Table 1.** Statistics of awards in discipline competitions in our college

Year	First and Second competitions		Third competitions
	National awards	Provincial awards	
2016	2	3	61
2017	0	10	69
2018	0	14	37
2019	0	10	50
2020	1	11	37

#### 3.2. Teacher Responsibility System, Lack of Standardized Management

At present, there is no overall discipline competition plan and arrangement in our college, and there is also no standardized management of discipline competition. The discipline competition is generally solely responsible by the teacher. There are many problems in this discipline competition teacher responsibility mode. One is the lack of standardized management, which makes it difficult to ensure the effective development of resource utilization. Many students and teachers participate in the competition passively, and fail to give full play to their subjective initiative, let alone the team cooperation and echelon construction of discipline competition guidance teachers, resulting in the failure of discipline competition to give full play to the role of talent training. Two is to the teachers, they need to complete all the competition independently, including the application of competition venues, competition propaganda, borrowing equipment, buying materials, organizing competition, etc., which takes a lot of time and energy, the teachers are difficult to draw sufficient time and energy to guide students to compete, resulting in competition effect is often not ideal. Third, for students, because there are many competitions, they do not know how to choose, and even some excellent students participate in different discipline competitions held by different teachers at the same time. They are tired of participating, and even excellent students cannot compete with good results.

#### 3.3. Insufficient Attention to Discipline Competition and Low Enthusiasm of Teachers and Students

Students still do not pay enough attention to the discipline competition. Although the discipline competition has been included in the undergraduate training program, the proportion of credits is small and easy to obtain, a certain number of credits can be obtained only by signing up for the competition. Therefore, many students don't pay attention to the discipline competition, just for credit and registration to participate in the competition, don't prepare and participate in training, and don't devote themselves to the competition, so that the role of discipline competition on personnel training is greatly reduced.

The incentive mechanism is not perfect, and the enthusiasm of teachers and students to participate is not high. Whether teachers or students, to participate in the discipline competition is often concentrated in a few

people. The number of teachers and students participating in the discipline competition in our college in the past five years is shown in Table 2. It can be seen from table 2 that the number of teachers and students was small, and the coverage area and popularization rate of the discipline competition were low in the past five years.

**Table 2.** Statistics of teachers and students in discipline competitions in our college

Year	Number of students		Number of competition teachers
	Participating in the competition	Total number of students in college	
2016	78	1564	7
2017	95	1438	10
2018	105	1394	12
2019	160	1411	18
2020	75	1439	15

**4. Construction of “Four-in-One” Discipline Competition Management and Operation Mechanism**

Perfect organizational structure and sound institutional guarantee are important prerequisites for the sustainable and healthy development of discipline competitions. Although the university has issued a series of discipline competition management methods, it is mainly responsible for the overall arrangement of the management department and the identification of the discipline competition. The leadership and implementation of the discipline competition are attributed to the college, and the quality of the discipline competition depends entirely on the college. Therefore, it is necessary for the college to build a scientific discipline competition management mode and play a leading role in order to make the discipline competition fully developed and lay the foundation for talent training.

**4.1. Perfect the Management and Operation Mechanism, Special Person in Charge of Discipline Competition**

The college should set out from its own situation, formulate detailed management measures of discipline competition, build a four-in-one competition management and operation mechanism of “university, college, teachers and students”, so as to ensure that the work of discipline competition has basis and rapid development. At the same time, according to the existing discipline competition projects of our college, we should formulate the annual competition plan and objectives, distinguish different types of competitions, focus on resources to conquer the first and second type of discipline competition, strive to achieve a breakthrough in the key competition, so as to drive other competitions and realize the all-round development of discipline competition.

The discipline competition involves many departments, such as the dean’s office, the Youth League Committee, the student affairs office, the innovation and entrepreneurship center for college students, the college and other departments. In the past, the teacher responsibility system lacked the overall management idea, at the same time, it was restricted by its own authority and ability, so it used to get twice the result.

Discipline competition involves many departments, such as the dean’s office, the League Committee, the student affairs department, the college students’ innovation and entrepreneurship Center, colleges, departments and teaching aids. In the past, the tutor responsibility system lacked the overall management idea, and was subject to its own authority and ability limitations. Therefore, the college should build a strong discipline competition leadership organization, and send special person in charge of discipline competition, do a good job of docking with the various departments of the university, record and apply for information and hardware, software facilities to the university management part, at the same time, do a good job of service for teachers and students, do a good job of competition propaganda, organization and guidance of teacher training and guarantee the operation of the competition, so as to truly realize the propaganda of discipline competition, organization, management and supervision in place.

**4.2. Perfecting Competition Reward and Punishment System**

In order to avoid the impure motivation of students in our college, only for credit registration to participate in discipline competition, negative preparation, not to participate in training or refuse to undertake team tasks, the college should supervise the whole process of discipline competition, control the competition attitude, preparation time, undertaking work and so on. Above all the college should make certain punishment for students withdrawing and negative preparation. The college should give some awards to students who actively participate in competitions and win awards in addition to credits.

At the same time, the college should strengthen the supervision of the whole process of teacher guidance competition, and carry out comprehensive quality control from the aspects of guiding students’ time, guiding students’ attitude, training students’ content and competition results. At the same time, the college should give some workload subsidies to the teachers, gives recognition and reward to the excellent teachers. The assessment results are used as an important indicator of teachers’ work identification and professional title appraisal.

**4.3. Building a Team of Continuous Competition Guidance Teachers**

Each teacher has its own strengths and weaknesses, so strengthening team cooperation and building a high-quality and high-level teacher team are the key to the discipline competition. First of all, we should fully mobilize the enthusiasm of the majority of teachers through publicity and incentive measures, change the situation that only a small number of teachers guide discipline competitions and fight alone in the past, select and cultivate a group of capable and responsible teachers, and encourage teachers to form interdisciplinary combinations. According to each teachers’ strengths, we

should form old and new team guidance teams with different discipline competitions, guide students respectively in their spare time, comprehensively improve the guidance level of competition teams, and give full play to the leading role of professors, the guiding role of young teachers, the main role of students and the cooperative role of teams. At the same time, teachers should implement dynamic management, constantly absorb and arouse the participation of new highly educated young teachers, and constantly add new blood and energy to the discipline competition guidance team.

At the same time, the college should encourage teachers to link discipline competition with teaching and research projects, promote the updating of teaching knowledge, continuously enrich the teaching content, realize the mutual development of teaching and learning, and continuously improve the teaching level and competition level.

#### 4.4. Establishing Associations to Encourage Students' Team Self-management and Realize the Natural Inheritance of Discipline Competition

The teaching workload of teachers in our college is heavy, and it is difficult to take extra time to deal with the daily affairs of the discipline competition after completing the teaching and scientific research. If the power of student groups is used to assist teachers in competition training and management, it can reduce the work of teachers to a certain extent, and it will be twice the result with half the effort.

In addition, by mobilizing the enthusiasm of students, the establishment of the discipline competition association, covering all the discipline competition projects in our college, is responsible for the recruitment, training, selection of students and to assist in open experimental work, so that the discipline competition becomes the daily activities of students, penetrates into students' learning and life, which ensures the continuity and standardization of discipline competition. At the same time, through the discipline competition association, students' self-management and mutual learning are realized. Through teaching students, the old association forms an echelon with new members, and conducts discipline competition training in a planned and systematic way. The old members lead new members, and the old students pass knowledge to the new students. This mode realizes the natural inheritance of discipline competition and avoids the interruption of discipline competition activities and knowledge.

## 5. Conclusion

Discipline competition is an important measure for talent training in colleges and universities, which plays an irreplaceable role in optimizing the process of talent training and improving the quality of education. As the

leader and executor of discipline competition, the college is the link between university, teachers and students. Only by constructing a perfect "university, college, teachers and students" four-in-one discipline competition management and operation mechanism, discipline competition can achieve long-term development, continuously improve the level, and truly play an important role in talent training.

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