

# Research on the Cultivation of College Students' Innovation and Entrepreneurship Ability Based on Subject Competition—Taking Logistics Management as an Example

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**Abstract:** *With the continuous development of the social economy, the competition in different fields is becoming more and more intense, so it will also put forward higher requirements for the cultivation of talents. Vigorously developing subject competitions is not only to cultivate talents who can better connect with the society, but also to effectively enhance students' own innovation ability. It is also of great significance to enhance social vitality and promote national development. This article takes the subject competition as the starting point of the research, through in-depth analysis of the functional effect of the subject competition, the principles and practice of the logistics management innovative talent training model based on the subject competition, and the guarantee mechanism, etc. The cultivation of innovative and entrepreneurial ability of college students has greatly promoted the quality of high-quality logistics management innovation talents, with remarkable results.*

**Keywords:** *Subject Competition, Innovation and Entrepreneurship, Logistics Management*

## 1. Introduction

In October 2021, the General Office of the State Council issued the "Guiding Opinions on Further Supporting College Students' Innovation and Entrepreneurship". This opinion pointed out that to strengthen innovation and entrepreneurship education, focus on the training requirements for innovative and entrepreneurial talents, improve talent training programs, and develop innovation and entrepreneurship courses. The curriculum system, curriculum standards, and curriculum content are aligned with the frontiers of subject development and industry standards to promote the organic integration of professional education and innovation and entrepreneurship education; strengthen the practical training of college students' innovation and entrepreneurship, and in-depth implementation of a series of excellent talent education and training programs to cultivate a large number of innovative and entrepreneurial capabilities. Various types of high-quality professional and technical personnel who are strong and meet the needs of economic and social development[1]. Under the background and opportunities of "mass entrepreneurship and innovation", what kind of philosophy should innovation and entrepreneurship education adhere to, what kind of model should be formed, and what kind of talents should be cultivated, has become an important issue in front of many higher education managers and practitioners problem.

The innovation and entrepreneurship-oriented talent training model based on subject competition can effectively promote the development of innovation and entrepreneurship, help to realize the innovation-driven development strategy, and enhance students' entrepreneurial employability and innovation ability.

## 2. Analysis of functional effects of subject competitions

### 2.1 Stimulate college students' enthusiasm for learning and self-learning ability

Subject competition is an important extension of classroom teaching based on and relying on classroom teaching. The subject competition requires college students not only to have a solid grasp of

professional knowledge, but also to actively expand their professional knowledge in the classroom, and even to learn knowledge other than professional knowledge. In the process of participating in the completion of the subject competition, the potential demand for knowledge in the subject competition and the sense of mission of completing the work prompt the college students to actively learn various knowledge other than professional knowledge [2]. A business plan, in the process of completing the competition, it is required that those in charge of technology should understand the knowledge of marketing, the students in charge of finance should understand the knowledge of technology, and the team leader should know management, marketing, human resource management, technology these requirements stimulate the enthusiasm of college students to learn professional and other knowledge, and cultivate the ability of independent learning.

### ***2.2 Cultivating college students' innovative consciousness and innovation and entrepreneurship ability***

Subject competitions are generally flexible and comprehensive. This requires college students to have a different thinking in solving problems, find another way, and need an innovative spirit. Participating in subject competitions can cultivate college students' innovative awareness and innovative thinking. In addition, through subject competitions, they can train college students' innovative and entrepreneurial skills. During the training process of subject competitions, college students can master various basic skills and form innovative ideas under the guidance of innovative thinking skill. Subject competitions generally require the submission of a design, report, plan or work, etc. In order to stand out from many contestants, it is necessary to create distinctive designs and works. Therefore, subject competitions are to train college students' innovative consciousness for an effective way to enhance innovation and entrepreneurship capabilities.

### ***2.3 Cultivating college students' teamwork awareness and organizational coordination ability***

The vast majority of subject competitions need to be completed in teams, which requires a sense of teamwork among members during the subject competition. At the beginning of the formation of the team, the professional backgrounds, knowledge and personalities of the team members are very different, which requires close communication and continuous coordination. In the process of completing the competition, the team members need to have a clear division of labor and perform their own duties. At the same time, they need to cooperate closely with the team the power of the team completes the transformation from theory to practice, and in the process realizes the cultivation of teamwork awareness and organizational coordination ability.

### ***2.4 It can effectively promote the reform of education and teaching***

The content of the subject competition involves the knowledge points of multiple courses rather than the knowledge points of a single course. The implementation of subject competition can promote a series of reforms in classroom teaching, curriculum system and practical training related to subject competition. By guiding the subject competition, teachers can enrich the content of the subject competition into the classroom teaching, optimize the course content, improve the teaching method, and deepen the teaching concept. The development of projects and competitions can achieve a good situation of promoting education through competition and promoting competition through education.

## **3. Principles of constructing logistics management innovative talent training mode based on subject competition**

### ***3.1 Objectives***

The training goal of logistics management innovative talents based on subject competition is the training of innovative and entrepreneurial talents, and all aspects of the training model must be carried out around this goal.

### ***3.2 Normative***

The normative nature of the training model not only means that teaching, practice, evaluation, supervision and other links have corresponding institutional norms, but also that the entire training

model is normative, can be replicated, can be promoted, and can be adapted to the training of talents in other majors.

### ***3.3 Systematic***

The construction of the logistics management innovative talent training model based on subject competition is a systematic project, and the influence of each link of the training model on the training of innovative talents must be considered from a systematic perspective, and strive to achieve the best.

### ***3.4 Evaluability***

The logistics management innovation talent training mode based on subject competition must be able to assess and evaluate each link, that is, each link should have clear specifications and quality standards, the assessment and evaluation are highly operable, and can achieve the teaching effect of each link of the talent training model to measurable and timely feedback to ensure the quality of talent training.

## **4. Construction and practice of logistics management innovative talent training mode based on subject competition**

### ***4.1 The concept of reform of the training mode of innovative talents in logistics management based on subject competition***

In order to cultivate innovative talents suitable for the needs of the industry, establish a five-in-one teaching reform concept of "learning, training, item, competition, and application", that is, learning as the foundation, training as improvement, item as boost, competition-oriented, and application as the goal [3]. The so-called "use as the goal" means that based on the concept of OBE, the knowledge and abilities that students can learn through the "logistics management" course in the graduation requirements can be applied in their future careers, so as to achieve the goals of the course. The required knowledge, ability and quality goals, and ultimately achieve the goal of training innovative talents[4]. The improvement of ability and quality goals must organically combine knowledge and practice, which depends on practical training. Through practical training, students can deepen their understanding of the knowledge of logistics management courses and improve the practical work ability of logistics management students. Therefore, it is said that "training is to improve". In order to stimulate students' enthusiasm and interest in learning theoretical knowledge and participating in practical training, according to the nature of the course and teaching content, carefully design project-based teaching or competitions, or directly participate in scientific research projects or related discipline competitions, through project-based boosting, competitions the guiding role enables students to learn more purposefully and train in more direction to achieve the goal of use.

### ***4.2 Constructing a fully integrated teaching circle model with subject competition as the core***

Use classroom teaching to impart theoretical knowledge to students, and at the same time integrate the content of scientific research projects and subject competitions according to the content of each course, maintain the advanced nature of the course content, create a high-level course, and stimulate students' enthusiasm for learning and autonomy in learning; at the same time, in the practical training session or classroom teaching, select appropriate content, carefully design and implement project-based or competition-based driving, improve the innovation and interest of the course, and enhance students' innovative awareness and ability to innovate and start a business. Through the innovation of the project and the competitiveness of the subject competition, the students' interest in learning professional knowledge is further stimulated. Therefore, a fully integrated teaching circle model with subject competitions as the core has been formed, and a good teaching ecology has been achieved in which the competitions are used to promote teaching, the integration of competitions in teaching, and the promotion of events through competitions.

### ***4.3 Build an all-round three-level discipline competition system around the core competencies of logistics management***

The core competencies of the logistics management major include the ability to optimize and

manage the logistics operation process, the ability to comprehensively use the professional knowledge of logistics management to solve problems in the logistics field and the ability to deal with unexpected and abnormal situations, the ability to improve and obtain and analyze the dynamic information of the logistics industry, the ability of statistical investigation, communication and teamwork skills, innovation and entrepreneurship skills, etc. Combined with the cultivation of these professional core competencies, a three-level discipline competition system consisting of school competitions, provincial competitions and national competitions has been formed. The first level is the school competition, which is the starting point of the discipline competition, preparing for the provincial or national competition for the students of the whole school. The second level is the provincial competition, which provides a higher-level platform for the players carefully selected in the school competition. The third level is the national competition, which is the highest level of competition. The opponents of this type of competition are outstanding players selected by colleges and universities across the country, which can stimulate students' fighting spirit and passion. The all-round three-level discipline competition system reflects the cultivation of the core skills of the logistics management major. Students are highly motivated to participate and have a wide coverage, which promotes the cultivation of the core capabilities of the logistics management major from different levels.

#### ***4.4 Optimizing the talent training plan, refining the discipline competition and incorporating it into the curriculum system***

According to the orientation of Nanjing University of Finance and Economics, the orientation of personnel training, and the requirements of personnel training specifications for logistics management professionals, in order to strengthen the cultivation of students' innovative spirit and practical ability, promote the all-round development of students' knowledge, ability and quality, improve students' comprehensive quality, and optimize talents training programs, and comprehensive quality development courses have been set up. The purpose of the comprehensive quality development course is to integrate the competitions involved in the subject rankings: the National Market Research Competition, the National University Innovation and Entrepreneurship Challenge, the Internet + Competition, and the National College Student Logistics Design Competition into classroom teaching. Disciplinary knowledge and skills, further expand students' good communication, expression and coordination ability and sense of competition, and at the same time lay a good foundation for discipline competitions and improve innovation awareness and ability[5]. In addition, professional-related competitions are incorporated into the relevant course implementation plans, and teaching arrangements incorporate professional competencies and competition requirements into the curriculum implementation plans. Due to the different forms and requirements of each competition, classroom teaching is no longer available. It is a boring "teacher to teach", flexible and diverse teaching methods improve students' interest, and there is more interaction with teachers and other students in the classroom.

#### ***4.5 Reconstructing the practical teaching system of logistics management major by subject competition***

Actively carry out reform and exploration on the original practical teaching system of logistics management major, implement the "integration of theory and practice" teaching based on subject competitions, use information-based teaching methods, attach importance to the organic combination of theory and practice, and integrate subject competitions into practical training mode, the whole process focuses on training logistics management students in the ability and quality of discovering, analyzing and solving problems, especially good at capturing scientific problems from practical logistics problems, good at using tools to analyze data, good at scheme design and optimization, good at induction summary, etc., so as to reconstruct a practical teaching system for the cultivation of innovative talents in logistics management that fits the project, is competition-oriented and is more systematic[6].

### **5. Guarantee mechanism of logistics management innovation talent training mode based on subject competition**

First, strengthen the standardization and institutionalization of teaching management. Formulate corresponding teaching management rules and regulations, and improve various quality assurance systems and technical specifications. Second, strengthen the construction of teaching staff. Establishing

a first-class teaching team is the premise and foundation of the cultivation of innovative talents. Again, create a culture of competition. Establish a competition platform, set up a student competition organization, hold competition lectures, salons, forums, create an innovative atmosphere, and create a competition culture. Finally, there is a diversified assessment and evaluation mechanism. Reform the assessment and evaluation methods of courses and implement diversified evaluations. Assessment runs through the entire teaching process. Before class, we pass the rain classroom assessment to preview the effect of self-study and self-learning. During the class, we use self-evaluation, student evaluation, group evaluation, teacher and student evaluation, etc. to objectively and comprehensively evaluate the learning activities in the classroom, including discussions, cases, etc. Analysis, answering questions, innovation, etc., after class through teacher's approval, rain classroom inspection and other assessments. It highlights the evaluation of the learning process, pays attention to the central position of the students, and increases the challenge of the assessment.

## 6. Conclusion

The logistics management innovative talent training mode based on subject competition, on the one hand, greatly improves the students' innovation and entrepreneurship ability, at the same time, it also promotes the students' ability to analyze and solve problems, enhance the practical ability, and improve the students' teamwork and cooperation ability consciousness. On the other hand, it promotes the "double-qualification" of professional teachers and improves teachers' awareness of education and teaching reform. In a word, it has greatly promoted the cultivation of high-quality logistics management innovative talents, and achieved remarkable results.

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## References

- [1] Guo F. *Development and Application of College Innovation and Entrepreneurship Cloud Platform Based on Big Data [C]// 2018 International Conference on Virtual Reality and Intelligent Systems (ICVRIS). Jilin Vocational Teachers Coll. Jilin, China, 2018.*
- [2] Niewhner N, Lang N, Asmar L, et al. *Towards an ambidextrous innovation management maturity model [J]. Procedia CIRP, 2021, 100(6):289-294.*
- [3] Keinnen M M, Kairi St O-Mertanen L. *Researching learning environments and students' innovation competences [J]. Education and Training, 2019, 61(1):17-30.*
- [4] Li C, Zhang Q, Yan W, etc. *Research on the cultivation of innovative and entrepreneurial ability of logistics management majors in the "Internet +" era [J]. Prospects of Science and Technology, 2017, 027(014): 348.*
- [5] Guo K M. *The setting of practical curriculum system for logistics management specialty in higher vocational colleges based on ability training [J]. Logistics Engineering and Management, 2017, 39(11): 165-166.*
- [6] Fu R H. *Discussion on the curriculum reform of logistics management major in higher vocational education under the background of innovation and entrepreneurship education [J]. Education and Teaching Forum, 2018, (13): 259-260.*