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# The Role of Discipline Competition in Training Innovative Talents of Logistics Engineering Specialty

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Abstract: Discipline competition plays an important role in the training of innovative talents in logistics engineering. By participating in competitions, students can broaden their knowledge and enhance their problem-solving and innovation skills. The competition provides practical opportunities for students to apply theoretical knowledge to real problems and to develop teamwork and communication skills by working with others to solve problems. The competition also provides the opportunity to engage with industry companies and promote students' understanding of the latest technologies and trends in the industry. In addition, winning the competition is also an honor for students individually and as a team, which helps to enhance employment competitiveness and career development. Therefore, discipline competitions can stimulate students' innovation potential and train them to become logistics engineering professionals with practical ability and innovative thinking.

Keywords: Discipline competition; Logistics engineering; Talent; Cultivate

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The following is a thesis outline on the role of discipline competition in the cultivation of innovative talents in logistics engineering, which is divided into five parts, including introduction, background and related research, application of discipline competition in logistics engineering, influence of competition on the cultivation of innovative talents, conclusion and prospect.

# 1. Introduction

Subject competition plays an important role in higher education, which can not only stimulate students' learning enthusiasm and improve professional skills, but also cultivate students' innovation ability and teamwork spirit. In the logistics engineering profession, discipline competition also has great potential to promote the cultivation of innovative talents. Through the conduct of this study, we will get a deeper understanding of the role of discipline competition in the training of innovative talents in logistics engineering, and provide useful suggestions and references for improving the quality and effect of training innovative talents in logistics engineering.

# 2. Significance and development trend of logistics engineering

Logistics engineering is a subject related to logistics, which covers the knowledge and skills of supply chain management, transportation planning, warehousing management, logistics information systems, etc. In the context of modern economy and globalization, the importance of the logistics industry is becoming increasingly prominent, so the logistics engineering profession is also getting more and more attention. The talents trained in logistics engineering play an important role in logistics enterprises, supply chain management and other fields, responsible for the planning and optimization of logistics networks, improve logistics efficiency and reduce costs.

With the continuous progress and application of science and technology, logistics engineering is also facing a new development trend. The application of digital logistics, intelligent logistics, and Internet of Things technology has continuously promoted the innovation and development of the logistics field, so the logistics engineering major should cultivate talents with innovative thinking and adapt to new technologies. As a way to promote the development of students' innovative ability and teamwork spirit, discipline competition provides strong support for the cultivation of innovative talents in logistics engineering.

Discipline competition has become a widely used teaching method and training mode in higher education. Past studies have shown that discipline competitions can stimulate students' interest and enthusiasm in learning and improve their professional knowledge and skills. Subject competition is not only a test of students' learning results, but also an effective way to promote students' creativity and problem-solving ability.

## 3. Application of discipline competition in logistics engineering

### 3.1 Common logistics engineering competitions

In logistics engineering, there are many types of discipline competitions, the following are some of the common competitions: First, logistics design competition. The competition requires participants to improve logistics efficiency and service quality by planning and designing logistics networks, optimizing logistics processes and information transmission. Second, logistics simulation competition. This kind of competition through the use of logistics simulation software, let the participants simulate the real logistics scene, logistics operation and management decisions, so as to exercise their practical ability and decision-making ability. Third, the supply Chain Management Challenge. This type of competition focuses on the development of practical skills in supply chain management, requiring participants to solve problems and challenges in the supply chain, including supplier selection, inventory management, transportation scheduling, etc., and optimize supply chain efficiency and quality.

## 3.2 Application and significance of competition in logistics engineering

These competitions have important application and significance in the logistics engineering profession. First, they provide a platform to apply theoretical knowledge to practical problems, helping students to understand and master practical skills in logistics engineering. Through the competition, students are able to apply the knowledge gained from classroom learning to practical scenarios and improve their problem-solving and innovation skills. Secondly, these competitions encourage the development of students' teamwork and communication skills, and by working with others to solve problems, students are able to better develop teamwork and project management skills. In the competition, participants need to work closely with team members to effectively work together to solve complex logistics problems. In addition, these competitions provide students with the opportunity to communicate with industry experts and business representatives, so that they can understand the latest development trends and technology applications in the current logistics industry, so as to better adapt to the needs of future jobs.

## 4. The influence of competition on the training of innovative talents

## 4.1 Influence of discipline competition participation on students

First, knowledge expansion. By participating in competitions, contacting and solving practical problems, students can expand their field of professional knowledge and apply the theoretical knowledge learned in practice. Competition projects usually involve areas and practical applications that students have not yet touched. By researching and solving relevant problems, students are able to deepen their learning and broaden their knowledge. Second, improve problem solving ability. The competition usually involves complex problems and challenges, which the participating students need to analyze and solve, thus developing their problem-solving skills and practical abilities. In the process of competition, students need to apply existing knowledge and skills, find ways and strategies to solve problems, and develop the ability to solve practical problems. Third, cultivate innovative thinking. The competition new solutions in practical situations. Students are expected to think and propose novel solutions, explore multiple possibilities for problems, and develop the ability to think independently and creatively. Fourth, teamwork and communication skills. In competitions, students usually have to work with team members to solve problems together. This develops students' teamwork, communication and collaboration skills. Students need to coordinate their roles and tasks, communicate and collaborate effectively, and work together to complete competition tasks. This ability to work in a team is also crucial for future work and career development.

To sum up, the impact of discipline competition participation on students includes knowledge expansion, problem solving ability improvement, innovative thinking training, teamwork and communication skills training and other aspects. These influences contribute to the overall development of students and lay a solid foundation for future career development.

#### 4.2 Influence of discipline competition participation on students' career development

First, we need to enhance employment competitiveness. Competition experience enables students to have a competitive edge in the job market, attract the attention of employers, and demonstrate their ability and performance in practice. Through the competition experience, students can demonstrate their excellent performance in problem solving, innovative thinking, teamwork and communication skills, and improve their competitiveness in the job market. Second, entrepreneurial incentives. By participating in the

competition, students may discover business opportunities in the process of solving practical problems, stimulate their entrepreneurial spirit and sense of innovation, and promote the possibility and opportunity of entrepreneurship. The competition experience can arouse students' interest and passion for entrepreneurship, and cultivate their entrepreneurial spirit of innovation and risk-taking. Third, opportunities for academic research and industry practice. Competition participants are often able to access cutting-edge academic research and industry practices, communicate with professionals, and provide more opportunities and platforms for future academic research or work. Competition experience can deepen students' understanding and application of professional knowledge, but also enable them to understand industry developments, build connections with industry experts, and broaden their career development channels.

To sum up, discipline competition participation has a significant impact on students' career development. Competitive experience can enhance students' employability competitiveness, motivate them towards entrepreneurship, and provide them with opportunities for academic research and industry practice. These influences have played a positive role in promoting students' future career development choices, development paths and opportunities.

## 5. Conclusion and prospect

Discipline competition plays an important role and has far-reaching significance in the training of innovative talents in logistics engineering specialty. By providing practical opportunities, the competition expands students' knowledge and enhances their problem-solving skills and innovative thinking. The competition also encourages students to work in teams and communicate, and to develop their ability to collaborate and organize. In addition, competition participation can enhance students' employability, stimulate entrepreneurial potential, and provide them with opportunities for academic research and industry practice.

Discipline competition has a positive effect on the training of innovative talents in logistics engineering. In the competition, the students expanded their knowledge, improved their problem-solving skills, and developed innovative thinking and teamwork skills. Competition participants also gain certain advantages in terms of career development, including enhanced employment competitiveness, entrepreneurial incentives, and opportunities for academic research and industry practice. However, there are still some limitations in the effect of competition in logistics engineering, such as the comprehensive requirements for students' professional knowledge, the inadequacy of competition design and the operability of evaluation indicators.

In order to further promote the effective application of discipline competition in the training of innovative talents in logistics engineering, the following research directions and suggestions can be taken: First, strengthen the design and evaluation of competition. Design more challenging and practical competition projects that focus on the integrated application of interdisciplinary knowledge and skills, while enhancing the evaluation of entries and presentation of results. Second, promote the integration of discipline competition and curriculum. Combining the competition with the curriculum, through a project-driven learning method, the practical experience of the competition is organically combined with theoretical knowledge to provide a more substantial training of innovative talents. Third, strengthen cooperation between industry and academia. Strengthen cooperation with industry and academia, make full use of their resources and experience, provide more practical questions and support for the competition, and improve the practicality and professionalism of the competition. Fourth, encourage the application of innovative teaching methods. Explore innovative teaching methods and technologies such as virtual LABS, simulation software, and big data analytics to provide richer learning experiences and hands-on opportunities.

To sum up, discipline competition plays an important role in the training of innovative talents in logistics engineering. However, in order to further improve the effectiveness of the competition, it is necessary to strengthen the design and evaluation of the competition, promote the integration of the competition and the curriculum, strengthen the cooperation between industry and academia, and explore innovative teaching methods and technologies. Through these efforts, it can make the training of innovative talents in the discipline competition in the logistics engineering more effective and practical.

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