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# Research on the Sentiments of Innovation and Entrepreneurship Education in Universities—Based on Field Research in Fujian Province Universities

Yilin CAI, Pingru LI, Shuyu CHEN, Ninghan REN, and Aiqing WANG\*

Ningde Normal University

\*Corresponding author. Email: [379632319@qq.com](mailto:379632319@qq.com), <https://orcid.org/0000-0002-5934-7493>

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## Abstract

“Mass entrepreneurship and innovation” is a national strategy of China, aimed at stimulating the innovative potential and entrepreneurial vitality of the entire society to promote economic transformation and upgrading. The introduction of this strategy not only helps to drive economic growth and improve employment rates but also aids in cultivating innovative talents and enhancing national competitiveness. In response, Fujian Province has implemented a series of policy measures to support and encourage university students to actively engage in innovation and entrepreneurship activities. This study focuses on students from five types of institutions within Fujian Province, exploring their awareness of their universities’ emphasis on innovation and entrepreneurship, and the number of related courses they have attended. It assesses the implementation of innovation and entrepreneurship education across different universities in Fujian, identifies existing disparities among various types of institutions, and proposes relevant countermeasures and suggestions to further develop the models of innovation and entrepreneurship education in universities within the province.

**Keywords:** Innovation and entrepreneurship education; Fujian Province; Different types of universities

## Abstract

In the 21st century, innovation and entrepreneurship education has become a significant force driving social progress and economic development. Universities, as essential incubators for future talents, play an increasingly prominent role in innovation and entrepreneurship

education. To better supply society with high-quality university graduates, Fujian Province places great emphasis on cultivating talents in innovation and entrepreneurship. The province actively promotes the innovation-driven development strategy, increases investment in technological research and development, talent cultivation, and supports the development of emerging industries such as "Internet Plus," providing more opportunities and platforms for innovation and entrepreneurship.

Currently, how is the development of innovation and entrepreneurship education in Fujian Province universities? What progress has been made in the focus of innovation and entrepreneurship education systems, curriculum settings, faculty strength, platform creation, etc.? Are there differences between different types of universities? What are the current problems in the innovation and entrepreneurship education system, and what are the directions for future improvement and development strategies? These are issues that need to be understood, examined, and discussed.

This survey aims to deeply analyze whether there are differences in innovation and entrepreneurship education among different types of universities through students' evaluations of their respective universities. The differences among universities will be reflected upon, and suggestions and strategies for the next step in university innovation and entrepreneurship education will be proposed.

## **1. Research Methods**

### **1.1 Survey Subjects and Methods**

This research mainly adopts a questionnaire survey method supplemented by interviews, conducted from April to September 2023. The survey focuses on the implementation of innovation and entrepreneurship education in five types of universities within Fujian Province. Freshmen, sophomores, juniors, and seniors from various universities participated online via mobile and PC. The survey data were descriptively analyzed using SPSS statistical software, and post-survey data processing was qualitatively referenced through visits, discussions, and report summaries.

### **1.2 Research Samples and Sampling Results**

A total of 500 online questionnaires were distributed, and 460 valid questionnaires were recovered, with an effective rate of 92.00%. The survey subjects were students from five types of universities in Fujian Province, covering various majors such as education, technology, engineering, and management. Random sampling was conducted based on the types of universities, with participation ratios of 3:2:2:1.5:1.5 for normal universities, comprehensive universities, science and engineering universities, financial universities, and medical universities, respectively. The basic information of the survey subjects is shown in Table 1.

## **2. Analysis of Survey Results**

### **2.1 Students' Views on the Focus and Advantages of Their Universities' Innovation and Entrepreneurship Education**

In 2015, the General Office of the State Council issued the "Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Higher Education

Institutions" (Guobanfa [2015] No. 36). Universities in Fujian Province actively responded according to the document, establishing their innovation and entrepreneurship education systems based on their own advantages. Students, as the primary targets of innovation and entrepreneurship education, reflected the direction and focus of innovation and entrepreneurship education in Fujian Province through their views on the focus and advantages of their universities. In this section, the research team designed two questions: "What do you think is the focus of your university's innovation and entrepreneurship education?" and "What are the advantages of your university's innovation and entrepreneurship education?" The results showed that the majority of students believed their universities focused on practical ability (76.67%), innovative thinking (71.67%), entrepreneurial spirit (68.33%), innovation and entrepreneurship knowledge (66.67%), and cross-disciplinary integration (45%).

## **2.2 Innovation and Entrepreneurship Course Settings in Universities**

### **2.2.1 Number of General Innovation and Entrepreneurship Courses Taken by Students**

To understand the further educational work of innovation and entrepreneurship in Fujian universities, the research team investigated the number of general innovation and entrepreneurship courses set up by Fujian universities. The survey found that 53.33% of students had only taken one general innovation and entrepreneurship course. Those who had taken two courses accounted for 23.33%, three courses accounted for 8.33%, and four or more courses accounted for 13.33%. Only 1.67% of students had not taken any related courses.

Next, the research team analyzed the differences in the number of general innovation and entrepreneurship courses set up by different types of universities. The analysis revealed that most normal, comprehensive, financial, and medical universities typically set up one to two general innovation and entrepreneurship courses. However, science and engineering universities set up more, with 42.86% of students indicating they had taken four or more related courses, showing that science and engineering universities place greater emphasis on general innovation and entrepreneurship courses compared to other universities.

### **2.2.2 Number of Employment-related Innovation and Entrepreneurship Courses Taken by Students**

Innovation and entrepreneurship education aims to better serve university graduates' employment, increase their employment opportunities, and improve employment rates. Therefore, the research team investigated the number of employment-related innovation and entrepreneurship courses students had taken to reflect the educational work of universities in improving students' employability. The survey showed that 5% of students had not taken any related courses, 55% had taken one course, 10% had taken two courses, 13.33% had taken three courses, and 16.67% had taken four or more courses.

The research team conducted an in-depth analysis of the differences in the number of employment-related innovation and entrepreneurship courses set up by different types of universities. The analysis revealed that most normal, comprehensive, and medical universities typically set up one employment-related course. However, half of the financial universities typically set up three related courses, and more than half of the science and engineering

universities set up four or more, indicating that financial and science and engineering universities place greater emphasis on employment-related innovation and entrepreneurship courses compared to other universities.

### **2.3 Students' Feedback on Innovation and Entrepreneurship Education in Universities**

Students' feedback on their universities' innovation and entrepreneurship education most accurately reflects the current educational outcomes. To understand these outcomes, the research team surveyed students with questions like "What impact do innovation and entrepreneurship courses have on your innovation and entrepreneurship quality?" The results showed that 35% of students felt the courses moderately improved their quality, 26.67% felt a slight improvement, 23.33% felt a significant improvement, 8.33% felt a very significant improvement, and 6.67% felt no improvement.

To further understand whether there are differences in students' innovation and entrepreneurship quality among different types of universities, the research team conducted a detailed analysis of the collected data. The analysis revealed that 42.86% of students from science and engineering universities felt that their innovation and entrepreneurship courses significantly improved their quality. However, most students from normal, comprehensive, and medical universities felt the courses only moderately improved their quality. Meanwhile, most students from financial universities felt the courses slightly improved their quality.

### **2.4 Future Environment's Impact on Innovation and Entrepreneurship Education Systems**

Government policy orientation and support significantly impact the establishment and development of innovation and entrepreneurship education systems. For example, the government may encourage innovation and entrepreneurship through financial support, tax incentives, loan guarantees, and other policy measures, directly affecting the implementation and effectiveness of innovation and entrepreneurship education systems.

Economic prosperity, market demand, industrial structure, and other factors also influence the demand and supply of innovation and entrepreneurship education. For example, in times of economic prosperity, increased market demand and a higher number of enterprises lead to a greater need for innovation and entrepreneurship talents, thereby driving the development of innovation and entrepreneurship education.

Social acceptance and encouragement of innovation and entrepreneurship also influence the development of innovation and entrepreneurship education. If the cultural environment is open and accepting of innovation and entrepreneurship, it will facilitate the promotion and implementation of innovation and entrepreneurship education.

Technological innovation, as a driving force for social progress, also significantly impacts innovation and entrepreneurship education. New technological trends and developments provide new opportunities and challenges, requiring continuous updates to the teaching content and methods of innovation and entrepreneurship education systems.

Lastly, changes in the international political and economic landscape, international trade environment, technological exchanges, and other international factors also affect innovation and entrepreneurship education. For example, globalization and increased international

trade necessitate innovation and entrepreneurship education to focus more on cross-cultural communication and cooperation skills.

In summary, the future environment's impact on innovation and entrepreneurship education systems is diverse and complex. To cope with these impacts, innovation and entrepreneurship education systems need to remain sensitive and adaptable, closely monitoring changes in policies, economy, culture, technology, and international environment, and timely adjusting and improving the education system to cultivate talents that meet future development needs. Additionally, the government and society need to jointly support and promote the development of innovation and entrepreneurship education, creating a favorable environment and conditions.

### **3. Strategies and Recommendations**

#### ***3.1 Universities Should Adjust the Focus of Innovation and Entrepreneurship Education Based on Their Advantages***

The research found that Fujian universities primarily focus on cultivating students' practical abilities and talent. However, the integration of their educational focus with their advantages is not high. Universities should adjust their focus based on their strengths and educational philosophies, forming unique innovation and entrepreneurship education models.

#### ***3.2 Promote the Integration of Innovation and Entrepreneurship Education with Professional and Employment Education***

Innovation and entrepreneurship education directly serves university graduates' employment. Universities should incorporate innovation and entrepreneurship courses into their curricula, following the Ministry of Education's guidelines, and enhance practice-oriented teaching and collaboration with enterprises.

Universities should emphasize practical teaching through case studies, role-playing, group discussions, and other methods to cultivate students' practical skills. Providing entrepreneurial platforms and resources, strengthening collaboration with enterprises, and offering continuous support in policy interpretation, legal consultation, and financial planning are essential to improving students' innovative thinking and entrepreneurial abilities.

#### ***3.3 Encourage Student Participation through Diverse Innovation and Entrepreneurship Activities***

Diverse activities can stimulate students' innovative thinking and entrepreneurial spirit. Universities should organize various innovation and entrepreneurship activities and offer credits to encourage student participation.

Different types of universities can organize entrepreneurial competitions, creative fairs, and investment meetings, providing students with opportunities to showcase their ideas, engage with consumers, and seek investment. These activities help students reduce trial-and-error costs, improve market positioning, and gain significant support for their entrepreneurial endeavors.

### 3.4 Improve Evaluation Systems to Promote Comprehensive Student Development

The evaluation system should aim to improve students' innovation and entrepreneurship abilities, encompassing theoretical knowledge, practical skills, innovative thinking, and teamwork. Universities should adopt multiple evaluation methods and establish feedback mechanisms.

Additionally, introducing enterprise evaluations for collaborative projects can provide practical insights, making the evaluation system more applicable and targeted. These measures will promote students' comprehensive development and cultivate talents for future socio-economic development.

### 3.5 Development Directions for Improving Innovation and Entrepreneurship Education Systems

Future innovation and entrepreneurship education should emphasize personalized content, interdisciplinary cooperation, practical operation, and international collaboration. Universities should adapt to global trends and cultivate talents with a global perspective and international competitiveness.

Personalized education content and methods should meet different groups' needs, fostering students' innovative thinking and problem-solving abilities. Cross-disciplinary cooperation and comprehensive knowledge systems should be emphasized, ensuring students possess diverse skills to navigate complex innovation and entrepreneurship environments.

Future innovation and entrepreneurship education should also focus on practice and industrialization, transforming educational outcomes into tangible economic and social benefits. Universities should integrate with community development, promoting socio-economic progress and enhancing societal innovation and entrepreneurship awareness.

As globalization progresses, innovation and entrepreneurship education must align with international standards, emphasizing international exchanges and cooperation. Students should develop international communication and cross-cultural skills, adapting to global development trends.

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### Author Biography

Yilin CAI, Female, born in December 2003, from Fengze District, Fujian Province. Undergraduate student at Ningde Normal University. Contact address: No. 1 Xueyuan Road, Dongqiao Development Zone, Jiaocheng District, Ningde City, Fujian Province, Postal Code: 352100, Email: 1911639044@qq.com, <https://orcid.org/0009-0003-2599-1744>.

Pingru LI, Female, born in April 2003, from Quanzhou, Fujian Province. Undergraduate student at Ningde Normal University. Contact address: No. 1 Xueyuan Road, Dongqiao Development Zone, Jiaocheng District, Ningde City, Fujian Province, Postal Code: 352100, Email: 1937003601@qq.com, <https://orcid.org/0009-0002-5771-8403>.

Shuyu CHEN, Female, born in March 2003, from Fu'an, Fujian Province. Undergraduate student at Ningde Normal University. Contact address: No. 1 Xueyuan Road, Dongqiao Development Zone, Jiaocheng District, Ningde City, Fujian Province, Postal Code: 352100, Email: 2195328981@qq.com, <https://orcid.org/0009-0009-6709-8034>.

Ninghan REN, Female, born in August 2003, from Yancheng, Jiangsu Province. Undergraduate student at Ningde Normal University. Contact address: No. 1 Xueyuan Road, Dongqiao Development Zone, Jiaocheng District, Ningde City, Fujian Province, Postal Code: 352100, Email: 3418448632@qq.com, <https://orcid.org/0009-0004-7561-3503>.

Corresponding Author, Aiqing WANG, Female, born in 1969, from Beijing. Professor in the Department of Accounting, School of Economics and Management, Ningde Normal University, and Master's Supervisor at the University of Chinese Academy of Social Sciences. Her main research areas are fiscal management and tax planning. Contact address: School of Economics and Management, Ningde Normal University, Ningde City, Fujian Province, Postal Code: 352100, Email: 379632319@qq.com, <https://orcid.org/0000-0002-5934-7493>.

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