

Synergistic Effects and Optimization Analysis of College Student Entrepreneurship Education

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Abstract

This paper, based on theories related to organizational learning, analyzes the synergistic effects of college student entrepreneurship education and summarizes the findings. On this basis, it proposes policy recommendations for optimizing college student entrepreneurship education in China. These recommendations include coordinating the overall planning of the entrepreneurship education system, improving support policies, shaping and cultivating entrepreneurial awareness among students, strengthening supporting mechanisms, and refining the curriculum design of entrepreneurship education.

Keywords

College student entrepreneurship education
Synergistic effects
Optimization analysis

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1. Introduction

Since the national call for “mass entrepreneurship and innovation,” China has gradually entered an era of entrepreneurship and innovation. The State Council and various ministries have emphasized the importance of promoting entrepreneurship among college graduates and other young people, introducing a series of policy measures. College student entrepreneurship education has also followed suit, aligning with national requirements to strengthen the foundation for entrepreneurship education.

In recent years, innovation and entrepreneurship activities have become a significant engine for China’s economic development, making the choices of college students regarding entrepreneurship increasingly important. Notably, college student entrepreneurship education, as a crucial means of advancing higher

education reform, plays a vital role in fostering student entrepreneurship. Therefore, this paper, from the perspective of college student entrepreneurship education and based on organizational learning theories, analyzes the synergistic effects of entrepreneurship education, summarizes the findings, and proposes policy recommendations for optimizing college student entrepreneurship education in China.

Domestic research on this topic primarily focuses on the entrepreneurship education system, implementation pathways, practical outcomes, and the enhancement of entrepreneurial and innovative capabilities among college students.

Cui Jun (2017), based on the specific circumstances of college student entrepreneurship education, pointed out areas for improvement in the entrepreneurship

education system, such as the need for a more effective quality evaluation system and better implementation mechanisms^[1]. He also proposed specific solutions and measures. Yue Zhiqiang (2015) highlighted the diverse, practical, and comprehensive nature of entrepreneurship education, emphasizing its importance in cultivating students' entrepreneurial abilities. He stressed the need to integrate entrepreneurship education with professional courses and related disciplines, focusing on practical requirements to foster comprehensive entrepreneurial talent.^[2]

2. Analysis of College Student Entrepreneurship Education Process Based on Organizational Learning

In the college student entrepreneurship education system, knowledge sharing is the core of organizational learning. It involves the sharing of individual and organizational knowledge among members through various means, thereby enhancing students' entrepreneurial capabilities.

Organizational learning and knowledge sharing involve mutual learning, integration, and improvement among members of the entrepreneurship education system. This process combines existing professional skills to form new competitive advantages for entrepreneurial ventures.

Organizational learning and knowledge sharing distinguish between tacit and explicit knowledge, as well as the mutual learning of core entrepreneurial competencies among internal and external entities within the entrepreneurship education system. Based on the differences between tacit and explicit knowledge, Deng Jianping (2019) proposed the SECI model, which includes the externalization, combination, and internalization of knowledge creation^[3].

In the process of organizational learning and knowledge sharing in entrepreneurship education, individuals' tacit knowledge undergoes socialization and externalization to form organizational tacit and explicit knowledge. This process is essentially one of knowledge and capability sharing. Through organizational learning and knowledge sharing, individual knowledge transforms into organizational knowledge, and tacit and explicit knowledge interact dynamically, elevating knowledge

from a lower to a higher level. The flow of tacit knowledge represents the entire knowledge integration process within an enterprise, from acquisition and generation to sharing, innovation, utilization, and mining.

Meng Xiangmin (2015), through analyzing the motivations for knowledge acquisition at various levels, developed the concept of spiral knowledge creation^[4]. Knowledge continuously moves upward within an organization, from the individual level to the group and organizational levels, spiraling upward through knowledge connections. These connections support the sharing of creative potential among college students in the entrepreneurship education system and serve as a key to their knowledge acquisition.

The success of college student entrepreneurship education hinges on creating an environment conducive to knowledge sharing, movement, and expansion. Knowledge connections occur in formal and informal relationships among entities, providing the foundation for transforming individual knowledge into organizational knowledge. With these connections, new knowledge can develop further, becoming the basis for organizational knowledge integration and institutionalization.

3. Analysis of Synergistic Effects in Organizational Learning for College Student Entrepreneurship Education

Knowledge sharing in college student entrepreneurship education is a process of mutual transformation and synergy between explicit and tacit knowledge among various entities within the system, aimed at achieving the entrepreneurial capabilities of target enterprises. The knowledge involved includes explicit knowledge, such as expressible and textual knowledge (e.g., organizational structures and processes), and tacit knowledge, such as cross-organizational coordination, complex knowledge, culture, routines, and attitudes toward innovation.

Knowledge sharing primarily involves the transfer, absorption, integration, and application of knowledge, thereby enhancing the core capabilities of both knowledge providers and recipients. The synergy of internal knowledge sharing within entrepreneurial enterprises integrates internal and external knowledge resources, resulting in an overall organizational learning benefit that

exceeds the sum of its parts.

Based on the above analysis, the synergistic process of knowledge sharing within and outside the college student entrepreneurship education system can be divided into three levels: individual knowledge, organizational knowledge within the system, and communication and synergy between internal and external knowledge.

Knowledge sharing within university student start-ups is a process of mutual transformation and collaboration between explicit and implicit knowledge among individuals and teams in the venture, with the aim of enhancing the entrepreneurial capabilities of the target enterprise.

Knowledge sharing primarily involves the transfer, absorption, integration, and application of knowledge, thereby improving the core competencies of both knowledge providers and recipients. The synergy of knowledge sharing within start-ups integrates internal and external knowledge resources, enabling the overall benefits of organizational learning, utilization, and knowledge creation to exceed the sum of its individual parts.

Based on the above analysis, the synergistic process of knowledge sharing within and outside university student entrepreneurial teams can be divided into three levels.

(1) Synergy of Knowledge Sharing Between University Student Entrepreneurial Teams and External Parties

University student entrepreneurship is an open and complex system. Collaboration between entrepreneurial teams and external parties enhances knowledge exchange and sharing, forming a partnership that influences each other to achieve mutual improvement.

Internal knowledge sharing synergy within entrepreneurial teams serves as the foundation for knowledge sharing synergy. Furthermore, internal team synergy promotes synergy within the enterprise organization. On this basis, the enterprise effectively integrates internal and external knowledge resources through organizational learning, consolidating and developing its core competencies.

(2) Synergy of Internal Knowledge Sharing During the Evolution of University Student Entrepreneurial Teams

It is essential to emphasize the acquisition of tacit knowledge by knowledge subjects at various levels within university student entrepreneurial teams through externalization. After internal learning and integration within the team, this tacit knowledge becomes explicit within the organization, thereby enhancing entrepreneurial capabilities.

(3) Synergy Between Knowledge Sharing and Core Enterprise Competencies

The focus of organizational learning for university student entrepreneurial teams lies in acquiring and creating knowledge. By learning and internalizing the tacit knowledge and skills of target enterprises, teams can elevate their core competencies. Through knowledge sharing, team members learn and absorb tacit knowledge from one another, transforming it into explicit knowledge. Individual knowledge continuously evolves into organizational knowledge, and fragmented knowledge gradually becomes systematic, forming an upward spiral of knowledge.

3.1. Synergy of Knowledge Sharing Within and Outside the College Student Entrepreneurship Education System

College student entrepreneurship education is an open and complex system. Collaboration between the system and external entities enhances knowledge exchange and sharing, forming a partnership that mutually benefits both parties.

Internal knowledge sharing synergy is the foundation of knowledge sharing synergy. It also promotes synergy among entrepreneurial entities within the system. On this basis, enterprises can effectively integrate internal and external knowledge resources through organizational learning, consolidating and developing their core capabilities.

3.2. Synergy of Internal Knowledge Sharing During the Evolution of College Student Entrepreneurship Education

It is essential to emphasize the tacit knowledge acquired by various knowledge entities within the entrepreneurial system through externalization^[5]. Through internal learning and integration, this tacit knowledge becomes explicit within the organization, thereby enhancing entrepreneurial capabilities.

3.3. Synergy Among Organizational Learning, Knowledge Sharing, and College Students' Entrepreneurial Capabilities

The focus of learning for entities in the college student entrepreneurship education system is knowledge acquisition and creation. By learning and internalizing the tacit knowledge and skills of target enterprises, entities can enhance their core capabilities. Through knowledge sharing, the system internalizes and transforms students' tacit knowledge into explicit knowledge, continuously converting individual knowledge into organizational knowledge and fragmented knowledge into systematic knowledge, forming an upward knowledge spiral. Ning Depeng (2020) argued that the core capability of college student entrepreneurship is the cumulative knowledge gained during the entrepreneurial process, particularly the ability to coordinate different production skills and integrate various technologies^[6].

4. Policy Recommendations for Improving College Student Entrepreneurship Education in China

4.1. Coordinate the Overall Planning of the College Student Entrepreneurship Education System

The implementation of the entrepreneurship education system should focus on the essence of education—nurturing students—with the goal of their comprehensive development. Aligning with national regulations and policies, the system should ensure effective entrepreneurship education^[7-8]. Only by planning the overall layout and top-level design of the system can students' awareness of entrepreneurship education be enhanced, its practicality and effectiveness improved, and a favorable environment and complete system be provided to ensure smooth progress.

Universities should shift their focus in entrepreneurship education to emphasize innovative thinking, ideals, beliefs, and value guidance. Integrating ideological and political education into the process can help students develop targeted capabilities while supporting the national innovation-driven development strategy.

4.2. Improve Support Policies for the College Student Entrepreneurship Education System

With increasing national support for entrepreneurship education, policies and funding for college student entrepreneurship have improved, providing a solid foundation for the system. Further efforts should include increasing support and funding to inspire entrepreneurial ideas among students and reduce risks. Additionally, establishing professional resource platforms that consolidate entrepreneurship-related information and policies can better guide students' entrepreneurial activities and enhance their capabilities.

4.3. Shape and Cultivate Entrepreneurial Awareness Among College Students

Entrepreneurship education should focus on fostering students' entrepreneurial awareness, including risk awareness, industry understanding, opportunity identification, market strategy mastery, and overall entrepreneurial spirit. This awareness should align with national industrial policies and industry trends, ensuring the sustained development of entrepreneurship education.

4.4. Strengthen and Improve Supporting Mechanisms for College Student Entrepreneurship Education

Entrepreneurial Culture: Cultivating an entrepreneurial culture can subtly influence students' mindsets, promoting comprehensive development and enhancing their entrepreneurial capabilities.

Patriotism and Core Socialist Values: Entrepreneurship goals should align with national and societal development needs, ensuring that entrepreneurial achievements contribute to society and realize personal value^[9].

Professionalism: Entrepreneurship education should emphasize diligence and dedication, as entrepreneurship is a long-term, systematic endeavor requiring perseverance.

Integrity: Students must uphold integrity, as credibility is foundational for entrepreneurial success. Education should instill honest and trustworthy values through theory and practice.

4.5. Refine Entrepreneurship Education Curriculum and Emphasize Innovative Models

The curriculum should integrate ideological and political

education standards, innovate teaching models, and adapt to societal and national talent needs. Practical education is crucial for bridging theory and reality, testing the feasibility of educational concepts and goals^[10-11].

Encouraging participation in entrepreneurial competitions, lectures, and practical activities can create a conducive environment for entrepreneurship. Building communication platforms and leveraging Industry-University-Research collaborations can provide students with practical opportunities and financial support, such as incubators and government seed funds, to prepare them for real-world entrepreneurial challenges^[12].

5. Summary

This study highlights the importance of synergistic effects in college student entrepreneurship education and

proposes key strategies for its optimization in China. By integrating organizational learning theories, the paper emphasizes systemic coordination, policy improvements, entrepreneurial mindset cultivation, stronger support mechanisms, and enhanced curriculum design. These recommendations aim to align entrepreneurship education with national innovation goals, fostering a more robust ecosystem for student entrepreneurs. Future efforts should focus on implementing these measures to maximize the impact of entrepreneurship education and support China's broader economic and innovative development. **Funding** This paper is one of the achievements of the 2021 Shanghai Educational Science Research Project "Research on the Path and Policy Support for Entrepreneurship Among College Students in Law and Political Science Universities—A Case Study of Shanghai" (Project No. C2021158).

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