

Research on Practical Paths of Cultivating Entrepreneurial and Innovative Ability of College Students

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ABSTRACT

In the context of China's national innovation-driven development strategy in the new era, cultivating entrepreneurial capabilities and innovative spirit among college students – the core force for national development – has become a crucial focus in higher education reform. This initiative not only enhances individual competencies and career competitiveness, but also directly impacts the construction of national innovation systems and the formation of core competitiveness. Currently, universities face multiple challenges in advancing innovation and entrepreneurship education, including conceptual misunderstandings, disconnects between curriculum systems and practical implementation, and underdeveloped support ecosystems. Therefore, systematically exploring diversified practical approaches to foster entrepreneurial and innovative capabilities among college students holds significant theoretical importance and urgent practical necessity for deepening higher education reform, improving talent cultivation quality, and serving socioeconomic development.

KEYWORDS

College student entrepreneurship; Innovation ability; Practice path; Training mode

1 Introduction

As the knowledge economy era advances and global competition evolves, innovation has emerged as the primary driver of development, while entrepreneurship serves as a vital pathway to boost socioeconomic progress and improve livelihoods. College students, as the most dynamic and creative demographic, form the backbone of implementing innovation-driven strategies and advancing mass entrepreneurship and innovation. Universities, as the main battleground for talent cultivation, bear the crucial mission of nurturing high-caliber professionals with innovative thinking, entrepreneurial awareness, and practical capabilities. Against this backdrop, establishing a scientific, systematic, and efficient practical framework for cultivating college students' entrepreneurial and innovative competencies—thereby bridging the critical gap between knowledge acquisition and skill application—has become a pivotal challenge in the connotative development of higher education. This study aims to explore this pressing issue through in-depth analysis.

2 Theoretical connotation and contemporary value of entrepreneurship and innovation cultivation for college students

2.1 The intrinsic connection and core essence of entrepreneurship and innovation cultivation

The cultivation of entrepreneurship and innovation capabilities among college students constitutes an organic whole that is mutually reinforcing. At its core lies systematic educational practices designed to stimulate students' initiative and creativity, fostering qualities such as the courage to explore, the skill to break through barriers, and the resolve to take risks. Innovation capability emphasizes critical, divergent, and unconventional thinking, highlighting the ability to deconstruct and reconstruct existing knowledge, as well as the mental literacy to identify, analyze, and creatively solve problems in new contexts. Entrepreneurial capability, on the other hand, focuses on transforming innovative concepts into practical value through implementation, emphasizing comprehensive execution skills to recognize and seize opportunities in uncertain environments, effectively integrate resources, build team organizations, and adapt to market changes. These two aspects are not merely causally related but rather dialectically unified: Innovation serves as the soul and source of entrepreneurship, providing sustained momentum and competitive advantages; Entrepreneurship acts as the vehicle and test for innovation, bringing creative outcomes to market and realizing their social and economic value. The cultivation of this integrated capability aims to develop students' core competencies for the future, enabling them to adapt to rapidly changing environments and proactively create value.

2.2 Individual development dimension: the cornerstone for enhancing comprehensive competence and

career competitiveness

At the individual development level, cultivating entrepreneurial and innovative capabilities serves as a cornerstone for promoting students' holistic growth and enhancing their long-term career competitiveness. This process effectively guides students to transcend the passive role of traditional knowledge recipients and rigid mental frameworks, transforming them into active knowledge explorers and proactive value creators. Through participation in innovation and entrepreneurship practices, students not only deepen their understanding and application of professional knowledge but also systematically develop core competencies transferable across disciplines, including interdisciplinary thinking, teamwork, communication, project management, and risk response. This comprehensive literacy that transcends single-discipline knowledge significantly enhances students' adaptability and competitiveness in the increasingly complex and dynamic job market. Whether they choose to establish new ventures, drive organizational change (i. e., internal entrepreneurship), or pursue specialized careers, these individuals demonstrate stronger problem-solving abilities and career potential, ultimately achieving higher levels of personal value and career success.

2.3 National and social dimensions: the driving force behind innovation-driven development strategies and the transformation of economic and social systems

In the context of national and social development, cultivating college students' entrepreneurial and innovative capabilities on a large scale and with high quality serves as both the core driving force and essential requirement for implementing innovation-driven development strategies and advancing socioeconomic transformation. Currently, the world is undergoing a critical phase of new technological revolutions and industrial transformations, where competition among nations fundamentally revolves around innovation talent. As high-level professionals nurtured by the state, college students' collective innovative vitality and entrepreneurial effectiveness directly impact the overall efficiency of national innovation systems and the enhancement of core competitiveness. They are not only the main force behind future technological breakthroughs but also creators of emerging industries and pioneers of new economic growth points. Through innovation and entrepreneurship activities, knowledge and technologies can be directly transformed into productive forces, creating new job opportunities, optimizing industrial structures, stimulating social vitality, and injecting sustained momentum into high-quality economic development. Simultaneously, these efforts hold irreplaceable and profound significance in fostering a social culture that values innovation and tolerates failure, thereby establishing strategic advantages for the nation's long-term development.

3 Building an integrated and progressive curriculum system

3.1 Optimizing the design of interdisciplinary course content

A key challenge in cultivating entrepreneurial innovation capabilities among contemporary university students stems from the disconnect between overly specialized academic disciplines and the multidisciplinary knowledge required for innovation. To address this, we must drive cross-disciplinary curriculum restructuring and deep integration, breaking down traditional disciplinary barriers to create innovation-oriented course clusters. Specifically, foundational methodology courses like design thinking, critical thinking, and project management should be universally incorporated into general education modules. Professional education programs should systematically integrate cutting-edge case studies of technological and business model innovations, while establishing interdisciplinary thematic courses such as "Artificial Intelligence and Social Innovation" and "Biotechnology and Commercial Applications". By encouraging cross-departmental and cross-disciplinary course selection, students can transition from a "deep-well" knowledge structure to a "matrix" framework. This approach lays a solid foundation for generating original ideas and solving complex real-world problems, ultimately fostering students' multidisciplinary knowledge and systematic thinking capabilities.

3.2 Promoting the reform of teaching methods and evaluation mechanisms

The innovation of course content must be accompanied by corresponding reforms in teaching methods and evaluation mechanisms to truly revitalize classroom engagement and achieve the transformation from knowledge infusion to competency cultivation. In terms of teaching approaches, we should widely adopt student-centered pedagogical models such as project-based learning, case teaching, flipped classrooms, and simulated training. These methods transform classrooms into practical arenas where students actively explore and collaboratively solve problems, enabling them to develop innovative thinking and teamwork skills through real or simulated task challenges. Regarding evaluation mechanisms, we must decisively move away from single-exam assessments and standard answer-oriented systems. Instead, we should establish a diversified, process-oriented evaluation framework that incorporates project

reports, presentation performances, team contributions, innovative outcomes, and practical journals. Special attention should be given to assessing students' logical reasoning during inquiry processes, problem-solving strategies, and iterative improvement capabilities.

3.3 Enhancing the diversified structure and capacity building of faculty teams

The quality of entrepreneurship and innovation education largely depends on the caliber and composition of faculty teams. Currently, university instructors often face challenges such as homogeneous academic backgrounds and insufficient practical experience. Therefore, it is crucial to build a diversified faculty team combining full-time and part-time members with cross-disciplinary expertise. On one hand, institutions should enhance in-house teachers' practical guidance capabilities through systematic training, academic exchanges, and corporate internships, helping them integrate theoretical knowledge with industry practices. On the other hand, external faculty resources should be actively expanded by establishing an open "Entrepreneurship Mentor Database". Regularly inviting successful entrepreneurs, venture capitalists, industry experts, and technical specialists to serve as guest professors or mentors through specialized lectures, project guidance, and workshops can bring cutting-edge industry trends and practical experience into campuses. Simultaneously, a scientific faculty evaluation and incentive mechanism should be established, incorporating practical teaching outcomes and project guidance effectiveness into faculty assessment systems. This approach will stimulate teachers' enthusiasm and creativity in entrepreneurship and innovation education, ultimately providing students with high-quality guidance that combines theoretical depth with practical breadth.

4 Establishing a multi-level and three-dimensional practical support platform

4.1 Enhancing resource integration and open sharing of in-school practical platforms

Campus resources serve as the most accessible and cost-effective platform for students' initial innovation practices, yet their effectiveness is often constrained by fragmented management and insufficient accessibility. Universities should systematically integrate and upgrade physical/digital resources including laboratories, engineering training centers, makerspaces, and data centers, establishing unified reservation management and open sharing mechanisms to ensure 24/7 accessibility for all students, particularly teams with clear innovation project intentions. Concurrently, institutions should establish regular innovation workshops, creative markets, and prototype development guidance programs, equipped with essential tools, materials, and technical instructors to support students in rapidly advancing concepts to prototype verification stages. Additionally, universities should proactively host academic competitions, innovation challenges, and entrepreneurship contests at various levels, using competitions as practical platforms to validate learning outcomes and stimulate innovation potential. These events should drive curriculum optimization and teaching method improvements, forming a virtuous cycle of "teaching-practice-competition-feedback" that enhances educational engagement.

4.2 Deepening the integration of industry and education and the collaborative education mechanism between schools and enterprises

The walls of universities cannot isolate students from real-world challenges. The ultimate cultivation of entrepreneurial and innovative capabilities must take place in authentic social and industrial environments. Therefore, we must vigorously expand and deepen industry-education integration, establishing a stable and mutually beneficial long-term mechanism for school-enterprise collaboration in talent development. This includes jointly building high-level off-campus practice bases, joint laboratories, and industrial research institutes with industry leaders, technology parks, and incubators, while co-developing practical courses and teaching programs. We should implement an "industry mentor" system, inviting experienced entrepreneurs, technical experts, and investors to teach in classrooms and guide projects, thereby directly conveying the latest industry trends, technological advancements, and market demands to students.

4.3 Establishing a comprehensive guidance and resource integration system

Cultivating entrepreneurial innovation capabilities requires a continuous evolutionary process, necessitating a full-chain service system that spans awareness cultivation, skill enhancement, project incubation, and resource coordination. Universities should establish dedicated entrepreneurship and innovation guidance centers to provide students with personalized consulting, policy interpretation, and project diagnosis services, creating a guidance framework covering all stages from idea generation to business development. Priority should be given to strengthening resource integration platforms by establishing seed funds and entrepreneurship scholarships to provide early-stage financial support, while

regularly organizing project roadshows and investment matchmaking events to facilitate effective connections between student projects and social capital/industry resources. Simultaneously, building alumni network platforms should be emphasized to leverage the mentorship of successful alumni, offering experience-sharing and resource connections to current students. Intellectual property services must also be enhanced to assist students in protecting their innovations, complemented by tracking feedback mechanisms for sustained long-term support of entrepreneurial projects. This will ultimately establish a virtuous ecosystem that nurtures innovation and supports entrepreneurial endeavors.

5 Conclusion

The cultivation of entrepreneurial and innovative capabilities in college students is a long-term, complex systemic endeavor. It cannot be achieved through isolated courses or sporadic activities, but requires a profound supply-side structural reform within the higher education system. Universities must fundamentally update their educational philosophies by establishing entrepreneurial and innovative literacy as a core objective in talent development. This should be implemented through a four-pronged collaborative training system integrating "curriculum, practice, platform, and culture." Future explorations should emphasize holistic systems, diversified pathways, and scientific evaluation. Continuous efforts should focus on deepening curriculum reforms, enhancing practical platform development, optimizing resource allocation between campus and external sectors, and actively fostering a campus culture that embraces risk-taking, celebrates innovation, and tolerates failure.

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References

- [1] Zijun B .Research on the Cultivation of College Students' Innovative and Entrepreneurial Ability Based on Internet[J]. International Journal of Web-Based Learning and Teaching Technologies (IJWLTT),2025,20(1):1-19.
- [2] Feng X .Effective Integration of Cultivation of Innovative and Entrepreneurial Ability of College Students and Civic and Political Education Resources in the Internet+ Era[J]. Applied Mathematics and Nonlinear Sciences,2025,10(1).
- [3] Chen R , Qun W .Research on the cultivation of college students' innovative ability by industry-teaching integration model based on personalized education[J]. ITM Web of Conferences,2025,7701032-01032.
- [4] Shi H . Research on the Influence of Campus Culture on the Cultivation of College Students' Innovative Ability[J]. Literature and Art Development and Innovation,2024,1(10).