Industrial Engineering and Innovation Management (2025)
Clausius Scientific Press, Canada

DOI: 10.23977/ieim.2025.080105
ISSN 2522-6924 Vol. 8 Num. 1

Innovation and Entrepreneurship Pathways for Application-Oriented Private University Students in the Internet+ Era: Challenges and Strategies

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Keywords: Application-Oriented Private Universities; Internet plus; Innovation and entrepreneurship; Development Path

Abstract: In the "Internet Plus" era, applied private universities face both opportunities and challenges in fostering student innovation and entrepreneurship. This study analyzes the current state and identifies challenges such as gaps in education systems, teaching staff, and platform construction. Despite some achievements, significant shortcomings hinder progress. To address these issues, the paper proposes a multi-dimensional approach, including reforming education systems, optimizing curricula, enhancing faculty capabilities, improving incubation platforms, and strengthening school-enterprise collaboration. It emphasizes building a robust support system and fostering an entrepreneurial culture to create a favorable ecosystem. By improving policy support and encouraging government-university-enterprise collaboration, applied private universities can cultivate entrepreneurial talents with innovative and practical abilities, driving the high-quality development of innovation and entrepreneurship education. This framework aims to empower students and elevate their contributions in the rapidly evolving "Internet Plus" landscape.

1. Introduction

Under the background of "Internet+" era, innovation and entrepreneurship education has become an important part of talent cultivation in applied private colleges and universities. [1] This study focuses on the current situation of the development of innovation and entrepreneurship education in applied private colleges and universities, analyses the existing problems, and puts forward corresponding solution strategies, aiming to provide reference for improving the quality of innovation and entrepreneurship education.

2. The Internet+ Era: Landscape Analysis

2.1 Emerging Opportunities in the Digital Age

The "Internet Plus" era has created unprecedented opportunities for innovation and entrepreneurship among students in application-oriented private universities. [2]The open Internet ecosystem offers abundant learning resources and technical support, enabling students to continuously upgrade their skills through online education platforms, technical communities, and professional forums. Furthermore, the policy environment supporting Internet-driven innovation has steadily improved, with various entrepreneurial support programs and incubators providing comprehensive guarantees. Emerging technologies such as big data, cloud computing, and artificial intelligence have further expanded the scope of innovation and entrepreneurship, offering boundless opportunities.

2.2 Contemporary Challenges and Barriers

Despite these advantages, students face numerous challenges in entrepreneurial practice. Intense market competition often leads to project homogenization, making it difficult to stand out among established enterprises. [5] Additionally, team instability and talent attrition significantly hinder the long-term development of projects, contributing to the high failure rate of student-led entrepreneurial ventures[7].

3. Current State of Innovation and Entrepreneurship Education

3.1 Key Characteristics and Major Achievements

Application-oriented private universities have experienced a surge in innovation and entrepreneurship activities, creating a vibrant campus atmosphere. [12]Universities have established entrepreneurial clubs, innovation studios, and regularly host events such as startup salons and creative markets, attracting significant student participation. Students demonstrate strong entrepreneurial spirit across fields like e-commerce, cultural creativity, and technological innovation[9].

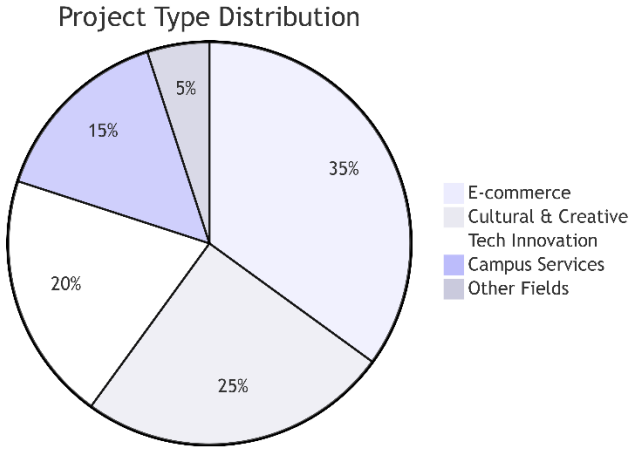

Figure 1: Distribution of Student Innovation and Entrepreneurship Projects in 2024

As shown in Figure 1, student innovation and entrepreneurship projects show a diversified development trend, with e-commerce and cultural and creative projects dominating, reflecting the characteristics of the Internet era.[7] These projects often emphasize practicality and market orientation, and can effectively solve practical problems in the community, demonstrating a pragmatic entrepreneurial attitude[8].

3.2 Development Trends and Future Prospects

In recent years, students have accumulated experience and achieved notable success in entrepreneurial practices. Some projects have reached commercialization and gained footholds in niche markets.

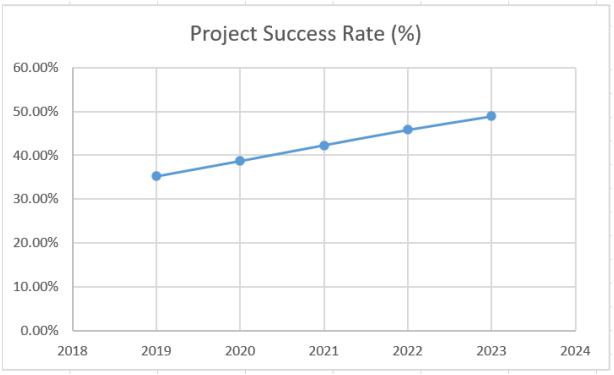

Figure 2: Student Entrepreneurship Project Success Rate (2019-2023)

As shown in Figure 2, the success rate of student entrepreneurial projects has shown a steady upward trend over the past five years, increasing from 15% in 2019 to 28% in 2023.This growing trend reflects the continuous improvement of the innovation and entrepreneurship education system and the strengthening of support.

3.3 Critical Issues and Root Causes

Despite progress, significant challenges remain. Innovation and entrepreneurship education systems are underdeveloped, with curricula often disconnected from practical needs. Many faculty members lack practical entrepreneurial experience, limiting their ability to provide effective mentorship. Existing evaluation and incubation mechanisms require optimization, as current project selection standards are overly simplistic and support is insufficiently targeted. Resource constraints, including limited incubation spaces, specialized equipment, and funding, hinder project development. Weak university-industry connections prevent projects from accessing essential market and industry resources.[9] Furthermore, entrepreneurial teams often struggle with sustainability due to inadequate management experience and high turnover rates. These challenges highlight systemic and collaborative gaps in the support ecosystem for innovation and entrepreneurship.

4. Strategic Framework for Advancing Innovation and Entrepreneurship Education

4.1 Educational System Reform and Curriculum Enhancement

Application-oriented private universities must fundamentally revamp their entrepreneurship curricula to create a seamless blend of theory and practice. This transformation requires implementing a "three-layer" curriculum structure: foundational entrepreneurship theory, specialized industry knowledge, and hands-on practical training. [10]By incorporating extensive case studies and real-world projects, students can master essential skills such as business modeling, financial analysis, and market strategy development. The curriculum should also emphasize cross-disciplinary integration, combining traditional business concepts with emerging technological innovations to prepare students for the complexities of modern entrepreneurship. Additionally, universities should adopt flexible assessment methods that evaluate both theoretical understanding and practical capabilities through project-based assignments and entrepreneurial simulations.

As shown in Figure 3, an integrated "three-in-one" structure should be established for innovation and entrepreneurship education, encompassing curriculum, practice platforms, and support systems. Through practical courses such as entrepreneurial simulation and business sandbox, students can experience the entire process of project selection, team formation, market research, product development, and promotion in real-world scenarios.

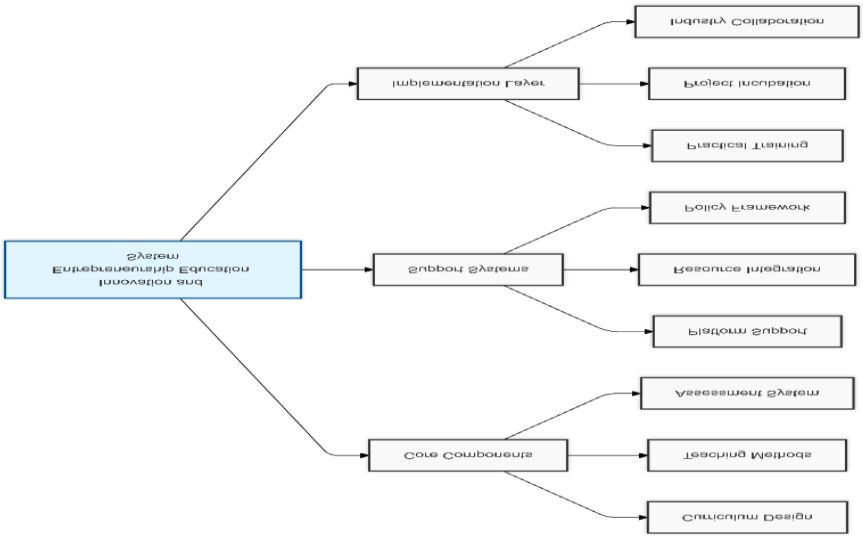

Figure 3: Innovation and Entrepreneurship Education System Framework

4.2 Building Faculty Excellence and Expertise

Developing a high-caliber, dual-role faculty team is essential. Universities should provide systematic training for academic staff, enabling them to acquire entrepreneurial guidance skills through national-level programs and specialized workshops. Practical internships in incubation centers, technology parks, and leading enterprises should be encouraged, offering valuable operational insights and industry connections. Moreover, introducing industry professionals as part-time mentors significantly enhances mentorship quality. For instance, one private university established a comprehensive mentorship network by inviting over 20 local entrepreneurs to form a guidance team, providing personalized, end-

to-end project support that yielded remarkable outcomes in student venture success rates and project commercialization[11].

4.3 Expanding Opportunities Through Platform Development

4.3.1 Entrepreneurial Incubation Centers: Design and Service Framework

Application-oriented private universities should comprehensively enhance the hardware infrastructure and service levels of their entrepreneurship incubation bases, establishing one-stop entrepreneurship service platforms.[4] In terms of infrastructure, dedicated funds should be allocated to renovate and upgrade incubation spaces, including the construction of open office areas, pitch halls, maker labs, and other functional zones.

In terms of service systems, a "space + resources + services" tri-dimensional support model should be established. An entrepreneurship project diagnosis center should be set up, where a team of professional mentors offers full-cycle guidance to the resident projects.

4.3.2 School-Enterprise Collaboration: Models and Implementation Strategies

To deepen the school-enterprise cooperation mechanism and build an innovation and entrepreneurship ecosystem characterized by complementary advantages and resource sharing, project cooperation should serve as the connecting link[3].

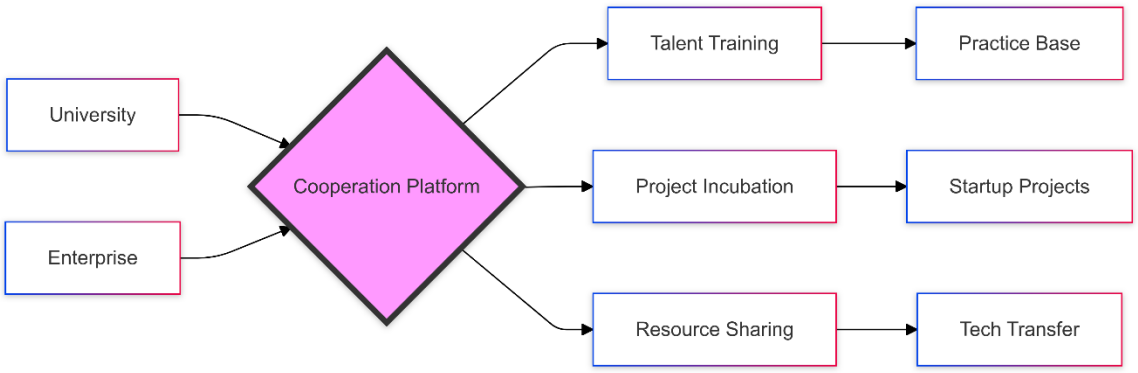

Figure 4: School-Enterprise Cooperation Innovation Ecosystem Operation Mechanism

As shown in Figure 4, university-enterprise cooperation should establish a flexible cooperation mechanism and explore diversified cooperation modes. For example, by adopting the "project crowdsourcing" model, enterprises will outsource their R&D tasks or operational problems to student teams, providing the necessary financial support and technical guidance.

5. Creating a Sustainable Innovation and Entrepreneurship Ecosystem

5.1 Building a Comprehensive Innovation Culture Framework

Application-oriented private institutions must establish a multi-layered cultural framework that integrates innovation into their institutional DNA. This involves creating an "Innovation Observatory" system that regularly monitors and evaluates campus innovation initiatives. Key implementation

strategies include organizing themed innovation weeks, establishing entrepreneurship mentor networks, and developing innovation laboratories where students can experiment with new ideas. Universities should also implement a structured reward system that recognizes both individual and team achievements in innovation, incorporating both monetary and non-monetary incentives such as priority access to resources and networking opportunities[6].

5.2 Developing Resource Support and Infrastructure

The foundation of a robust innovation ecosystem lies in its infrastructure and resource allocation. Universities should establish dedicated innovation centers equipped with state-of-the-art facilities and technological resources. These centers should serve as one-stop shops for entrepreneurial activities, offering services ranging from technical support to market research assistance. Additionally, institutions should create a sustainable funding mechanism that includes seed funding programs, innovation grants, and partnerships with venture capital firms. The infrastructure should also include digital platforms that facilitate collaboration between students, faculty, and industry partners.

5.3 Policy Framework and Governance Mechanisms

A comprehensive policy framework is essential for sustaining innovation initiatives. This framework should encompass three key areas: academic flexibility, resource allocation, and risk management. Universities should implement flexible academic policies that allow students to integrate entrepreneurial activities into their studies through credit recognition systems and entrepreneurship-focused degree programs. The governance structure should include a dedicated innovation and entrepreneurship committee responsible for policy formulation, resource allocation, and program evaluation. Furthermore, institutions should establish clear intellectual property policies that protect student innovations while encouraging commercialization opportunities.

6. Conclusion and Future Directions

The development of innovation and entrepreneurship education in application-oriented private institutions represents a critical pathway for fostering next-generation talent. While significant progress has been made, the journey toward creating truly entrepreneurial universities requires continuous refinement and adaptation. Success depends on the seamless integration of educational resources, policy support, and cultural transformation.

Looking ahead, institutions must focus on strengthening their innovation ecosystems through enhanced industry-academia partnerships, technological integration, and international collaboration. The future of innovation and entrepreneurship education lies in creating sustainable, adaptable systems that can evolve with changing market demands while maintaining their core mission of nurturing innovative talent. This holistic approach will not only benefit individual institutions but also contribute significantly to the broader national innovation strategy and economic development goals.

Acknowledgement

Project Number: 2024JG003:"Exploring Innovation and Entrepreneurship Pathways for Students in Application-Oriented Private Universities in the Context of Transformation in the Internet+ Era"

Project Number: 2024JG009:"Research and Practice on a Blended Teaching Model for Electrical and Electronic Courses Based on New Media Public Platforms"

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