

Postprint: An Exploration of Entrepreneurship Education Implementation in Higher Education from a Knowledge Evolution Perspective

Authors: Zhang Lingzhi, Xue Jingxin

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Abstract

[Purpose/Significance] Insufficient entrepreneurial competence among university students is a crucial factor constraining their engagement in entrepreneurial activities. This paper analyzes the causes of creativity deficiency in entrepreneurial activities from the perspective of knowledge evolution and proposes recommendations, which is of significant importance for advancing the entrepreneurship education system for university students. [Method/Process] Based on knowledge evolution theory, this study interprets the evolutionary characteristics and patterns of university students' entrepreneurial knowledge, as well as the stimulating effects of the external environment. From four aspects—individual, external environment, disciplinary system, and educational model—it analyzes the factors constraining the growth of university students' entrepreneurial competence using a knowledge evolution perspective. [Results/Conclusion] From the perspective of cultivating university students' entrepreneurial knowledge, it proposes four reform measures: strengthening the learning environment for university students' entrepreneurial knowledge, providing interdisciplinary knowledge supply, introducing social practice resources, and advancing education system reform, thereby offering countermeasures and suggestions for higher education institutions to promote entrepreneurship education.

Full Text

Abstract

[**Purpose/Significance**] The lack of entrepreneurial ability among college students is a critical factor constraining their engagement in entrepreneurial activities. This paper analyzes the reasons for creativity deficits in entrepreneurship from the perspective of knowledge evolution and proposes recommenda-

tions, which holds significant importance for promoting the construction of an entrepreneurship education system for college students. **[Method/Process]** Based on knowledge evolution theory, this study interprets the evolutionary characteristics, patterns, and external environmental stimuli of college students' entrepreneurial knowledge. From four dimensions—individual, external environment, disciplinary system, and education model—it examines the factors restricting the growth of college students' entrepreneurial ability through a knowledge evolution lens. **[Result/Conclusion]** From the standpoint of cultivating college students' entrepreneurial knowledge, this paper proposes four reform measures: strengthening the learning environment for entrepreneurial knowledge, providing interdisciplinary knowledge supply, introducing social practice resources, and advancing education system reform. These measures offer strategic recommendations for universities to promote entrepreneurship education.

Keywords: knowledge evolution; entrepreneurship education; entrepreneurial ability

Since the initiative of “mass entrepreneurship and innovation,” college student entrepreneurship has become a key focus in higher education. In recent years, China has issued a series of policy documents, including the *Notice of the Ministry of Education on Employment and Entrepreneurship of National College Graduates in 2016*, which integrates entrepreneurship content into the curriculum system of higher education and promotes entrepreneurship through competitions and incubation programs. However, the *China College Student Entrepreneurship Development Report 2017* released by Northeast Normal University reveals that while the entrepreneurship rate among 2016 graduates was only 2.93%, 65.14% expressed interest in entrepreneurship. Among graduates' top three concerns about entrepreneurship, “lack of good projects and creative ideas” ranked first [1]. This indicates that although college students have strong entrepreneurial aspirations, the absence of viable projects prevents them from translating intention into action. High similarity and insufficient innovation in student ventures are widespread problems, with the core reason being inadequate innovative capacity among students.

From a knowledge management perspective, knowledge is the source of innovation, and deficiencies in college students' innovative capacity manifest as insufficient knowledge. The improvement of knowledge capabilities is a gradual process of knowledge growth [2]. Exploring the implementation of college student entrepreneurship education from the perspective of knowledge evolution provides a new research framework that can better facilitate entrepreneurship cultivation in Chinese universities.

1. Introduction

Since the 1980s, entrepreneurship education has been vigorously developed abroad. The United States, as the most successful country in entrepreneurship education, has established three major models: the “Babson model” focusing on

entrepreneurial awareness cultivation, the “Harvard model” emphasizing practical management experience, and the “Stanford model” fostering systematic entrepreneurial knowledge [3]. Since 2000, research on entrepreneurship education in Chinese universities has gradually increased, with education models being a key area. Drawing on Western concepts while adapting to China’s educational context to explore localized models represents an important strategy for domestic universities [4]. Market-oriented approaches that emphasize entrepreneurial capacity cultivation and strengthen the education system covering foundational knowledge, practical skills, and risk management constitute essential elements for building a higher education entrepreneurship system [5].

Most research on college student entrepreneurship education focuses on capacity cultivation. Students primarily enhance their entrepreneurial abilities through coursework, practical training, online resources, and part-time enterprise work [6]. Universities foster entrepreneurial capacity by creating an entrepreneurial atmosphere, building curriculum systems, and strengthening skills training [7]. As entrepreneurship education deepens, the curriculum must shift from universal to specialized, targeting students with strong entrepreneurial intentions for focused education, transitioning from practical platform training to enterprise incubation, and emphasizing multi-domain knowledge cultivation [8]. Evidently, entrepreneur knowledge capacity cultivation is a crucial component of entrepreneurship education and an effective way to overcome entrepreneurial challenges [9]. Entrepreneurs lack experience in managing new ventures and risk response capabilities, so integrating entrepreneurial knowledge learning throughout the entire process can compensate for inherent deficiencies [10]. Entrepreneurial knowledge learning activities mainly occur in new ventures, depending on the knowledge environment within entrepreneurial contexts, and the degree of knowledge acquisition determines entrepreneurial success [11]. The increase in entrepreneurs’ self-efficacy is a gradual process that promotes opportunity identification and accurate judgment of future economic benefits [12-13].

Current domestic entrepreneurship education in universities suffers from factors such as a missing evaluation system, preventing students from accurately assessing entrepreneurial behavior and leading to blind or fearful entrepreneurship [14]. Entrepreneurs’ dynamic capabilities in perceiving, adapting to, and updating the entrepreneurial environment, as well as organizational and technical flexibility, improve through learning and manifest in opportunity identification [15]. In summary, university entrepreneurship education implementation should emphasize professional knowledge accumulation and practical knowledge cultivation for student entrepreneurs. Studying the mechanisms of capacity improvement from the perspective of entrepreneurial knowledge learning aligns with the laws of entrepreneurial talent cultivation.

2. Interpretation of Entrepreneurial Knowledge Evolution

The concept of knowledge evolution originates from Darwin’s biological evolution theory proposed by 19th-century British biologists, which posits that

survival of the fittest and natural selection drive biological evolution. Scholars such as Karl Popper and Donald Campbell argue that knowledge development is also an evolutionary process, possessing biological-like attributes that achieve evolution through variation, inheritance, and selection [16-17]. As knowledge-bearing individuals, humans play roles in carrying, disseminating, and supporting innovation during knowledge evolution. Entrepreneurship is a highly complex endeavor, and entrepreneurial knowledge refers to the knowledge used in entrepreneurial activities for opportunity identification, resource allocation, venture operation, and decision-making to generate economic benefits [18]. Entrepreneurs' capabilities are reflected in the breadth and depth of their entrepreneurial knowledge. As entrepreneurial work deepens, entrepreneurs need to become "plug-and-play" experts in multiple domains, and the accumulation of relevant knowledge demonstrates the process of knowledge evolution.

2.1 Evolutionary Characteristics of Entrepreneurial Knowledge

Entrepreneurial knowledge evolution involves both the increase in individual knowledge stock and the deepening of knowledge understanding [19]. Knowledge cannot grow from nothing; entrepreneurs' existing knowledge stock forms the foundation for entrepreneurship. Every aspect of entrepreneurship—including product design, customer needs analysis, and partnership implementation—reflects characteristics of entrepreneurs' stock knowledge, demonstrating the heritability of knowledge evolution. Entrepreneurial demand serves as the selection criterion for knowledge, with market needs guiding the development of entrepreneurs' professional knowledge toward applied directions. The demand for entrepreneurial management knowledge also continuously changes with the deepening of entrepreneurial activities, reflecting the environmental selection characteristic of knowledge evolution. The complexity of entrepreneurial activities stimulates demand for knowledge breadth, making cross-disciplinary knowledge acquisition an inevitable process for every entrepreneur. As entrepreneurial time increases, entrepreneurs become versatile experts with both specialized and broad skills, showing obvious exogenous growth characteristics. Entrepreneurship represents an open knowledge learning model where entrepreneurs encounter knowledge from various fields. The collision of interdisciplinary knowledge changes the types and attributes of entrepreneurs' knowledge. Entrepreneurs' unconventional and unique approaches represent manifestations of knowledge variation, which is a necessary condition for innovation. The high complexity of entrepreneurial activities provides entrepreneurs with more external knowledge, and survival pressures stimulate rapid learning. The knowledge diversity demonstrated by entrepreneurs aligns with evolutionary theory's hypothesis that competitive environments promote species diversity, making entrepreneurial knowledge evolution particularly characteristic of knowledge evolution processes.

2.2 Evolutionary Patterns of Entrepreneurial Knowledge

Biological evolution primarily manifests through convergence, divergence, and co-evolution. Knowledge evolution theory posits that environmental changes also drive knowledge growth in these three forms [20]. Entrepreneurship is often conducted through teams. Although team members may have different knowledge backgrounds, when exposed to the same entrepreneurial environment, their knowledge cognition in areas such as product iteration direction, strategic choice, and team building gradually converges. Shared entrepreneurial cognition is a common characteristic of entrepreneurial teams.

Entrepreneurs' key capability lies in promptly capturing opportunities arising from market changes, with evolving market demands guiding the direction of knowledge learning. Because each entrepreneur perceives and approaches opportunities differently, their knowledge growth patterns vary, leading to divergence in entrepreneurial products, models, and services. Knowledge growth is related to demand, and the complexity of market needs often cannot be solved by knowledge from a single discipline. Entrepreneurs must learn knowledge from different domains as needed, and the growth of multi-domain knowledge demonstrates a co-evolutionary characteristic. These three knowledge evolution patterns appear at every stage of entrepreneurs' knowledge growth, often concurrently, resulting in diversified evolutionary patterns.

2.3 External Environmental Stimulation of Entrepreneurial Knowledge Evolution

Entrepreneurs' knowledge evolution requires external environmental stimulation. Based on identified opportunities, entrepreneurs launch ventures and gradually improve their comprehensive application capabilities across multiple domains, including product development, market forecasting, strategic implementation, team management, and venture operation. Knowledge evolution is a gradual process. New products, materials, and processes create external stimuli at every stage of their development, and entrepreneurs initiate new knowledge learning in response to these stimuli. Opportunity identification represents the internalization of knowledge, which entrepreneurs then promote to diffuse and spread innovation within and across fields. Socio-environmental factors such as economy, politics, and culture influence entrepreneurs' knowledge cognition. Their complexity creates significant differences in entrepreneurs' knowledge growth, even forming substantial contrasts in entrepreneurial direction. During knowledge evolution, entrepreneurs influence others' learning methods and create reverse stimuli to the external environment, gradually evolving it toward encouraging entrepreneurship and forming a virtuous development model.

3. Factors Restricting College Students' Entrepreneurial Ability Growth

Insufficient entrepreneurial ability among college students encompasses factors such as weak entrepreneurial intention, lack of innovation capacity, lagging entrepreneurship education, and suboptimal entrepreneurial environment [21]. Various types of knowledge—including industry knowledge, entrepreneurial knowledge, and organizational management knowledge—affect entrepreneurial activities, and entrepreneurs' behaviors reflect their entrepreneurial capabilities [22]. Whether college students possess the ability to engage in entrepreneurship depends fundamentally on their knowledge structure and their capacity to guide entrepreneurial behavior through knowledge. From the moment students enter university, they transition from foundational to applied knowledge learning, with knowledge application ability built upon existing knowledge stock. Therefore, establishing individual knowledge attributes through professional learning guides the direction of knowledge evolution. The process of students contacting industry and society creates demand stimuli, motivating knowledge application and gradually developing from pure knowledge learning to knowledge innovation. Innovative knowledge must be materialized into products and services to meet market needs and generate entrepreneurial motivation. The complexity of entrepreneurial processes stimulates students' desire for cross-domain knowledge learning, evolving knowledge development from single-discipline vertical progression to interdisciplinary diversification. As entrepreneurial activities deepen, individual students address complex situations through team entrepreneurship, with team division of labor prompting knowledge growth to return to specialized knowledge while emphasizing cross-disciplinary knowledge oriented toward entrepreneurial needs.

Thus, in college student entrepreneurship, individuals serve as carriers of knowledge growth, the external environment stimulates their knowledge evolution, university disciplinary resources provide knowledge sources, and education models influence learning methods. Analyzing factors restricting entrepreneurial ability growth from the perspectives of individual, external environment, disciplinary system, and education model through a knowledge evolution lens aligns with human-centered educational philosophy and facilitates solutions.

3.1 Individual Factors

Engaging in entrepreneurship requires opportunity identification ability, which depends on accumulated industry knowledge and social experience. Insufficient professional knowledge accumulation leaves students with little understanding of their corresponding industries, preventing them from transforming external stimuli into innovation needs. With inadequate innovation capacity, students may have entrepreneurial ideas but lack the ability to generate high value-added products, often resorting to low-knowledge-content survival entrepreneurship. Knowledge innovation primarily originates from individuals, who are not only entities bearing knowledge but also sources of knowledge production [23]. The

professional knowledge accumulation process for college students can be viewed as an inevitable stage of knowledge evolution and a process of innovation capacity cultivation. College student entrepreneurship uses personal knowledge and abilities to meet diverse social needs, guided by entrepreneurial intention in knowledge learning. Only by consciously strengthening applied knowledge accumulation can students ensure that innovation capacity formed through knowledge evolution meets entrepreneurial demands. If learning targets only professional knowledge without attending to social demand stimuli, it inevitably creates a disconnect between academic research and social needs, preventing entrepreneurial product formation and leaving research achievements unused.

3.2 External Environmental Factors

Evolutionary theory is a form of environmental determinism, where external stimuli are important factors affecting knowledge learning and providing external knowledge sources [24]. Current social cognition of entrepreneurship is biased, viewing entrepreneurship education merely as an auxiliary employment tool. This employment-oriented entrepreneurship perspective deviates from the original purpose of entrepreneurship education. Moreover, this misconception that “entrepreneurship education is for employment rates” creates reverse stimuli, causing many students who have not yet started businesses to develop knowledge resistance, diverting their knowledge evolution from entrepreneurial intentions. College students in relatively closed campus environments have limited access to external knowledge and lack channels to understand current social and industry demands. As external knowledge sources, industry enterprises find that university-industry cooperation benefits do not proportionally match their investments in time, manpower, and resources, resulting in insufficient cooperation desire. Enterprises only enter campuses during recruitment, transmitting knowledge about job requirements rather than industry development needs. Under recruitment stimuli, students preferentially supplement professional knowledge and practical skills, with certification, grading, and postgraduate entrance exam preparation becoming the norm. Entrepreneurial knowledge oriented toward interpersonal relationships, team building, organizational management, communication with business partners, and policy interpretation remains difficult to acquire, leaving no room for entrepreneurial capacity improvement.

3.3 Disciplinary System Factors

College entrepreneurship education must be based in disciplines, leveraging innovation guidance and connecting with industry needs to awaken students' creative capacity [25]. China's current university disciplinary system suffers from closed evaluation systems, research cultures, and institutional models [26]. Talent cultivation mostly follows vertical knowledge evolution patterns, with indicators such as academic advancement ability, cutting-edge breakthroughs, landmark achievements, and top-tier academic leaders guiding discipline construction toward elite academic research talent cultivation. Publication journal

tiers and citation counts gradually become discipline construction standards. Entrepreneurial products mostly represent marketization of mature academic research achievements, making such applied knowledge difficult to reflect academic innovation and inconsistent with discipline development. Many graduate students face dilemmas where their research cannot be transformed into entrepreneurial projects, while product development work jeopardizes graduation. Discipline construction direction serves as the weathervane for university talent cultivation. Students' knowledge learning must follow their university's knowledge environment. University discipline evaluation guides construction toward vertical, academic, and high-end directions, creating misalignment between this stimulus and knowledge accumulation directions needed for entrepreneurial products, inevitably resulting in students' inability to design entrepreneurial products despite knowledge innovation capacity.

3.4 Education Model Factors

The most important reason for ineffective entrepreneurship education is the lack of entrepreneurship environment construction, preventing entrepreneurship education from entering the university education system. Opportunity identification is crucial for students to launch ventures. Universities typically adopt entrepreneurship education through three approaches: offering courses like "Entrepreneurship Foundations," inviting entrepreneurs and industry experts for lectures, and organizing entrepreneurship competitions and incubation platforms with social capital [27]. Through entrepreneurship courses, students acquire basic knowledge about entrepreneurial activities and gradually form cognition of entrepreneurial management knowledge. However, these economic and management courses are overly theoretical and foundational, while students lack entrepreneurial practice experience, making knowledge internalization impossible. Entrepreneurship activities provide students with typical cases of enterprise operation, but limited activity time restricts transmission of practical knowledge about industry development needs and solutions to entrepreneurial dilemmas, providing insufficient stimulation for students' professional and entrepreneurial knowledge and failing to achieve expected learning outcomes. Incubation processes target students who have already started businesses, offering funding, space, and policy interpretation but limited knowledge about specific entrepreneurial stages. Thus, the three-tier model of entrepreneurship courses, activities, and incubation represents a universal talent cultivation approach, while entrepreneurship education requires personalized knowledge learning that existing content cannot satisfy.

4. Countermeasures for Universities to Promote Entrepreneurship Education

Entrepreneurship education is a human-development-centered education system construction. Knowledge learning and personal development are not necessarily unified; universities should cultivate students' cognitive abilities in knowledge

learning and strengthen autonomous learning awareness [28]. From a knowledge learning perspective, cultivating entrepreneurial ability should focus on knowledge evolution patterns, rationally utilizing educational resources and external environmental stimuli, guiding students to understand the significance of entrepreneurship education, and gradually cultivating innovative and entrepreneurial talent through applied innovation capacity cultivation, increased entrepreneurial knowledge supply, and an enhanced entrepreneurship knowledge environment.

4.1 Emphasizing Connotative Construction of Entrepreneurship Education Environment to Correctly Guide Students

The current three-tier cultivation model of entrepreneurship courses—activities—incubation meets the three-level needs of entrepreneurship knowledge popularization, practice expansion, and activity support. However, the cultivation content and methods do not align with entrepreneurial talent cultivation needs. “Mass entrepreneurship and innovation” capacity cultivation cannot be reflected in just one “Entrepreneurship Foundations” course. Universities must establish connections between entrepreneurship courses and specialized courses, using entrepreneurship projects as a link to tightly integrate entrepreneurship knowledge cultivation with professional knowledge learning. This approach trains students to apply entrepreneurial thinking to professional knowledge learning and construct professional learning directions based on social needs. In accordance with the *National Standards for Teaching Quality of Undergraduate Programs* requirements for applied talent cultivation, universities should increase the proportion of innovation courses, cultivate students’ innovation awareness, methods, and models, and integrate innovation connotations into the innovation process of professional knowledge learning to truly reflect the original intention of “mass entrepreneurship and innovation” talent cultivation.

In entrepreneurship practice and incubation stages, universities must play a guiding role, fully leveraging industry-university-research practice bases and student entrepreneurship incubators to expose students to real industry needs. Universities should encourage students to explore difficult problems urgently needing solutions in industries, highlight the application orientation of practice stages, and demonstrate students’ advantages in innovation and entrepreneurship. Campus entrepreneurship competitions should focus more on enriching students’ comprehensive problem-solving abilities, guiding student entrepreneurs to develop risk awareness.

4.2 Breaking Disciplinary Barriers and Expanding Interdisciplinary Knowledge Supply for Entrepreneurship

Knowledge diversity is a prerequisite for knowledge evolution. As professional knowledge hubs, universities possess knowledge diversity characteristics and can provide various knowledge types for entrepreneurship, serving as impor-

tant sources for entrepreneurs' stock knowledge. Current insufficient innovation capacity among college students indicates obstacles in knowledge acquisition. While students' majors are typically their primary entrepreneurial domains, acquiring knowledge from other fields represents an important pathway for exogenous knowledge growth. The common deficiency in interdisciplinary knowledge innovation among student entrepreneurs demonstrates severe disciplinary barriers that hinder knowledge flow, making innovation impossible and failing to meet the high complexity knowledge demands of entrepreneurship. Universities should take the deepening of entrepreneurship education as an opportunity to explore internal interdisciplinary cooperation mechanisms based on their disciplinary characteristics and the knowledge features of student entrepreneurship projects. Using a "one university, one policy" approach, universities should establish interdisciplinary research directions in areas with high entrepreneurial demand, encourage graduate supervisors and young professional teachers to participate in cross-disciplinary academic research, and guide student entrepreneurship projects as entrepreneurship mentors to enhance innovation levels from a professional innovation perspective, providing interdisciplinary knowledge sources for student entrepreneurs.

Student entrepreneurship projects carry strong school disciplinary characteristics, which reflect disciplinary advantages but also highlight the limitations of a single institution's knowledge. Provincial education commissions should vigorously promote university entrepreneurship alliance development, facilitate inter-university disciplinary cooperation, establish cross-university cooperation mechanisms using student entrepreneurship projects as links, break administrative barriers between institutions, remove obstacles to single-discipline horizontal connections, and promote cooperation between advantageous disciplines across universities. This reduces the common problem of team members' disciplinary backgrounds being limited to their school's disciplines and provides entrepreneurship teams with members possessing required knowledge to meet the complexity demands of student entrepreneurial products.

4.3 Expanding Social Resource Introduction Channels and Building Entrepreneurship Practice Models

Entrepreneurial knowledge learning is a stimulated response, and entrepreneurial experience accumulation represents important knowledge internalization. The root cause of student entrepreneurs' lack of major-related projects lies in insufficient practical experience in their fields, inability to identify business opportunities from practical problems, and inadequate participation in practical teaching that fails to form entrepreneurial accumulation. Entrepreneurship education possesses practical talent cultivation characteristics that are currently lacking in higher education systems. Addressing college student entrepreneurship education needs and national requirements for applied talent cultivation, universities should increase university-industry horizontal research cooperation, advance teacher-led participation in enterprise R&D, ex-

plore complete off-campus practice base teaching models, encourage enterprise mentors to enter classrooms, and gradually establish school-enterprise practical talent cultivation mechanisms. This provides students with industry exposure, helps them understand real social needs outside campus, enables them to think about ways to transform professional knowledge to serve industries during professional practice, offers channels for converting professional knowledge into practical skills, and provides pathways for accumulating practical knowledge for entrepreneurship.

Universities should actively explore methods for introducing social capital by building college student entrepreneurship project databases, regularly organizing on-campus project roadshows, establishing alumni venture capital funds, and other forms to strengthen incubation management of student entrepreneurship projects. This allows high-potential student projects to be recognized by social capital, identifies knowledge gaps in student entrepreneurship during incubation, enhances the cultivation function of platforms, and improves student entrepreneurship success rates. Using social venture capital for precise incubation reduces homogenization problems in student entrepreneurship projects and enhances their quality and innovation.

4.4 Advancing Teaching System Reform and Increasing Entrepreneurship Element Integration

Entrepreneurship education is one component of university talent cultivation, and student entrepreneurship is not the sole objective. However, students' innovative capacity and entrepreneurial awareness are important contents of talent cultivation. Teaching stages should reflect not only the three-tier entrepreneurship cultivation model mentioned in this study but also be integrated throughout the entire student cultivation system. The *National Standards for Teaching Quality of Undergraduate Programs* has clear requirements for curriculum frontier and practical ability cultivation in undergraduate programs. Entrepreneurship-oriented cultivation programs should center on “mass entrepreneurship and innovation” capacity cultivation, strengthening professional foundational knowledge in required courses to build solid professional foundations for student entrepreneurs and meet vertical knowledge needs for core innovation competitiveness construction. Universities should increase interdisciplinary knowledge transmission in elective course systems to expand student entrepreneurs' knowledge breadth and meet multi-domain knowledge needs for innovation and entrepreneurship. They should emphasize the practicality and frontier nature of practice stages, build curricula aligned with entrepreneurship education, enable students to understand current practical problems, use their professional knowledge to find solutions, and promote business opportunity discovery.

Curriculum design provides the foundation for student entrepreneurs' knowledge learning. As catalysts for knowledge learning, teachers' knowledge reserves, teaching methods, and guidance directly affect student entrepreneurship. There-

fore, universities must change faculty evaluation mechanisms, emphasize the innovation and applicability of academic achievements, and increase the weight of guiding student entrepreneurship projects in faculty assessment to encourage organic integration of academic research with student entrepreneurship capacity cultivation and transform faculty from evaluators to active participants. As entrepreneurship subjects, students' participation enthusiasm is the primary driver of entrepreneurial knowledge learning. Thus, universities should encourage student participation in innovation and entrepreneurship competitions at all levels, guide students to develop active thinking abilities in student activities and social practice, learn to use professional knowledge to interpret practical problems, cultivate entrepreneurial awareness, and actively accumulate entrepreneurship-related knowledge.

Talent cultivation is a systematic project. Universities must gradually integrate entrepreneurship education concepts into the education system, making every cultivation stage reflect entrepreneurship orientation. Academic affairs and graduate school offices should issue entrepreneurship course evaluation standards, credit conversion policies, and assessment requirements to supervise course quality, guide implementation, and improve the teaching system architecture. Cultivation units must incorporate entrepreneurship education modules into professional teaching content, integrate entrepreneurship competition projects into professional practice training systems, actively conduct enterprise teaching and off-campus training, and provide students with diversified knowledge content. Student affairs and youth league committees should combine entrepreneurship activities with volunteer services, social services, and student competitions to imprint entrepreneurship on students' daily learning and life. Financial, personnel, and logistics departments must interpret entrepreneurship policies from their business perspectives, actively introduce relevant social resources, provide convenient conditions for student entrepreneurship, and demonstrate support functions. Universities should also leverage their advantage as knowledge hubs to strengthen cooperation with government agencies, enterprises, and foreign universities to provide rich knowledge resources for student entrepreneurship and support its development.

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Note: Figure translations are in progress. See original paper for figures.

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