

Evolving Landscapes of Higher Entrepreneurship Education: A Comparative Analysis of Policy, Curriculum, and Support Ecologies in China and the United States

Yundong Wu¹ Ruofan Lin²

1 Graduate School, Dongshin University, South Jeolla, South Korea

2 College of Management, Yunnan Normal University, Kunming, China

ARTICLE HISTORY

Received: 26 June 2026

Accepted: 13 July 2026

KEYWORDS

University entrepreneurship education; China-United States comparison; Higher education; innovation and entrepreneurship; Educational trends

CORRESPONDING AUTHOR

Yundong Wu
ethanwu0525@gmail.com

ABSTRACT

Entrepreneurship education has shifted from the periphery of higher education to the center of global debates on talent cultivation, innovation policy, and youth employment. This article provides a systematic comparative analysis of recent trends in university entrepreneurship education in China and the United States. Employing a five-dimensional analytical framework encompassing policy arrangements, curricular design, practice platforms, support ecologies, and evaluation mechanisms, this study utilizes literature analysis and comparative inquiry to synthesize recent English-language scholarship. The comparison yields three primary findings. First, both countries have evolved beyond stand-alone courses toward comprehensive ecosystems; however, China expansion is propelled by centralized policy guidance and rapid platform construction, whereas the US relies on institutional autonomy, alumni networks, and deep regional innovation embedding. Second, while China has achieved remarkable progress in organizational mobilization and platform availability, it faces critical constraints including curricular standardization, shortages of practice-oriented instructors, and a preoccupation with short-term performance metrics. Third, the US exhibits greater maturity in interdisciplinary, experiential, and user-centered pedagogy, though it struggles with severe resource concentration in elite institutions and fragmented assessment standards. The article argues that the next phase of Chinese university entrepreneurship education must transition from scale expansion to structural quality optimization. A durable reform agenda requires establishing tiered course sequences, embedding experiential learning within real-problem contexts, building sustainable mentor networks, and reforming evaluation models to focus on long-term cognitive and behavioral outcomes rather than event counts or business registrations.

I. Introduction

Entrepreneurship education no longer sits at the edge of higher education. It has moved inward, into the core of how universities think about employability, innovation, and student development. A narrow reading still survives in some policy discussions, where entrepreneurship education is treated as a tool for urging students to start firms. The better view is wider. Under conditions marked by technological acceleration, shifting labor markets, industrial reorganization, and increasingly uneven transitions to adulthood, universities are being asked to cultivate students who can recognize openings, assemble resources, work across uncertainty, and act before every variable is known. That is why the field has grown so quickly. It is also why simple course-counting tells us very little.

Research has changed in step with that shift. Early studies often asked a blunt question: Does entrepreneurship education work? That question has not disappeared, but it no longer carries the field. Attention has turned instead to a harder set of issues: what kind of education matters, for whom, through which learning processes, and under what institutional conditions (Nabi et al., 2017). Meta-analytic evidence has reinforced the point. Entrepreneurship education shapes not only knowledge acquisition and skill formation but also the human capital through which students imagine and pursue future action

International experience shows no single path. In some countries, public policy and national reform plans have pushed entrepreneurship education into universities with considerable force. Elsewhere, institutional autonomy, civic organizations, foundations, investors, and alumni networks have driven the process from multiple directions at once. The United States remains one of the earliest and most varied cases. Entrepreneurship education there grew first within business schools, then spread into engineering, design, science, and social innovation, carried not just by courses but by competitions, incubators, centers, donor support, and extra-campus networks (Solomon, 2007, 2008). China entered the field later, yet its growth has been strikingly fast. Once entrepreneurship and innovation became tied to national development goals and higher education reform, the density of institutional provision expanded at speed (Cui et al., 2019; Zhou & Xu, 2012).

Existing scholarship has produced a substantial body of work on entrepreneurial intention, course outcomes, pedagogical design, and perceived university support. What remains less developed is a systematic comparison of recent trends in university entrepreneurship education in China and the United States. Too often, entrepreneurship education is reduced to the effect of a single course. Too often, cross-national comparison turns into inventory rather than analysis. Platforms, mentor arrangements, regional innovation ties, and assessment logics are mentioned, then left floating. The result is a flattened picture of what universities actually do.

This article addresses that gap by placing China and the United States within a shared comparative frame and grounding the discussion in recent English-language research. Three questions guide the analysis. What trajectories now define university entrepreneurship education in China and in the United States? Where do the two systems differ in policy architecture, curricular design, practice platforms, and support ecologies? Which features of the American case can be translated, with caution, into reforms suited to Chinese universities? The discussion follows a conventional academic sequence: conceptual clarification, literature review, research design, country analysis, comparative synthesis, policy implications, and conclusion. The argument, however, aims for more than orderly structure. It seeks explanatory force.

II. Conceptual Clarification and Literature Review

2.1 Defining Entrepreneurship Education

Entrepreneurship education is not reducible to narrow business start-up training. In higher education, it reaches further. It includes the transmission of knowledge related to venture creation, yet it also involves the cultivation of opportunity recognition, initiative, action orientation, judgment under risk, and value creation in social as well as commercial settings (Bécharde & Grégoire, 2005). Framed this way, entrepreneurship education is less about a single outcome than about a capacity structure. Students are asked to see problems earlier, think more imaginatively about solutions, test ideas in public, and coordinate people and resources under imperfect conditions.

That wider understanding helps distinguish entrepreneurship education from entrepreneurship itself. A university course cannot manufacture founders on command. Nor should it try. What it can do is build the forms of perception, analysis, collaboration, and action that make entrepreneurial behavior more plausible across a range of professional settings. Within the university context, at least three layers are usually present: cognitive foundations, including knowledge of entrepreneurship, markets, institutions, and regulation; competence formation, including opportunity identification, communication, teamwork, and resource orchestration; and action-oriented learning, including project development, market testing, prototyping, and forms of social innovation.

Entrepreneurial competence sits close to the center of this discussion. Studies have repeatedly shown that the relationship between entrepreneurship education and entrepreneurial intention is not direct in any simple sense. Self-efficacy, knowledge acquisition, perceived support, and action confidence often mediate that relationship (Lv et al., 2021; Zhang et al., 2014). The educational process matters because it shapes how students interpret uncertainty and whether they believe themselves capable of acting within it. Entrepreneurship education, then, should be read not as an input-output machine but as a formative process in which learning design, institutional support, and situated experience interact over time.

2.2 Literature Review

The international literature on entrepreneurship education in higher education can be read in three broad

movements. The first was concerned with legitimacy. Scholars asked whether entrepreneurship deserved a place within the university at all, and whether it should stand apart from management education or remain nested within it (Solomon, 2007). The second focused on effectiveness. Entrepreneurial intention, self-efficacy, attitudes, and subsequent behavior became common outcome variables in empirical studies and meta-analyses (Martin et al., 2013; Rauch & Hulsink, 2015). A third movement has become more prominent in recent years. Here the key concern is context: course design, disciplinary variation, institutional conditions, ecosystem ties, and the problem of tracing long-term effects (Carpenter & Wilson, 2021; Nabi et al., 2017).

Several recurring themes organize this body of work. One concerns curriculum and pedagogy. Experience-based learning, design thinking, project work, case analysis, and cross-disciplinary collaboration tend to produce more grounded entrepreneurial understanding than lecture-heavy formats that remain at the level of concepts alone (Linton & Klinton, 2019). Another concerns intention and behavior. Entrepreneurship education does not automatically raise entrepreneurial intention for every student, yet it can strengthen self-efficacy, motivation, and perceived opportunity in ways that shape later action (Nabi et al., 2018; Piperopoulos & Dimov, 2015). A third theme concerns institutional environment. Students' perceptions of university support, mentor access, entrepreneurship centers, alumni ties, and external partnerships shape how they evaluate the meaning and usefulness of what they learn (Lu et al., 2021; Su et al., 2021). Mei et al. (2020) likewise report that entrepreneurship education can strengthen students' entrepreneurial intention in higher education, but the size and direction of that effect depend on how learning environments and perceived support are structured.

Table 1. Analytical Framework for the China-U.S. Comparison

Comparative Dimension	Main Focus in Chinese Universities	Main Focus in U.S. Universities	Analytical Concern in This Article
Policy institutions	State promotion, reform schemes, large-scale diffusion	Institutional autonomy, foundation support, local innovation policy	Differences in institutional drivers
Curricular systems	General courses, competition-based courses, integration of specialty and entrepreneurship education	Interdisciplinary courses, entrepreneurship minors, design thinking	Differences in course structure and pedagogy
Practice platforms	On-campus maker spaces, incubators, project incubation	Entrepreneurship centers, accelerators, alumni networks	Differences in resource configuration
Support ecologies	Coordination among government, universities, and industrial parks	Coordination among universities, communities, capital, and alumni	Degree of ecosystem embedding
Evaluation mechanisms	Coverage rates, project counts, competition performance	Learning outcomes, behavioral change, long-term tracking	Pathways of effectiveness assessment

Research on China has often centered on entrepreneurial intention, educational satisfaction, perceived support, and the fit between course provision and student needs. Wu and Wu (2008) offered an early account of how higher education influences entrepreneurial intention among Chinese university students. Zhou and Xu (2012) reviewed the field and argued that Chinese universities had advanced quickly in institutional and curricular terms, even as practice orientation and system coherence lagged behind. Subsequent studies added finer-grained evidence. Cui et al. (2019) linked entrepreneurship education to entrepreneurial mindset formation and identified inspiration and educational attributes as crucial mediating elements. Wei et al. (2019) showed that innovation outcomes are shaped through multiple mediating paths rather than simple exposure to entrepreneurship courses. Chen et al. (2022) argued that diverse learning environments and knowledge transfer processes are essential to building entrepreneurial competence.

Work on the United States has tended to place more weight on curricular innovation, institutional diversity, and the relation between entrepreneurship education and wider support systems. Solomon (2007, 2008) described a field marked by course variety, cross-disciplinary expansion, and significant involvement from actors beyond the university itself. Yet the American case is not uniformly open or

evenly distributed. Access to strong entrepreneurial education often clusters in institutions with deep alumni ties, substantial capital access, and long-established entrepreneurial cultures. This unevenness matters. It reminds us that expansion alone is not a synonym for equity. Related ecosystem-oriented research also stresses that durable entrepreneurship education depends on stakeholder collaboration among universities, firms, public actors, and intermediary organizations rather than on campus provision alone (Bischoff et al., 2017).

To avoid a narrow or fragmented comparison, this article uses a five-dimensional framework covering policy institutions, curricular systems, practice platforms, support ecologies, and evaluation mechanisms. The framework links national reform trajectories to organizational practices inside universities. It also connects teaching design to student outcomes. Most important, it prevents entrepreneurship education from being collapsed into the single question of course existence.

III. Research Design and Sources

This study combines literature analysis with comparative inquiry. Literature analysis is used to clarify concepts, reconstruct the intellectual development of entrepreneurship education, and summarize recent work on university-level practices in the two countries. Comparative analysis provides the second step. It places the Chinese and American cases within a shared analytical frame so that differences in institutional arrangement, curricular design, and support ecology can be examined without collapsing one case into the terms of the other.

The documentary base consists of research on entrepreneurship education, higher education, entrepreneurial intention, support ecologies, and the development of university entrepreneurship education in China. Priority is given to highly cited reviews, meta-analyses, and empirical studies whose arguments can be checked and situated within recent international debates. Within this article, the term trend refers to recurrent directions in policy, course design, organizational form, and assessment practice that appear across the literature. Universities remain the central unit of analysis, while their relations with actors beyond the campus are examined whenever those relations shape educational practice in substantial ways.

IV. Trends in University Entrepreneurship Education in China

4.1 Policy-Driven Institutional Expansion

The Chinese case is marked, first of all, by policy force. Entrepreneurship education has developed in close relation to national innovation strategy, higher education reform, and youth employment policy. That alignment has given the field momentum. It has also given it form. In a comparatively short period, universities across the country built courses, centers, competitions, incubators, and organizational units meant to carry entrepreneurship education into ordinary academic life. Speed was the great strength of this route. Institutional breadth followed.

Zhou and Xu (2012) described Chinese entrepreneurship education as strongly top-down in its early development. The main obstacle was not the absence of rhetoric. It was the limited maturity of curricular systems, instructional teams, and practice platforms. Once innovation and entrepreneurship education entered the formal reform agenda of universities, however, entrepreneurship education ceased to be an optional extracurricular supplement and became part of mainstream talent cultivation.

The direction of travel has since shifted. The earlier question was whether a university had entrepreneurship education at all. The present question is what kind of education is being offered, to whom, and with what consequences. In the first expansion phase, opening courses, arranging lectures, and hosting business-plan competitions often counted as progress in themselves. That threshold has passed. Attention now falls more heavily on curricular reconstruction, integration with disciplinary study, platform effectiveness, and the assessment of learning outcomes. Tang et al. (2014) showed that Chinese university entrepreneurship education often fails to align neatly with student needs. The implication is clear: expanding supply is not enough when the form of provision remains poorly matched to developmental variation across students and disciplines.

4.2 From Generalized Provision to Tiered and Differentiated Curricula

Curriculum is the most visible face of entrepreneurship education in Chinese universities. A common structure has taken shape: general entrepreneurship courses for broad access, specialized workshops or training camps for more interested students, project competitions, and some form of incubation support

for teams with stronger commitment or more advanced ideas. This arrangement gives universities a practical route for reaching many students while reserving deeper engagement for a smaller group. Yet broad reach does not guarantee meaningful growth. Cui et al. (2019) found that entrepreneurship education exerts a positive effect on the entrepreneurial mindset of Chinese college students, though that effect depends strongly on whether educational attributes inspire students, increase perceived value, and generate positive learning experiences. Wei et al. (2019) came to a similar conclusion from another angle. The effect of entrepreneurship education on student innovation operates through multiple mediating mechanisms. A course organized mainly around abstract transmission and standard lecture routines may satisfy administrative requirements while doing little to strengthen students' capacity to think and act entrepreneurially.

Three curricular shifts are especially visible in the literature. Integration with disciplinary education has become more common, moving entrepreneurship education beyond business and management into engineering, design, information technology, medicine, and related fields. Teaching methods have begun to move away from teacher-centered explanation toward case work, simulation, problem framing, and project-based learning. Assessment practices are also changing. Written tests no longer dominate to the same extent; process evaluation, portfolio work, and project presentation are more common, even if standards remain uneven. Chen et al. (2022) argue that diverse learning environments, knowledge transfer, and educational support are central to the formation of entrepreneurial competence. Their point bears directly on the Chinese case: curricular reform succeeds only when course design is joined to environments in which students can test and revise action.

A concrete illustration is Tsinghua x-lab. Its official website presents an integrated package of entrepreneurship courses, capability-enhancement programs, branded competitions, mentor support, and city-based cooperation initiatives, while a separate course page lists multiple practice-oriented offerings rather than a single introductory class (Tsinghua x-lab, 2026).

4.3 Faster Platform Construction, Slower Ecological Deepening

Platform building has become another defining trend. Universities across China have established maker spaces, innovation labs, incubators, entrepreneurship colleges, and university-locality partnership bases to connect classroom learning with real projects. These structures matter. They raise participation, create opportunities for prototyping and validation, and help cultivate a visible campus climate around entrepreneurship.

Support alone does not mean the same thing everywhere. Lu et al. (2021) found that university support systems have a significant effect on students' entrepreneurial intentions, especially when students perceive concrete resource support, institutional backing, and mentor access. The Chinese literature therefore gives good reason to value platform development. At the same time, quantity can conceal fragility. Many university-based platforms in China still depend heavily on school administration and government project funding. Connections to markets, alumni entrepreneurs, investors, and long-term external mentors often remain thinner than the number of built platforms might suggest.

That gap matters because a platform becomes educationally consequential only when it links students to sustained feedback, real demand, legal and intellectual property support, and forms of external judgment that no campus can fully simulate on its own (Yundong et al., 2025). China has moved quickly in construction. Ecological embedding has advanced more slowly. Where platforms run mainly on short funding cycles or event-driven logic, continuity becomes hard to secure and learning effects become harder still to stabilize.

The same example also reveals why platform counts alone are insufficient. Tsinghua x-lab can already connect students to courses, challenge-based activities, mentors, and locality-linked programs, yet the comparative question is whether such links become stable pipelines for repeated market feedback, follow-up advising, and long-horizon project development rather than one-off events (Tsinghua x-lab, 2026).

4.4 Persistent Constraints: Homogenization, Staffing, and Short-Term Evaluation

Expansion has exposed structural limits. One is curricular homogenization. Entrepreneurship courses often repeat similar content, similar examples, and similar organizational routines across institutions, with insufficient adjustment to disciplinary profile or regional industrial structure. Another concerns staffing. Huang et al. (2020) found that teachers and students do not report identical levels of satisfaction with the sustainable development of entrepreneurship education in Chinese universities. Behind that difference lie familiar problems: limited practice experience among instructors, uneven support

conditions, and workload structures that make it difficult to sustain high-intensity project-based teaching.

Evaluation creates a third constraint. In many universities, performance is still judged through short-term indicators such as competition awards, funded projects, or the number of registered ventures. These measures are legible to administrators. They are easy to count. Yet they can distort the educational purpose of the field by pushing institutions toward visible outputs at the expense of deeper competence formation. The next stage of reform in China, therefore, should not be defined by higher coverage alone. Better quality, differentiated provision, stronger ecosystem coordination, and longer-term assessment need to become the new priorities.

V. Trends in University Entrepreneurship Education in the United States

5.1 From Business School Course Offerings to Cross-Disciplinary Educational Systems

The American case is often treated as the most mature example of university entrepreneurship education. That reputation rests on history, but not on history alone. Solomon (2007) argued that entrepreneurship education in the United States did not emerge primarily through central state imposition. It developed through pressures and opportunities inside universities, changing market conditions, foundation support, and the wider diffusion of entrepreneurial culture. Business schools provided the early home. The field did not stay there for long. Engineering, science, design, and social innovation programs became important sites of expansion.

This route has major consequences for organizational form. Entrepreneurship education in the United States is rarely confined to the status of a single course. Many universities offer minors, certificate programs, entrepreneurship centers, innovation labs, accelerator pathways, and alumni-based networks that students can enter at multiple points in their academic careers. What appears, on the surface, as curricular diversity is actually something larger: a more distributed educational system in which entrepreneurship is woven into the structure of student development and institutional life.

MIT offers a clear illustration of this distributed model. The Martin Trust Center links entrepreneurship courses, certificate pathways, Entrepreneurs in Residence, advisory resources, the Orbit platform, and the MIT delta v accelerator into a continuous educational path rather than a stand-alone course offering (MIT Martin Trust Center for Entrepreneurship, n.d.).

5.2 Experiential Learning as the Dominant Pedagogical Form

Another defining feature is pedagogical style. Experience does far more work in the American case than abstract explanation alone. Project development, venture challenges, prototyping, customer interviews, rapid iteration, and cross-disciplinary team collaboration are common elements of course design and co-curricular programming. Linton and Klinton (2019) describe design thinking-oriented entrepreneurship education as a mode of learning organized around problem discovery, quick testing, and user-centered judgment. Students are not simply told that uncertainty matters. They meet it.

That encounter can be uncomfortable. It can also be productive. Piperopoulos and Dimov (2015) showed that entrepreneurship education does not always raise entrepreneurial self-efficacy and intention in a simple upward line. Courses that expose the difficulty of entrepreneurship may reduce naive confidence even as they build more durable understanding. Nabi et al. (2017) and Rauch and Hulsink (2015) point in a similar direction. Educational designs that activate a chain from learning to inspiration to action are more likely to affect behavior than formats organized around one-way knowledge delivery. In other words, what matters is not motivational rhetoric but situated practice.

5.3 Networked Support Systems and Deep External Embedding

The support structure of American university entrepreneurship education is also more clearly networked. Entrepreneurship centers, mentors, alumni funds, local business partnerships, accelerators, and investor communities often work together as part of the student learning environment. These arrangements do not merely support venture launch. They support judgment, exposure, and socialization into communities where ideas are challenged, refined, and sometimes abandoned.

That is one reason American universities often convert classroom work into external action more effectively. A student may identify a problem in class, test an idea through a center or incubator, revise it with alumni or community mentors, and carry it into a competition or accelerator. The sequence is not guaranteed, but the institutional possibility is there. The educational significance lies in continuity. Students are not left to cross the gap between course and action on their own.

Yale Ventures shows the same ecological logic in another institutional form. Its public platform combines Venture Lab, Customer Discovery (NSF I-Corps), Entrepreneurs in Residence, Investors in Residence, venture funding, and innovation centers, making it easier for students to move between ideation, testing, mentorship, and external exposure (Yale Ventures, 2025).

5.4 Persistent Limits: Resource Concentration and Fragmented Assessment

The American model has limits of its own. Resources remain unevenly distributed. Elite institutions and universities with long entrepreneurial traditions, wealthy alumni networks, and ready access to capital often provide richer opportunities than ordinary universities, community colleges, or institutions serving marginalized student populations. Opportunity, then, is not spread evenly across the system.

Table 2. Comparative Features of University Entrepreneurship Education in China and the United States

Dimension	Main Features of Chinese University Entrepreneurship Education	Main Features of U.S. University Entrepreneurship Education	Nature of the Difference
Institutional starting point	Strong policy guidance and fast reform implementation	Strong institutional autonomy and deeper historical accumulation	Difference in institutional drivers
Course organization	General courses, competition-based courses, integrated specialty-entrepreneurship provision	Interdisciplinary courses, minors, certificates, strong experiential learning	Difference in teaching organization
Platform construction	Rapid expansion of on-campus platforms	Mature coordination between on-campus and off-campus platforms	Difference in ecological depth
Staffing structure	Faculty-led systems with limited practice-oriented instructors	Joint participation of faculty, alumni, and industry mentors	Difference in mentor arrangements
Evaluation orientation	Strong attention to coverage, project counts, and awards	Greater attention to learning outcomes, behavioral change, and long-term effects	Difference in performance logic

Assessment is another unresolved issue. Carpenter and Wilson (2021) show that studies of entrepreneurship education in higher education rely on widely varying indicators, from entrepreneurial intention to knowledge acquisition, behavioral tendencies, and subsequent start-up activity. That variety reflects intellectual energy, but it also makes comparison difficult. A further caution follows. Entrepreneurship education should not be judged solely by whether students launch companies. Its educational value lies more broadly in capacity formation, judgment, collaborative action, and the ability to move ideas into public testing. The American case illustrates both the promise of ecosystem-rich provision and the difficulty of evaluating it coherently.

VI. Comparative Analysis of University Entrepreneurship Education in China and the United States

6.1 State Capacity, University Autonomy, and Resource Coordination

The sharpest difference between the two cases lies not in whether entrepreneurship education is valued. It lies in how that value is organized. Chinese universities have built entrepreneurship education through a clearly visible policy route. National reform plans, evaluation pressures within higher education, and youth employment concerns have pushed courses, platforms, and project systems into place with considerable speed. The advantages are obvious: high implementation efficiency, broad coverage, and concentrated mobilization of resources.

That speed is rooted in a specific institutional configuration. Higher education in China is closely tied to national development strategy, and universities operate within an administrative hierarchy in which policy priorities can be translated into ministerial targets, provincial implementation plans, institutional assessment indicators, and earmarked funding streams in relatively short order. Once entrepreneurship

education is framed as part of innovation policy, graduate employment governance, and university modernization, institutional leaders face strong incentives to respond quickly. Standardized policy templates lower coordination costs. Target-based implementation encourages replication. Platform growth, in this sense, reflects more than educational enthusiasm; it reflects a governance system with substantial state capacity, dense administrative coordination, and a long-standing ability to diffuse reform agendas across regions at scale.

American universities operate through a different logic. Their entrepreneurship education systems are shaped more heavily by institutional autonomy and by the presence of communities beyond the campus: foundations, alumni, local firms, civic partners, and regional innovation networks. This arrangement encourages experimentation. It also ties educational practice more closely to local conditions and institutional history. Diversity grows from that structure. So does inequality.

The American pattern is inseparable from the historical development of university self-governance and resource marketization. Universities in the United States generally possess wider discretion over curriculum, fundraising, center formation, and external partnerships. Philanthropic giving, alumni loyalty, competitive grant-seeking, and proximity to innovation clusters all help determine which institutions can build strong entrepreneurship programs and which cannot. That decentralized environment produces local adaptability and organizational creativity, yet it also means that entrepreneurship education often advances where reputational capital, donor trust, and market-facing networks are already thick. What appears as pedagogical flexibility is therefore supported by a deeper institutional order built around autonomy, competition for resources, and strong mediation by civil society and regional economies.

Neither model should be romanticized. Policy-led expansion can build capacity fast, yet a long stay in the administrative mode invites formalism, metric fixation, and curricular sameness. Ecology-led development can produce lively and context-sensitive practice, yet uneven social and institutional resources may widen differences across universities. Comparative analysis is useful here precisely because it resists easy ranking. Each route solves certain problems while generating others.

6.2 A Shared Turn from Knowledge Delivery to Action-Based Learning

Despite their institutional differences, both countries reveal a common movement away from knowledge-delivery models and toward action-based learning. Maresch et al. (2016) found that students from different disciplinary backgrounds respond differently to entrepreneurship education. That finding has deep curricular implications. A single template is rarely sufficient.

Chinese universities increasingly use project work, university-industry cooperation, and innovation training, but many programs still sit between broad access and deep integration. American universities made this shift earlier: design thinking, customer discovery, collaborative problem solving, and venture experimentation are now routine in many programs. The contrast is therefore one of depth and institutionalization rather than direction.

Those different starting points are institutional as much as pedagogical. In China, entrepreneurship education often has to move through established disciplinary structures, formal teaching plans, and approval routines that can make cross-unit coordination more cumbersome. Interdisciplinary reform is possible, but it usually requires alignment with existing administrative channels and evaluation frameworks. In the United States, minors, certificates, cross-listed courses, co-curricular labs, and center-based programming are easier to assemble because authority over credits, staffing, and educational experimentation is often more dispersed. Curricular flexibility, then, is not simply a matter of teaching philosophy. It is shaped by how academic authority is distributed inside the university.

The contrast is visible in institutional design. Tsinghua x-lab's official course page shows several practice-oriented offerings, whereas MIT's Trust Center organizes a longer pathway from courses to certificates, EIR advising, Orbit, and delta v. Both systems value action, but the American example more often offers a continuous progression across credit-bearing and co-curricular settings.

The comparison also clarifies what entrepreneurship education is not. It is not a mechanism for turning every student into a founder. Read more carefully, it is a mode of education that strengthens initiative, practical imagination, and complex problem-solving. That wider educational purpose matters a great deal for Chinese universities. Once entrepreneurship education is reduced to start-up registration or competition awards, much of its value disappears from view.

6.3 Platform Expansion Is Not the Same as Ecological Maturity

China has made major gains in platform construction. Entrepreneurship colleges, maker spaces,

incubation bases, and competition systems now give many universities a recognizable organizational shell for entrepreneurship education. That should not be dismissed. Yet platforms become educationally powerful only when they are connected to mentor support, project pipelines, legal services, market testing opportunities, alumni networks, and channels through which students can encounter judgment from outside the university.

American universities generally perform better here because many platforms are embedded in wider innovation systems rather than operating as stand-alone campus units. The key comparative lesson is simple: platforms can be built quickly; ecologies take longer. For Chinese universities, the priority is not endless platform replication but stronger linkages that turn existing platforms into settings for consequential learning.

The deeper reason is again institutional. In China, platform replication is facilitated by administrative coordination, campus-space allocation, local government partnership, and the availability of programmatic funding tied to innovation and employment goals. These conditions make organizational shells easier to create than dense external networks. In the United States, by contrast, the durability of entrepreneurship platforms often depends on a slower process of relationship-building among universities, investors, alumni, firms, and regional intermediaries. Such ecologies cannot be issued into existence through administrative instruction alone. They grow through repeated exchange, reputational trust, and a market environment in which outside actors have both incentive and capacity to remain engaged.

Yale Ventures makes this ecological logic especially visible by connecting Venture Lab, customer discovery, residency-based mentorship, innovation centers, funding programs, and annual innovation events within one accessible platform (Yale Ventures, 2025).

6.4 From Short-Term Outputs to Long-Term Learning Effects

Assessment remains a common difficulty in both countries. Chinese universities often privilege indicators that are highly visible in administrative settings: the number of courses offered, the scale of competition participation, the level of awards received, and the quantity of projects transformed into registered ventures. Such measures are manageable. They are also reductive. They encourage event-based activity and can pull institutions toward symbolic achievement rather than educational depth.

American practice leans more toward learning outcomes, student development, behavioral change, and later action, although standards remain inconsistent and follow-up windows vary (Carpenter & Wilson, 2021). A more useful framework would track three layers: cognitive and competence gains, sustained behavioral participation, and longer-run developmental outcomes such as post-graduation entrepreneurial activity, innovation work, and public value creation.

These evaluative tendencies also reflect broader governance styles. In China, indicators that can be aggregated and reported upward still travel most easily through the administrative system, even when they capture only part of the learning process. In the United States, the absence of a common national template allows more experimentation but weakens comparability. One system risks over-standardization; the other risks dispersion.

VII. Implications for the Improvement of Entrepreneurship Education in Chinese Universities

The comparative evidence suggests that reform in China should move beyond the logic of scale. The central task now is structural improvement. A tiered curricular sequence would be a good place to start. General entrepreneurship education for the whole student body still matters because it introduces core ideas and basic action awareness. Students with clearer project experience, stronger entrepreneurial interest, or a need for interdisciplinary innovation training require more advanced provision: venture labs, project incubation courses, experimental modules, and sequenced mentoring. A layered course chain can align exposure with readiness.

Learning design also needs stronger ties to real settings. The American case shows that educational effects often emerge when students confront actual problems, negotiate constraints, and assemble support across institutional boundaries. Chinese universities can respond by embedding entrepreneurship education more deeply in disciplinary study, industry college initiatives, and socially grounded project work. Entrepreneurship education should not remain an attached module. It should function as a mechanism through which students integrate knowledge and action.

Staffing reform is just as urgent. Entrepreneurship education is inherently cross-boundary work. No single faculty member can easily cover market analysis, technology transfer, financing, product

validation, organizational coordination, and field mentoring at once. Universities therefore need stable arrangements that connect internal faculty development with external mentor participation, especially from entrepreneurs, alumni, investors, and industry practitioners. Temporary events are not enough. Continuity matters.

To successfully advance entrepreneurship education, a phased implementation strategy is required, transitioning from foundational optimization to ecosystem institutionalization.

In the short term (1–2 years), the focus is on refining existing resources and laying a solid foundation. This involves auditing current entrepreneurship courses to separate general education from advanced, incubation-oriented modules. Simultaneously, practical support will be enhanced by recruiting part-time mentors from alumni and local industry, while linking existing maker spaces to regular office hours and project clinics. Crucially, evaluation metrics will be adjusted to reduce the dominance of single-event statistics in annual reviews.

In the long term (3–5 years), the strategy shifts toward systemic integration and ecosystem building. The institution will develop cross-school minor or certificate pathways to foster interdisciplinary learning and fully institutionalize mentor and investor networks. Durable partnerships will be forged with external incubators and legal/IP service providers. Finally, by establishing longitudinal graduate tracking, the institution will realign funding and faculty incentives around actual learning quality and sustained project development, rather than mere event volume.

By balancing immediate programmatic adjustments with long-term structural reforms, the institution can build a sustainable, high-impact entrepreneurial ecosystem.

Table 3. Reform Priorities for Entrepreneurship Education in Chinese Universities

Area for Improvement	Main Problem	Reform Path	Expected Effect
Curricular system	Strong generalization, weak advanced progression	Build a tiered and differentiated course sequence	Better curricular fit
Teaching approach	Too much lecture, too little practice	Strengthen project-based learning, design thinking, and interdisciplinary collaboration	Higher quality action-based learning
Staffing mechanism	Shortage of practice-oriented instructors	Build joint communities of internal faculty and external mentors	Greater educational realism
Platform ecology	Many platforms, weak connections	Strengthen links to industry, capital, and alumni networks	Stronger project conversion and sustained support
Evaluation model	Strong short-term performance orientation	Establish competence-based and longitudinal evaluation	Higher-quality governance of educational outcomes

Evaluation reform completes the picture. Entrepreneurship education should not remain tied too tightly to competition trophies, certificates, or registration counts. A stronger framework would track learning process, competence growth, project quality, and longer-term developmental outcomes together. Once evaluation changes, course design, resource allocation, and organizational behavior will change with it.

VIII. Conclusion

This article has compared recent trends in university entrepreneurship education in China and the United States through recent English-language scholarship on entrepreneurship education, higher education, entrepreneurial intention, support ecologies, and the development of Chinese university entrepreneurship education. In both countries, entrepreneurship education has moved beyond the single-course model toward broader systems that combine teaching, practice platforms, mentorship, and external support. The convergence stops there. China and the United States differ sharply in institutional drivers, curricular organization, and resource coordination.

China's strengths are easy to identify: rapid reform implementation, strong organizational mobilization, and efficient platform construction. The American case shows strengths of another kind: energetic curricular experimentation, richer opportunities for learning in real settings, and stronger integration of

university provision with external support networks. Each case also carries persistent limits. China still faces curricular homogenization, a shortage of practice-oriented instructors, and a tendency toward short-term evaluation. The United States continues to wrestle with concentrated resources, uneven access, and inconsistent assessment standards.

A more durable judgment follows from the comparison. The quality of university entrepreneurship education depends less on the number of courses or the number of projects than on whether curriculum, platforms, and support ecologies form a stable and effective relationship. For Chinese universities, the future does not lie in making entrepreneurship education merely bigger. It lies in making it deeper, more differentiated, and more educationally coherent. Tiered curricula, interdisciplinary action-based learning, robust mentor communities, ecologically connected platforms, and long-horizon evaluation together offer a path toward that goal. If such reforms take hold, entrepreneurship education can move beyond the status of a periodic policy priority and become a lasting part of higher education's effort to prepare young people for innovation, work, and public life.

This study has at least two limitations. First, it relies mainly on English-language scholarship and selected official institutional sources, so some Chinese-language policy discussions and campus practices may be underrepresented. Second, the analysis is literature-based rather than interview- or observation-based, which limits its ability to capture how entrepreneurship programs operate across different institutional tiers. Future research should combine English- and Chinese-language datasets, conduct multi-site case studies of universities at different levels, and track student outcomes longitudinally across curricular, ecological, and regional contexts.

Disclosure Statement

No potential conflict of interest was reported by the author.

Data Availability Statement

Data available on request from the author.

References

- Béchar, J.-P., & Grégoire, D. A. (2005). Entrepreneurship education research revisited: The case of higher education. *Academy of Management Learning & Education*, 4(1), 22-43. <https://doi.org/10.5465/amle.2005.16132536>
- Bischoff, K., Volkmann, C., & Audretsch, D. B. (2017). Stakeholder collaboration in entrepreneurship education: An analysis of the entrepreneurial ecosystems of European higher educational institutions. *The Journal of Technology Transfer*, 43(1), 20-46. <https://doi.org/10.1007/s10961-017-9581-0>
- Carpenter, A., & Wilson, R. (2021). A systematic review looking at the effect of entrepreneurship education on higher education student. *The International Journal of Management Education*, 19(3), 100541. <https://doi.org/10.1016/j.ijme.2021.100541>
- Chen, H., Tang, Y.-T., & Han, J. (2022). Building students' entrepreneurial competencies in Chinese universities: Diverse learning environment, knowledge transfer, and entrepreneurship education. *Sustainability*, 14(15), 9105. <https://doi.org/10.3390/su14159105>
- Cui, J., Sun, J., & Bell, R. (2019). The impact of entrepreneurship education on the entrepreneurial mindset of college students in China: The mediating role of inspiration and the role of educational attributes. *The International Journal of Management Education*, 19(1), 100296. <https://doi.org/10.1016/j.ijme.2019.04.001>
- Huang, Y., Liu, L., & An, L. (2020). Are the teachers and students satisfied: Sustainable development mode of entrepreneurship education in Chinese universities? *Frontiers in Psychology*, 11, 1738. <https://doi.org/10.3389/fpsyg.2020.01738>
- Linton, G., & Klinton, M. (2019). University entrepreneurship education: A design thinking approach to learning. *Journal of Innovation and Entrepreneurship*, 8, 3. <https://doi.org/10.1186/s13731-018-0098-z>
- Lu, G., Song, Y.-p., & Pan, B. (2021). How university entrepreneurship support affects college students' entrepreneurial intentions: An empirical analysis from China. *Sustainability*, 13(6), 3224. <https://doi.org/10.3390/su13063224>
- Lv, Y., Chen, Y., Sha, Y., Wang, J., & An, L. (2021). How entrepreneurship education at universities influences entrepreneurial intention: Mediating effect based on entrepreneurial competence. *Frontiers in Psychology*, 12, 655868. <https://doi.org/10.3389/fpsyg.2021.655868>
- Maresch, D., Harms, R., Kailer, N., & Wimmer-Wurm, B. (2016). The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs. *Technological Forecasting and Social Change*, 104, 172-179. <https://doi.org/10.1016/j.techfore.2015.11.006>

- Martin, B., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28(2), 211-224. <https://doi.org/10.1016/j.jbusvent.2012.03.002>
- MIT Martin Trust Center for Entrepreneurship. (n.d.). The Martin Trust Center for MIT Entrepreneurship. Retrieved July 6, 2026, from <https://entrepreneurship.mit.edu/courses/>
- Mei, H., Lee, C.-H., & Xiang, Y. (2020). Entrepreneurship education and students' entrepreneurial intention in higher education. *Education Sciences*, 10(9), 257. <https://doi.org/10.3390/educsci10090257>
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277-299. <https://doi.org/10.5465/amle.2015.0026>
- Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? The role of learning and inspiration. *Studies in Higher Education*, 43(3), 452-467. <https://doi.org/10.1080/03075079.2016.1177716>
- Piperopoulos, P., & Dimov, D. (2015). Burst bubbles or build steam? Entrepreneurship education, entrepreneurial self-efficacy, and entrepreneurial intentions. *Journal of Small Business Management*, 53(4), 970-985. <https://doi.org/10.1111/jsbm.12116>
- Rauch, A., & Hulsink, W. (2015). Putting entrepreneurship education where the intention to act lies: An investigation into the impact of entrepreneurship education on entrepreneurial behavior. *Academy of Management Learning & Education*, 14(2), 187-204. <https://doi.org/10.5465/amle.2012.0293>
- Solomon, G. T. (2007). An examination of entrepreneurship education in the United States. *Journal of Small Business and Enterprise Development*, 14(2), 168-182. <https://doi.org/10.1108/14626000710746637>
- Solomon, G. T. (2008). Entrepreneurship education in the United States. In *Local economic and employment development (LEED)*. OECD Publishing. <https://doi.org/10.1787/9789264044104-6-en>
- Su, Y., Zhu, Z., Chen, J., Jin, Y., Wang, T., & Lin, C.-L. (2021). Factors influencing entrepreneurial intention of university students in China: Integrating the perceived university support and theory of planned behavior. *Sustainability*, 13(8), 4519. <https://doi.org/10.3390/su13084519>
- Tang, M., Chen, X., Li, Q., & Lü, Y. (2014). Does Chinese university entrepreneurship education fit students' needs? *Journal of Entrepreneurship in Emerging Economies*, 6(2), 163-178. <https://doi.org/10.1108/JEEE-02-2014-0002>
- Tsinghua x-lab. (2026). Innovation and entrepreneurship courses. Retrieved July 6, 2026, from <https://www.x-lab.tsinghua.edu.cn/461/list.htm>
- Tsinghua x-lab. (2026). Tsinghua x-lab. Retrieved July 6, 2026, from <https://www.x-lab.tsinghua.edu.cn/>
- Wei, X., Liu, X., & Sha, J. (2019). How does entrepreneurship education influence the students' innovation? Testing on the multiple mediation model. *Frontiers in Psychology*, 10, 1557. <https://doi.org/10.3389/fpsyg.2019.01557>
- Wu, S.-z., & Wu, L. (2008). The impact of higher education on entrepreneurial intentions of university students in China. *Journal of Small Business and Enterprise Development*, 15(4), 752-774. <https://doi.org/10.1108/14626000810917843>
- Yundong Wu, Weijian Kong, Tingting Lv, Xiaoqing Xi, Bowei Liu, Ruofan Lin, & Jintao Li. (2025). The influence of college students' views on entrepreneurial success, failure, and market prospects on their entrepreneurial intentions. *Global Academic Frontiers*, 3(2), 73-84. <https://doi.org/10.5281/zenodo.15582227>
- Yundong Wu, Weijian Kong, & Ruofan Lin. (2025). Acceptance and Achievements of Digital Transformation by Small and Micro Enterprise Owners: The Comprehensive Influence of Internal and External Factors. *Journal of Innovation and Entrepreneurship*, 1(1), 34-42. <https://doi.org/10.63944/es6s.JIE>
- Yale Ventures. (2025). Yale Ventures at Yale University | Innovation and entrepreneurship. Retrieved July 6, 2026, from <https://ventures.yale.edu/>
- Zhang, Y., Duysters, G., & Cloudt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, 10(3), 623-641. <https://doi.org/10.1007/s11365-012-0246-z>
- Zhou, M., & Xu, H. (2012). A review of entrepreneurship education for college students in China. *Administrative Sciences*, 2(1), 82-98. <https://doi.org/10.3390/admsci2010082>