

START-UP PROJECTS AS A COMPETENCY-BUILDING TOOL: SUPPORTING UZBEKISTAN’S 2030 ENTREPRENEURSHIP AGENDA THROUGH HIGHER EDUCATION

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Abstract: This article examines the pedagogical integration of start-up projects within Uzbekistan’s higher education system as a strategic instrument for developing entrepreneurial competencies in alignment with the nation’s 2030 entrepreneurship agenda. As Uzbekistan faces the challenge of absorbing nearly one million young labor market entrants annually, the traditional model of preparing students as job seekers proves insufficient, necessitating a fundamental educational shift toward cultivating job creators and innovators. The article argues that start-up projects, conceived and developed within academic environments, represent a powerful experiential learning tool that embeds critical competencies - including creative thinking, problem-solving, resilience, teamwork, and opportunity recognition - that are difficult to impart through conventional lecture-based instruction. Drawing on competency-based and project-based learning frameworks, the analysis explores how Uzbekistan’s emerging entrepreneurial ecosystem, comprising university accelerators, incubation centers, grant programs, and the new “Fundamentals of Entrepreneurship” course, provides the necessary infrastructure for this pedagogical transformation. The article synthesizes theoretical foundations from the EntreComp competence model and international best practices in entrepreneurship education, demonstrating how experiential, problem-centered approaches foster durable competency development. Through a qualitative case study methodology examining universities participating in the “Universities - startup generators” program, the research investigates pedagogical practices, institutional factors, and competency outcomes associated with start-up project implementation. This article contributes to the growing body of scholarship on entrepreneurship education in transitional economies and offers practical insights for educators, policymakers, and institutional leaders seeking to harness higher education as an engine for national economic transformation.

Keywords: entrepreneurship education, start-up projects, competency-based learning, experiential pedagogy, higher education, Uzbekistan 2030 agenda

Introduction

The concept of entrepreneurship in higher education has undergone a profound transformation, moving from a specialized business discipline to a core competency relevant across all fields of study. This evolution reflects a global recognition that the skills associated with entrepreneurial thinking - creativity, problem-solving, resilience, and the ability to identify and act upon opportunities - are essential for navigating the complexities of the modern world. For a nation like Uzbekistan, currently charting an ambitious course towards economic modernization and diversification as outlined in its 2030 agenda, the integration of start-up projects into the pedagogical fabric of higher education is not merely an innovative trend but a strategic imperative. Start-up projects, conceived and developed within the academic environment, represent a powerful competency-building tool that can directly support the nation’s vision of fostering a generation of job creators and innovators. By moving beyond the passive absorption of theoretical knowledge and embracing the active, experiential learning that start-up creation demands, universities can become the primary engines for cultivating the human capital necessary for Uzbekistan’s future prosperity.

Literature Review

The theoretical foundations of entrepreneurship education have evolved considerably, shifting from narrow business skill acquisition toward comprehensive competency development. Contemporary scholarship distinguishes between education about entrepreneurship (knowledge acquisition) and education through and for entrepreneurship (experiential skill development and attitudinal formation). This distinction is central to understanding start-up projects as pedagogical tools, as they embody the latter approach by placing students in active, problem-centered learning environments.

A prominent framework in the field is the European Commission’s EntreComp model, which conceptualizes entrepreneurial competence as encompassing three interrelated areas: ideas and opportunities, resources, and action. This model has been widely validated and serves as a holistic reference for designing entrepreneurship curricula across diverse educational contexts. Competence-based approaches recognize two dimensions of entrepreneurial capability: a narrow dimension tied to enterprise functions such as financial and economic literacy, and a broader dimension linked to entrepreneurial mindsets and behaviors including autonomy, teamwork, communication, initiative, and decision-making.

The pedagogical literature emphasizes that project-based entrepreneurial learning fosters these competencies through iterative processes of idea generation, business modeling, and stakeholder engagement. Studies of long-term program implementation demonstrate that entrepreneurship education achieves durability and coherence when integrated into compulsory, project-based coursework that requires students to articulate assumptions, navigate uncertainty, and develop shared analytical vocabulary across multiple project cycles. Research on digital entrepreneurship education further highlights that technologies such as AI and collaboration platforms enhance creativity, problem-solving, and teamwork, though regional cultural contexts shape how these competencies are prioritized - with Asian contexts tending toward technological proficiency and European contexts emphasizing social values.

Research Methods

This study adopts a qualitative, multi-method research design appropriate for investigating the pedagogical integration of start-up projects in Uzbekistan’s higher education context. The research employs a case study approach, examining universities participating in the “Universities - startup generators” program and the new “Fundamentals of Entrepreneurship” course introduced for the 2026-2027 academic year.

Data collection encompasses three primary sources. First, documentary analysis of policy documents, presidential decrees, and curriculum materials provides the institutional framework for understanding how start-up projects are formally structured within higher education. Second, semi-structured interviews with university faculty, program administrators, and student participants are conducted to capture lived experiences and perceptions of competency development through start-up projects. Third, participant observation of selected start-up project courses and pitch competitions provides direct insight into pedagogical practices and student engagement.

Data analysis follows an iterative, thematic approach. Documentary materials and interview transcripts are coded using a framework derived from the EntreComp competency model and the identified dimensions of entrepreneurial competence. Triangulation across data sources strengthens interpretive validity. The analysis focuses on identifying patterns in competency development, pedagogical practices that facilitate learning, and institutional factors that support or constrain the effectiveness of start-up projects as a pedagogical tool. This methodological approach is consistent

with established practices in entrepreneurship education research that employ qualitative designs to explore competence development in authentic educational contexts.

The strategic direction of Uzbekistan under its 2030 agenda places a significant emphasis on youth engagement and economic participation. The “Youth of the New Uzbekistan - 2030” strategy, for instance, prioritizes ensuring youth employment and supporting their entrepreneurial activity as a key area of national development. This is not merely a policy aspiration but a pragmatic response to a demographic reality where approximately 22 million young people reside in the country, with close to one million expected to enter the labor market by 2030. This demographic dividend presents a tremendous opportunity, but it also necessitates a fundamental shift in educational paradigms. The traditional model of preparing students primarily as job seekers is insufficient to absorb this growing workforce; the future of work demands that higher education institutions cultivate the next generation of employers and innovators. The goal, as articulated in national discussions, is to transform young people from job applicants into value-creating professionals who can drive economic growth. Start-up projects offer a direct pedagogical pathway to achieve this transformation, embedding the very skills and mindsets required for economic self-sufficiency and innovation.

At the heart of this pedagogical shift is the development of a robust start-up ecosystem within and around universities. A start-up ecosystem is not just a collection of individual projects; it is a supportive environment comprising mentors, investors, incubators, accelerators, and a culture that encourages risk-taking and innovation. When this ecosystem is integrated into the educational process, it creates a powerful context for learning. Students are not just studying entrepreneurship in the abstract; they are immersed in it. This is a core principle of competency-based and context-based education, where knowledge is acquired and applied in realistic, meaningful situations. The pedagogical potential of such an ecosystem lies in its ability to develop a range of critical competencies that are difficult to teach through lectures alone: creative and innovative thinking, leadership, effective teamwork, complex problem-solving, and risk management. These are the “meta-competencies” that define the modern, agile professional and are precisely the skills that the new “Fundamentals of Entrepreneurship” course, to be introduced in all higher education institutions starting in the 2026-2027 academic year, aims to impart. This course, designed to provide practical skills in launching start-ups and developing business plans, represents a foundational step, but its true potential will be realized when it is paired with hands-on project work.

The most effective way to develop these competencies is through experiential, project-based learning. The traditional lecture, while useful for conveying foundational concepts, cannot replicate the intensity and complexity of bringing an idea to market. Start-up projects serve as a vehicle for this experiential learning, placing students in situations where they must navigate ambiguity, make decisions with incomplete information, and collaborate with peers from diverse disciplinary backgrounds. This aligns closely with models of successful entrepreneurship education seen globally, such as the Entrepreneurship and Innovation Project course at the University of Edinburgh, where students work in teams to identify a problem, develop a solution, and construct a comprehensive business plan over a semester. This course is designed as an enquiry-based, problem-centered experience that supports students in “finding and justifying the entrepreneurial solution to a problem,” a process that inherently builds communication, strategic thinking, and collaborative skills. Similarly, the “Bridging Studies” model emphasizes a holistic project-based approach where an individual or group project is the heart of the curriculum, and seminars on topics like creativity, project management, and communication are structured around supporting its development. This framework ensures that theoretical learning is immediately applicable, and the final conference, where students present their work to a network of stakeholders, bridges the gap between academia and the real world.

Uzbekistan has made remarkable strides in constructing the infrastructure necessary to support these pedagogical goals. A comprehensive four-stage ecosystem to support start-ups, from idea generation to export expansion, has been established under a presidential decree. This system is designed to identify promising start-up ideas, support product development, facilitate launch, and assist in scaling operations to international markets, aiming for ambitious targets of 5,000 start-ups and \$2 billion in venture investment by 2030. For higher education, key initiatives like the “Universities - startup generators” program are transformative. This program introduces student accelerators, internships, and exchange initiatives, and grants universities the right to invest up to \$20,000 per project in promising student start-ups through their incubation centers. This ability to provide direct financial support is a game-changer, moving university support from the conceptual to the tangible. Furthermore, annual national “Most innovative idea” competitions for state universities, with grants of UZS 100 million for winners, create a powerful incentive for students to engage with the start-up process and provide a clear pathway from a classroom project to a funded venture. The establishment of university-based research and development centers by 2027, equipped with modern labs and digital infrastructure, will further solidify this ecosystem, creating a physical space where interdisciplinary teams can collaborate and prototype their ideas. This infrastructure is also designed to support broader goals, including engaging 900,000 young people in volunteer activities and increasing the number of training centers to 90,000 by 2030, thereby creating a culture of proactivity and community engagement.

The integration of start-up projects into higher education is not just about economics; it is a deeply pedagogical endeavor. It represents a shift towards a more engaged, active, and relevant form of learning that can cultivate the specific competencies demanded by the 21st-century economy. The European project “Entrepreneurship Without Borders” exemplifies this approach by drawing inspiration from incubators and accelerators to create learning experiences rooted in “experimentation, collaboration, and active participation”. The development of collaborative challenges, rapid prototyping, and strategic foresight workshops are methods designed to place participants in realistic and engaging learning situations. This experiential focus is echoed in a successful model piloted at an international university, which integrated start-up labs and industry co-mentorship into engineering curricula. The model embedded entrepreneurial pathways into capstone and vertically integrated projects, equipping students to translate technical solutions into scalable ventures through real-world problem solving and leadership development. These examples demonstrate that when students are given the opportunity to grapple with real challenges in a supportive environment, their engagement increases, and their readiness for innovation improves dramatically. The findings from such models are directly applicable to Uzbekistan’s higher education system, suggesting that the planned curricular changes, when supported by the emerging ecosystem infrastructure, can yield significant results in student competency development.

The role of specialized institutions in championing this agenda is also critical. The Graduate School of Business and Entrepreneurship (GSBE) in Uzbekistan is a prime example of an institution dedicated to this mission. Its mission is to train leading specialists capable of working effectively in contexts of digital transformation and a green economy, with a focus on developing responsible and proactive leaders. The GSBE’s research focus on the “Entrepreneurial Ecosystem and Startup Projects” provides the academic rigor and strategic guidance necessary to support the national agenda. By offering advanced degrees like MBAs with specializations in small business and entrepreneurship, and by conducting research on supporting new business initiatives, the GSBE acts as a hub of expertise and a bridge between policy, education, and practice. Its faculty, comprised of professionals with international experience, ensures that the education provided is not only locally relevant but also

globally competitive, helping to integrate Uzbek entrepreneurship into the wider international community. The success of such institutions will be pivotal in creating a cadre of educators and mentors capable of guiding the next generation of student entrepreneurs.

Conclusion

In conclusion, the alignment of national strategic goals with a progressive educational agenda positions Uzbekistan to make a significant leap forward in human capital development. The use of start-up projects as a competency-building tool is not simply a pedagogical fad but a strategic necessity that responds directly to the challenges and opportunities of the 2030 agenda. By creating a vibrant and supportive entrepreneurial ecosystem within higher education, Uzbekistan is cultivating the very skills that will drive its future economy: creativity, resilience, and a proactive, problem-solving mindset. The initiatives to introduce core entrepreneurship courses, establish university accelerators, invest in student projects, and develop a comprehensive support infrastructure represent a coherent and ambitious strategy. When students are empowered to move from the classroom to the marketplace, they are not just building businesses; they are building the human capital that will define the New Uzbekistan. This is the transformative power of education in the 21st century, and Uzbekistan is building a model for the region and the world to observe.

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