

Foreign Experiences in Developing Entrepreneurial Skills in Students: Convergent Analysis

Radjabov Sardor Bakhtiyorovich

Independent researcher at the National Institute of Educational Pedagogy named after Qori Niyazi, Uzbekistan

Received: 09 September 2026; **Accepted:** 03 October 2026; **Published:** 26 October 2026

Abstract: The article studies foreign experiences in developing entrepreneurial skills in general secondary school students based on the convergent analysis method. A comparative analysis of entrepreneurship education models in the educational systems of Finland, Germany, the USA, South Korea, Singapore and Japan, as well as Turkey, Malaysia, Indonesia, the Gulf States, Pakistan and Bangladesh was carried out in terms of strategic direction, pedagogical mechanism, developed competencies and criteria for compatibility with national values. As a result of the analysis, a common didactic mechanism combining various models was identified: the cycle “problem - idea - prototype - test - presentation - reflection”, and the structure of entrepreneurial competence consisting of cognitive, practical, communicative and moral-social blocks was based. Scientific and methodological recommendations were developed for adapting foreign experience to the principles of national education for school education in Uzbekistan.

Keywords: Entrepreneurship education, entrepreneurial competence, convergent analysis, foreign experience, project-based education, dual education, social entrepreneurship, business pedagogy, metacompetence.

Introduction: In the context of the digital transformation of the global economy and structural changes in the labor market, the formation of entrepreneurial skills in the younger generation has become one of the priority areas of educational policy. The competencies required by the 21st century labor market are not limited to academic knowledge. They also include practical life skills such as initiative, innovative thinking, economic literacy, problem solving, teamwork, communication, risk management, and the ability to create products and services. Therefore, entrepreneurship education is interpreted in modern pedagogy as an expanded, practice-oriented and competency-based model of traditional “economic education”.

In foreign countries, the development of entrepreneurial competencies in students usually serves three strategic goals: ensuring economic independence and employment of young people;

training personnel for the innovation ecosystem; developing solutions to societal problems through social entrepreneurship. Therefore, in many countries, entrepreneurship education is established not as a separate academic subject, but as a meta-competence integrated into the educational content. In the EntreComp framework, entrepreneurial competence is also defined as the ability to turn an idea into value in any field, not limited to business.

Finland: Phenomenon-based education. In the Finnish education system, entrepreneurial skills are formed mainly through interdisciplinary integration. Students acquire the skills of problem identification, resource calculation, team planning, and presentation of results in the process of solving real-life problems. The main idea of the model is to prioritize the development of life-long skills rather than providing students with ready-made knowledge. According to M. Lackeus's classification, this approach belongs to the type of “education through entrepreneurship” and forms

entrepreneurial competence naturally, together with the content of other subjects [9].

Germany: dual education and vocational entrepreneurship. In Germany, entrepreneurship training is closely linked to vocational education and the labor market. The dual education model (the combination of study and production practice) develops in students skills such as work culture, responsibility, adherence to quality standards, time management and customer orientation. The advantage of the model is its practical effectiveness: the student observes and directly participates in the economic process not in the classroom, but in a real work environment.

USA: Startup culture and simulation. Entrepreneurship education in the USA is integrated with a startup ecosystem, business incubators, school clubs, competitions and hackathons. Students are given the experience of creating a project and testing it in the market. Entrepreneurial skills are strengthened through creative ideas, prototyping, marketing strategies, financial and investment concepts, team management, presentation and negotiation. As HM Neck and PG Greene point out, this model sees entrepreneurship as a practice to be practiced, not a theory to be learned [4]. In this system, student activity is at the center, and the teacher plays the role of a mentor and guide. At the same time, a study conducted in the Netherlands

showed that mini-company programs do not always have the expected motivational effect; therefore, practical programs require careful pedagogical planning and evaluation.

South Korea and Singapore: technological entrepreneurship. In these countries, entrepreneurship education is combined with STEM/STEAM, robotics, engineering and digital technologies. Students see a startup as an “intellectual product” - a mobile application, an automated solution, a robot, a service platform. This experience shows that digital competence and entrepreneurial competence are complementary systems: without technology, a startup will develop slowly, and without an entrepreneurial mindset, technology will not reach the market.

Japan: Work ethic and kaizen culture. In Japan, entrepreneurial skills are associated with a culture of work ethic, discipline, quality, team responsibility, and continuous improvement (kaizen). The pedagogical advantage of the Japanese model is that it instills in students small habits that lead to big results - cleanliness, order, punctuality, duty, quality, and trust. Such education creates a stable psychological foundation for long-term success in a business environment.

The results of the above analysis are summarized in Table 1.

Table 1.

Models of Entrepreneurship Skills Development in Western and East Asian Countries (Comparative Analysis)

Country/model	Basic approach	Fixed assets	Developing competencies	Implications for Uzbekistan
Finland	Phenomenon-based learning	Interdisciplinary projects, life problems	Problem solving, teamwork, reflection	Integrating entrepreneurship into academic subjects
Germany	Dual education	Education and production practice	Responsibility, quality, work culture	Strengthening school-college-enterprise cooperation
USA	Startup ecosystem	Hackathon, incubator, school club	MVP, marketing, communication, leadership	Systematization of startup clubs and competitions
South Korea, Singapore	Technological entrepreneurship	STEM, robotics	Innovation, technical thinking, digital literacy	IT and business integration
Japan	Work ethic (kaizen)	Discipline, teamwork	Stable habits, quality, trust	Strengthening work culture and quality education

The table data shows that each model prioritizes different aspects of entrepreneurial competence: Finland - cognitive and reflexive, Germany and Japan - work ethic, the USA - communicative and market-oriented, Korea and Singapore - technological and innovative aspects.

Experience of the East and Muslim countries. The experience of entrepreneurship education in the East, especially in Muslim countries, is of particular importance for Uzbekistan. In these countries, entrepreneurship education is being formed not only as an economic mechanism, but also in combination with the principles of spiritual and moral education, honest work, social responsibility and involvement in the development of society. As AAGümüşay noted, from an Islamic perspective, entrepreneurship is an activity that, along with making a profit, must meet the requirements of moral standards and social justice [10].

From the perspective of business pedagogy, three methodological foundations are important in analyzing the experience of Muslim countries: first, the competency-based approach to entrepreneurship is not knowledge, but a system of behavior, skills, and responsibility that is focused on results; second, cultural and national identity requires that entrepreneurship education be in harmony with national values and religious and moral norms; third, technological modernization, the digital economy, and startup culture require the inclusion of technological entrepreneurship in the content of education.

Turkey: Vocational education and ethical work. The main priority of entrepreneurship education in Turkey is to prepare for the profession and develop life skills. In the general education curriculum, entrepreneurship is taught as an interdisciplinary integration, and in the vocational education system, as practice-oriented modules. An important aspect of this practice is that entrepreneurship is interpreted not only as a means of

generating income, but also as a socio-cultural capital that includes cooperation, honesty, hard work and initiative.

Malaysia and Indonesia: Digital Entrepreneurship and the Halal Economy. In these countries, the strategy for developing youth entrepreneurship encompasses economic innovation, as well as halal products, Islamic finance, and social entrepreneurship. One of the main mechanisms has been to develop a startup mindset, e-commerce, and interest in the service sector among schoolchildren. The pedagogical value of this approach is that the student understands entrepreneurship as a model of service to society and solving a social problem; the concept of “success” is associated not with wealth, but with responsibility, influence, and trust.

Saudi Arabia, UAE, Qatar: innovation ecosystem. In the Gulf states, entrepreneurship education is combined with the policy of economic diversification and digital transformation. A system of startups, technoparks, accelerators and innovation centers is being developed; projects based on STEM/STEAM, robotics, artificial intelligence and programming occupy a special place in education. At the same time, societal values and national identity act as a kind of “moral filter” in entrepreneurship education: student initiative is evaluated by the criteria of honesty, justice, balance of interests and responsibility.

Pakistan and Bangladesh: Social Entrepreneurship and Microeconomic Approaches. In these South Asian countries, entrepreneurship skills are developed as a social mechanism aimed at employment, poverty reduction, and support for family businesses. Practical training in schools, simple business models, financial literacy, and a culture of respect for work are the main tools. In this model, entrepreneurship is not an “elite startup”, but a vital competence necessary for every young person to find their place in life.

Table 2.

Models of student entrepreneurship development in Muslim countries (comparative analysis)

Group of countries	Strategic direction	The pedagogical mechanism	Competencies to be developed	Harmony with national values
Turkey	Professional training, practice	Modular training, practical assignments	Work culture, initiative, responsibility	Moral work, teamwork

Group of countries	Strategic direction	The main pedagogical mechanism	Competencies to be developed	Harmony with national values
Malaysia, Indonesia	Digital entrepreneurship and the honest economy	Projects, e-commerce elements	Financial literacy, startup service, mindset,	Honesty, social benefit
UAE, Qatar, Saudi Arabia	Innovation ecosystem, technological entrepreneurship	STEM/STEAM, technopark environment	Technological thinking, innovation, leadership	The harmony of moral criteria and modernization
Pakistan, Bangladesh	Social entrepreneurship	Microprojects, practical business games	Thrift, problem solving, self-sufficiency	Justice, work, family responsibility

The experience of Muslim countries is characterized by three general trends. The first trend is the combination of entrepreneurship and spirituality: entrepreneurship is perceived as a means of education, strengthening the criteria of responsibility, honesty, trust and social benefit in the student. The second trend is the priority of practical and project-based education: competencies are formed not through theoretical lectures, but through cases, simulations, service projects and digital product creation. The third trend is the strengthening of technological entrepreneurship: in the case of the UAE, Saudi Arabia, Qatar and Malaysia, the development of innovative startup competencies is observed already at

the school level.

Comparing the experiences of the two groups of countries on the basis of common criteria showed that, although their priorities differ, they have a common didactic mechanism. This mechanism can be expressed as a cyclical model of the formation of entrepreneurial competence of the student (Figure 1). The cycle combines the interdisciplinary problem-solving stages in the Finnish model, the minimum viable product (MVP) and market testing in the US model, and the technological prototype stages in the Korean and Singaporean models into a single process.

Entrepreneurial Competence Develops Through a Repeating Cycle

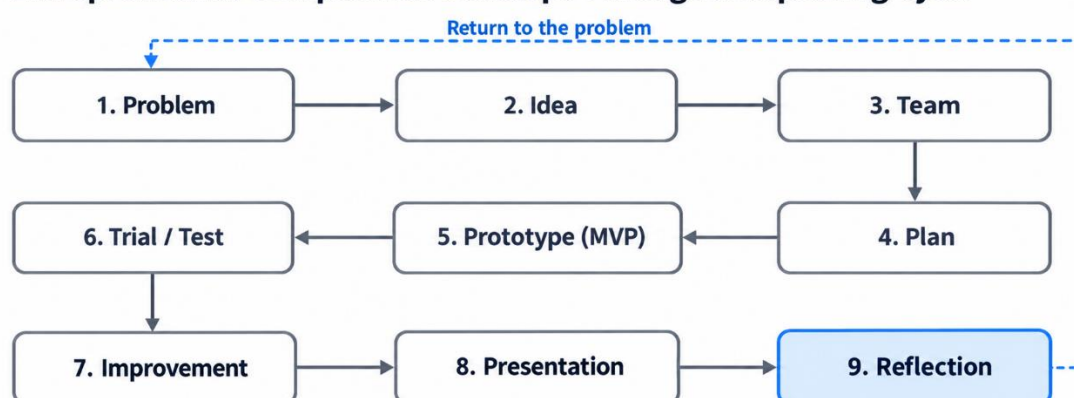


Figure 1. The cycle of formation of a student's entrepreneurial competence (convergence of foreign models)

An important feature of the cycle is that it ends with reflection and a return to a new problem. This is consistent with the view of DF Kuratko about the continuous and iterative nature of entrepreneurial

education. The reflection stage ensures that the student seeks an answer to the question “what have I learned?” and serves to stabilize the entrepreneurial relationship noted by A. Fayolle and B. Gailly.

The second result of the convergent analysis is related to the structural structure of entrepreneurial competence. While Western models mainly emphasize cognitive, practical and communicative aspects, models from Muslim countries prioritize the moral-social aspect. By combining both approaches, a four-block

structure of entrepreneurial competence was established (Figure 2). In it, the moral-social block is considered the basis of the remaining three blocks, since in the Uzbek educational tradition, entrepreneurship is interpreted in an inextricable link with honest work and social responsibility.

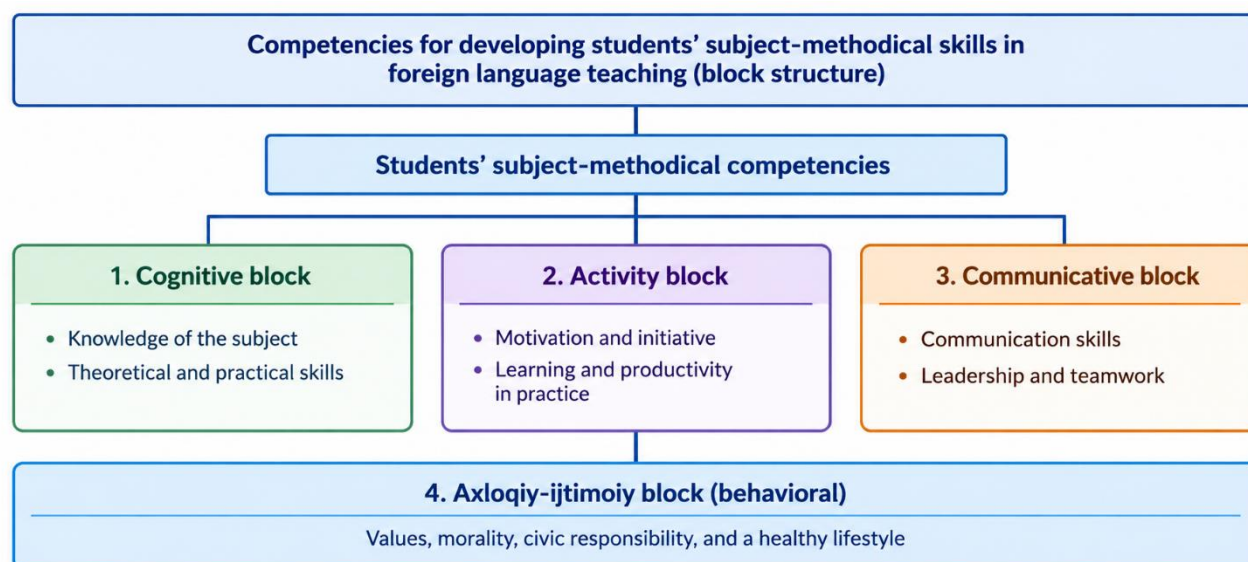


Figure 2. Four-block structure of entrepreneurial competence (author's development)

In general, the development of entrepreneurial skills is most effectively achieved not by teaching within a single subject, but by redesigning the educational environment and the architecture of learning activities. Although the priorities differ in each model, there is a common trend that unites them: entrepreneurial competence is formed in the unity of social activity, practical experience, technology, teamwork and moral responsibility.

Implications for general secondary education in Uzbekistan

Based on the results of the convergent analysis, the following scientific and methodological recommendations were developed for the development of entrepreneurial skills in schools in Uzbekistan:

1. **Integrative organization.** Introduce entrepreneurship education not as a separate subject, but as a metacompetence integrated into the content of mathematics, technology, computer science, fundamentals of economic knowledge, and native language subjects.
2. **Practical cycles.** Systematic organization of project, simulation and school startup programs throughout

the academic year based on the cycle "Problem - Idea - Prototype - Test - Presentation - Reflection".

3. **Technological base.** Development of STEM and digital competencies as a technological basis for entrepreneurship, harmonization of the activities of IT circles and startup clubs.
4. **Network of cooperation.** Establish a mentoring and internship system between schools, vocational education institutions, local businesses and entrepreneurs.
5. **Spiritual basis.** Organize entrepreneurship education based on the chain of "honest work - responsibility - innovation" and strengthen the sense of involvement in students through social entrepreneurship projects.
6. **Two-dimensional assessment.** Assessing results not only in terms of the product (outcome), but also in terms of competency growth (process) and educational indicators - responsibility, integrity, service culture; this can be done by adapting the step-by-step scale from the EntreComp framework [7].

CONCLUSION

In conclusion, the analysis of foreign experience has

shown the importance of integrative education, practical projects, digital technologies, and spiritual and moral education in developing entrepreneurial skills in students. In the Uzbek education system, it is possible to educate enterprising, innovative-thinking, and socially responsible young people by combining these experiences with national values, introducing the “problem - idea - prototype - test - presentation - reflection” cycle, and comprehensive assessment of competencies.

REFERENCES

1. Law of the Republic of Uzbekistan "On Education". September 23, 2020, No. O'RQ-637. <https://lex.uz/docs/5013007>
2. Decree of the President of the Republic of Uzbekistan “On the Development Strategy of New Uzbekistan for 2022–2026”. January 28, 2022, No. PF-60. <https://lex.uz/docs/5841063>
3. Kuratko DF The emergence of entrepreneurship education: Development, trends, and challenges // Entrepreneurship Theory and Practice. – 2005. – Vol. 29, No. 5. – P. 577–598. DOI: 10.1111/j.1540-6520.2005.00099.x
4. Neck HM, Greene PG Entrepreneurship education: Known worlds and new frontiers // Journal of Small Business Management. - 2011. - Vol. 49, No. 1. – P. 55–70. DOI: 10.1111/j.1540-627X.2010.00314.x
5. Fayolle A., Gailly B. The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence // Journal of Small Business Management. - 2015. - Vol. 53, No. 1. – P. 75–93.
DOI: 10.1111/jsbm.12065
6. Oosterbeek H., van Praag M., Ijsselstein A. The impact of entrepreneurship education on entrepreneurship skills and motivation // European Economic Review. - 2010. - Vol. 54, No. 3. – P. 442–454. DOI: 10.1016/j.eurocorev.2009.08.002
7. Bacigalupo M., Kampylis P., Punie Y., Van den Brande G. EntreComp: The Entrepreneurship Competence Framework. - Luxembourg: Publications Office of the European Union, 2016. - 36 p. DOI: 10.2791/593884
8. European Commission/EACEA/Eurydice. Entrepreneurship Education at School in Europe. Eurydice Report. – Luxembourg: Publications Office of the European Union, 2016. DOI: 10.2797/301610
9. Lackéus M. Entrepreneurship in Education: What, Why, When, How. Entrepreneurship360 Background Paper. - Paris: OECD, 2015. - 45 p.
https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf
10. Gümüşay AA Entrepreneurship from an Islamic perspective // Journal of Business Ethics. - 2015. - Vol. 130, No. 1. – P. 199–208.
DOI: 10.1007/s10551-014-2223-7