

INTEGRATED STRATEGIC MODEL FOR EDUCATIONAL LEADERSHIP AND ENTREPRENEURIAL SKILLS DEVELOPMENT AT THE HIGH SCHOOL LEVEL: A COMPARATIVE APPROACH BETWEEN ROMANIA AND THE REPUBLIC OF MOLDOVA

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Abstract

The article analyses how managerial strategies can support the development of entrepreneurial skills in secondary education, based on a comparison between Romania and the Republic of Moldova. Based on the premises of the EntreComp theoretical framework and the literature on transformational and sustainable educational leadership, the study proposes an integrative strategic model (MSI-EAL) that combines digitization, collaboration, and sustainability as cross-cutting directions. Institutional best practices and systemic challenges are analyzed, particularly with regard to curriculum integration, educational partnerships, and the impact of participatory leadership. The results show that where school leadership supports innovation, involves community actors, and integrates entrepreneurial vision into the organizational culture, the effects on students are visible: increased motivation, real initiatives, and transferable skills. The comparative analysis highlights both commonalities and differences in approach, while also providing directions for action for inclusive and effective educational policies.

Key words: *entrepreneurship education, educational leadership, key competences, sustainability, digitalization*

JEL Classification: *I21, L26, O35*

I. INTRODUCTION

Entrepreneurial education is not just a lesson about business or an optional subject in the curriculum, but rather an invitation to free thinking, initiative, and action. Nowadays, uncertainty is the rule, not the exception, so young people need to learn more than just economic theories: they need to discover how to turn ideas into real projects, how to collaborate effectively, and how to take smart risks. That is why the European Commission has included entrepreneurial competence among the eight key competences for lifelong learning. Not only because it is useful professionally, but because it teaches you to face life with initiative and courage (European Commission, 2019). School plays a strategic role in this equation, so when entrepreneurial education is well integrated into high school, students not only learn about business, but also begin to think of their ideas as initiatives with potential impact, gain autonomy, become more curious, and build the confidence to take action. International studies support this direction: young people who participate in such programs tend to develop an active attitude and are more easily oriented toward flexible and realistic career paths (Fayolle & Gailly, 2015). But for all this to happen, changes at the managerial level are necessary, we are not just talking about an administrative director, but about an educational leader who understands that the future of students is being built now, with every decision (Fullan, 2019). Leadership makes the difference between a school that “checks off projects” and one that turns ideas into reality. The impact of the educational system on the development of human resources and the connection between them as levers of social and economic modernization is also highlighted (Corbu & Hapenciuc, 2020). In essence, the theoretical framework suggests that the development of entrepreneurial skills in high school requires a synergy between curricular innovation and managerial vision. Appropriate managerial strategies can create open and collaborative learning environments, where students can assume active roles. Thus, distributed leadership and adaptive management approaches allow schools to respond more effectively to student diversity and changes in the external environment. School managers can thus act as agents of change, adapting curricula to international standards and creating bridges between the school and the socio-economic environment (Eurydice, 2022). The theoretical foundation described guides the analytical framework of this study and supports the central premise: effective educational leadership is an essential condition for capitalizing on entrepreneurial education among young people.

II. RESEARCH METHODOLOGY

The study was based on a mixed research methodology, combining the quantitative survey method with the qualitative method of semi-structured interviews, as well as the analysis of official documents in the field of education, in order to outline a more accurate picture of the investigated reality. Initially, the survey was applied to a sample of 340 students and 12 teachers involved in teaching economic subjects or in entrepreneurial activities in Romania and the Republic of Moldova. Subsequently, interviews were conducted with seven high school principals, responsible for establishing the strategic directions of the institutions they lead. The discussions aimed to identify significant correlations between the managerial styles adopted in high schools and the perceived level of entrepreneurial skills developed by students. The study aimed to identify the types of educational leadership prevalent in the analyzed high schools; the perception of students, teachers and managers; the differences and convergences between the two educational systems. The statistical analysis of the quantitative data and the thematic interpretation of the interviews complemented each other, and by correlating the results with educational policy documents and international sources (OECD, UNESCO and the Eurydice network), the conclusions were anchored in a solid and relevant framework.

A limitation of the research is that, from the Republic of Moldova, only one high school was included in the sample, selected based on an existing institutional collaboration within joint educational projects.

III. RESULTS AND DISCUSSIONS

Despite systemic challenges, both Romania and the Republic of Moldova have started to adopt relevant initiatives of transformational educational leadership and integration of the sustainable dimension in entrepreneurship education. Some high schools have demonstrated the capacity to build sustainable partnerships with the economic environment and NGOs, to integrate ecological themes into students’ entrepreneurial projects and to capitalize on the potential of digitalization for the development of transversal skills. Table 1 summarizes some examples of good practices identified following research and documentation on regional and local initiatives.

Table 1. Examples of good practices

Country	Example of good practice	Main component	Observed impact
Romania	Andronic Motrescu High School, Rădăuți	Participative leadership	Active entrepreneurship club, collaboration with tech start-ups, integration of student feedback into managerial decision-making
		Green entrepreneurship	Entrepreneurial recycling projects, green mini-incubators developed in partnership with local NGOs
Republic of Moldova	“PROSUCCES” High School, Chișinău	Distributed leadership	Implementation of JA Moldova, mixed teams of students–teachers–managers involved in simulated business initiatives
		Education for sustainability	Eco-innovation projects, partnerships with local entrepreneurs for the development of environmentally friendly products

These practices validate the hypothesis that visionary educational leadership, based on collaboration and contextual innovation, can act as a catalytic vector for sustainable entrepreneurial education. Moreover, they confirm that well-calibrated managerial strategies can partially compensate for curricular or infrastructural limitations, by activating community resources and valuing student autonomy.

The quantitative data provide a first insight into how leadership strategies influence the development of entrepreneurial skills in high schools. To complete this picture and understand not only general trends but also contextual differences, the analysis continues with a comparative reading and some applied reflections on the role of leadership in the process of educational transformation. Through this approach, it becomes clearer how the school can be transformed into an active space for entrepreneurial training, where ideas take shape and can be tested safely.

Table 2. Comparative analysis of trends and challenges in entrepreneurship education in upper-secondary schools

Indicator	Romania	Republic of Moldova	Comparative observations
Curricular integration of entrepreneurship education	Included in the national curriculum as a compulsory or optional subject (theoretical, technological, vocational tracks).	Introduced mainly through external programs (Junior Achievement, NGOs) and uneven optional modules.	Institutionalized approach (Romania) vs. partnerships and contextual flexibility (Moldova).
Educational resources and digital infrastructure	Urban schools: ICT labs, educational platforms, private partnerships; rural areas: significant shortages of equipment and internet access.	Limited digital resources, especially in rural areas; reliance on international projects for equipment and training.	Persistent urban–rural gaps in both countries; Romania holds a structural advantage in educational infrastructure.
Teachers’ competences and professional development	Teachers have access to continuous training programs and interactive methodologies, but implementation remains uneven in practice.	Teacher training in entrepreneurship education is insufficient, based on occasional trainings offered by external partners.	Need to develop national networks for continuous professional development in both countries.
Approach to sustainability (green entrepreneurship)	Sporadic initiatives integrated into extracurricular projects (e.g., Erasmus+, NGOs); sustainability is not part of the core curriculum.	High student interest in green entrepreneurship, but without systematic curricular or logistical support.	High convergence potential: both systems would benefit from integrating sustainability into educational programs.
Partnerships and community involvement	Frequent collaboration with businesses, local authorities, and universities (especially in urban areas).	More limited partnerships, often dependent on local initiatives and temporary international projects.	Differences in intensity, but a shared trend toward expanding educational collaborations.
Students’ perception of the subject	Students perceive the subject as useful, but largely theoretical and disconnected from real life.	Students value the practical component when available, but point to a lack of applied projects.	Complementary perspectives; highlight the need for a mixed educational model.

In support of this comparative perspective, Table 3 highlights the main indicators relevant to entrepreneurship education, the trends and challenges specific to each system, providing a solid starting point for formulating realistic strategic recommendations. The urban–rural differences in terms of access to superior material resources and partnerships, the curricular integration of entrepreneurship education in different forms in both countries, reflect the importance of developing entrepreneurial skills. A common point is the still predominantly theoretical character of entrepreneurship education classes in both systems, highlighted by the perceptions of students and teachers (Boldureanu et. al, 2023). In both Romania and Moldova, students want more practical, experiential learning, indicating the need to connect the theory taught in the classroom with real-world applications (e.g. projects, business simulations, school mini-incubators). The lack of continuity and sporadic nature of extracurricular projects reduce the formative impact – the problem is accentuated by the volatility of funding (many activities depend on temporary grants) and the absence of a long-term managerial vision in some institutions. Overall, the challenges identified – from inequalities of access and limited relevance of the curriculum, to deficiencies in infrastructure and weak integration of sustainability – confirm the urgent need to rethink managerial approaches in high schools. For entrepreneurship education to find its natural place in high school life, more is needed than isolated lessons or occasional activities. A profound change in approach is needed – one that starts at the level of school leadership and goes down to every initiative that takes shape among students. Schools need a coherent, vivid and adaptable vision that integrates the new realities of the world in which young people will operate: accelerated digitalization, environmental responsibility and the importance of networking. Romania and the Republic of Moldova, despite their differences in context, have fertile common ground, so if the former benefits from resources and infrastructure aligned with European requirements, the latter comes with the flexibility of local initiatives and the ability to do a lot with a little (Bucșa, 2025). Both can capitalize on these assets to build educational environments in which the entrepreneurial spirit grows naturally,

not imposed.

Research data shows that where school managers support teachers' ideas, develop real connections with community stakeholders, and treat innovation as part of the school culture, students become braver, more curious, and more willing to test their ideas. Practice has shown that when the school becomes a space open to the world – through green projects, digital platforms, and solid partnerships – entrepreneurship education stops being just a subject and becomes a way of being. School managers, in this equation, are not just administrators, but leaders who shape the future, developing educational leadership. With a dedicated team and clear direction, they can transform the school into a true laboratory of initiative, where students learn to build, make mistakes, rebuild, and above all, believe that they can. This is, in essence, education with real stakes. Schools involved in JA often report an increase in student motivation and a change in the mindset of teachers, who begin to see partnerships as a strategic resource, not just a bureaucratic requirement. This suggests that distributive educational leadership, which involves actors outside the school in the educational process, can amplify the impact of entrepreneurial programs. In contrast, isolated high schools, without openness to the community, have difficulty providing practical context to students, and entrepreneurial education risks remaining at a theoretical level.

To support the interpretation of the empirical findings and to synthesize the managerial logic underlying entrepreneurship education at the upper-secondary level, Figure 1 presents a conceptual overview of the key strategic components that contribute to the development of entrepreneurial competences. The figure highlights how goal definition, resource prioritization, program implementation, partnership integration, and activity scheduling interact within a coherent managerial framework, translating leadership decisions into concrete educational outcomes.

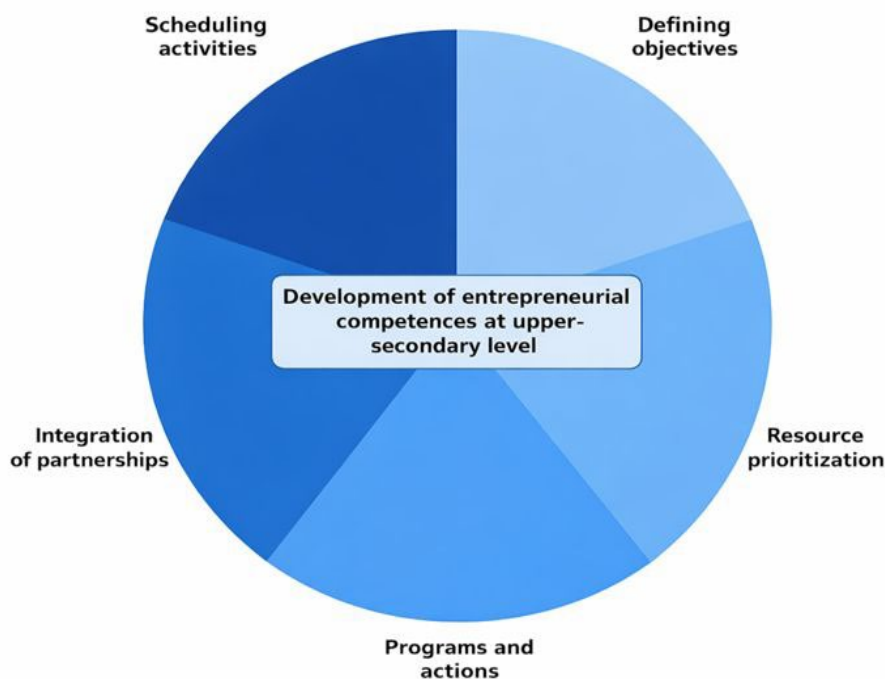


Figure 1. Conceptual model of managerial components supporting the development of entrepreneurial competences at the upper-secondary level.

This conceptual representation complements the proposed MSI-EAL model by illustrating its practical managerial translation at school level, emphasizing the operational mechanisms through which strategic leadership fosters entrepreneurial competences.

It is also important to note that implementing innovative management strategies is not without risks and obstacles. Resistance to change from teaching staff, bureaucratic barriers at the system level (e.g., rigid national curricula) or financial constraints can compromise valuable initiatives if not managed carefully (OECD, 2021,2025). This is where the need for a culture of risk management in education comes in. High school

principals need to anticipate and assess potential risks – from student saturation with too many activities to the failure of partnerships – and develop mitigation plans. For example, faced with the difficulties of financing school incubators (high costs, lack of expertise), an effective management solution was to partner with the local business environment and adopt frugal innovation, i.e. the implementation of creative solutions with minimal resources. This example shows how flexibility and strategic planning can transform risks into opportunities for learning and progress. Thus, the discussion highlights that the impact of managerial strategies in high school entrepreneurial education is major: where there is vision, openness to new things and collaboration, the beneficial effects are visible both at the student level (increased skills, motivation, concrete results such as school projects and micro-businesses) and at the community level.

IV. CONCLUSIONS

An important contribution of this study is the formulation of an integrative strategic model (MSI-EAL), designed specifically for high schools that aim to transform entrepreneurial education into a living process adapted to the times. The model starts from a classic approach – the Ansoff matrix, with its established directions (penetration, product development, market development and diversification) – but complements it with a modern vision that integrates three essential transversal dimensions today: digitalization, sustainability and collaboration. These elements are not just aesthetic additions, but real directions of action that can guide high schools in formulating relevant initiatives and in clearly assessing progress. Basically, MSI-EAL becomes a compass that orients the school management towards adaptive leadership, with vision, in which innovation and partnership are no longer optional, but part of the institutional DNA. This proposal is not just a theoretical model that captures attention, but a real working tool for schools, designed to help them move from isolated initiatives that come and go, to a coherent and sustainable vision. It becomes obvious that the development of entrepreneurial education involves educational leadership, sustainability, digitalization, which leads to several directions of action:

❖ **Changing the way we teach: a more alive, more applied curriculum**

Entrepreneurship should not be a subject treated as a theoretical appendix, but an experience integrated into school life. This means introducing modern modules – such as Digital or Green Entrepreneurship – but also real opportunities for practice: mini-companies in high school, educational incubators, interdisciplinary projects. Such an approach also requires a periodic review of the content, so as to include current topics (sustainability, artificial intelligence, circular economy) and to allow for relevant assessments, based on portfolios and projects, not just on written tests.

❖ **Teachers – the key to success**

A teacher trained in entrepreneurship does not just teach a lesson, but becomes a guide for students who are finding their way. Therefore, it is essential to build a network of continuous training that goes beyond simple workshops. Mentoring, local communities of practice and concrete support are needed for teachers who want to experiment and innovate. Rewarding teachers' involvement – including through official recognition – would send a clear message: entrepreneurship education is a priority, not a fad.

❖ **School and community: a team, not two separate domains**

High schools must open up to the environment. Partnerships with local entrepreneurs, NGOs, universities or authorities can radically transform the quality of the programs offered to students. Through job-shadowing, idea fairs, practical workshops or company visits, students learn “on the go”, and the school gains social relevance. Involving parents and the community in school events can bring added support and visibility. In order for all of this not to depend on the isolated enthusiasm of a principal, a broader collaborative framework is needed – for example, educational consortia or regional educational innovation hubs.

❖ **Without technology, entrepreneurship remains on paper**

Digital transformation is no longer optional, investments in IT infrastructure, especially in rural schools, must become a priority. Smart classrooms, online platforms, business simulators – all can make the difference between a theoretical course and an authentic learning experience. Moreover, digitalization allows collaborations between high schools from different regions or countries, including between Romania and the Republic of Moldova, giving rise to cross-border networks of entrepreneurial learning.

❖ **Integrating sustainability**

Young people are increasingly interested in the impact of their actions on the environment and the community, which is why entrepreneurship education must respond to this concern by integrating the green and social dimensions. Projects on recycling, urban agriculture, circular economy or social entrepreneurship not only build skills, but also cultivate empathy and responsibility. Schools can collaborate with environmental organizations or join international networks such as Agenda 2030, to provide students with global learning

contexts.

❖ Policies that do not remain on paper

At the decision-making level, a clear and stable framework is needed. Entrepreneurship education must be explicitly included in national strategies and financially supported in a sustainable way – through grants for incubators, dedicated funds for schools from disadvantaged backgrounds or the flexibility of regulations for innovative projects. A unitary strategic model, such as the one proposed in this research (MSI-EAL), could provide institutions with a clear map for planning, implementation and evaluation.

The study presents some inherent limitations: the sample did not include all geographical regions of the two countries, and qualitative data may reflect the subjectivity of the actors involved. Future research can expand the sample and apply longitudinal models to track the evolution of skills over time.

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