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EDUCATIONAL ENTREPRENEURSHIP: INNOVATIVE MODELS FOR YOUTH AND THE ADMINISTRATION OF THE FUTURE

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Abstract. The paper reports original results from an applied research on how "educational entrepreneurship" can generate innovative models of competence training at high school level, relevant for business and administration of the future. The aim of the study is to identify and validate didactic and managerial mechanisms through which initiative, creativity, collaboration, responsibility and financial literacy can be developed coherently in the upper cycle of pre-university education. The research subject is students and teachers from high schools in Romania and the Republic of Moldova. The methodology is mixed. The quantitative component used a Likert scale questionnaire applied to a sample of 100 students and 20 teachers, targeting five dimensions of entrepreneurial competences; the internal consistency of the instrument was assessed by Cronbach's alpha coefficient, and the latent structure by exploratory factor analysis. The qualitative component included semi-structured interviews with teachers and students, analyzed thematically (inductive approach) to capture contexts, barriers and facilitators of implementation. The analyses were complemented by methodological triangulation to increase the credibility of the results. The results indicate three major findings. (1) Combining project-based learning with school-business partnerships favors consistent increases in student initiative, collaboration and responsibility. (2) Micro-incubation in high school (project clubs with external mentoring, rapid prototyping and iterative feedback) supports applied creativity and knowledge transfer in real contexts. (3) Curricular flexibility and managerial support at the school level are key factors; in their absence, the effects of interventions diminish, even in the presence of digital resources. We conclude that educational entrepreneurship becomes effective when configured as a school-community ecosystem, not as an isolated discipline. The paper proposes the LINC (High School–Innovation–Networking–Community) model as an operational architecture in four steps: needs diagnosis, integrated competence design, implementation through partnership projects and authentic evaluation. The contribution of the study consists in articulating a replicable framework, with direct utility for decision-makers and practitioners, oriented towards increasing the relevance of high school education for business and administration.

Keywords: Educational Entrepreneurship, Innovative Models,Entrepreneurial Competences, High School Education, Knowledge Economy
JEL Classification: I25, L26, M21, O35

Introduction. Education plays an essential role in developing citizens who can adapt to fast-changing economic and technological and social environments. The knowledge economy operates through information management yet requires people to convert knowledge into functional solutions which benefit society and business operations and administrative work. The modern educational system now views entrepreneurial competences as fundamental skills which help students handle uncertainty while discovering new possibilities and taking charge of their choices. Educational entrepreneurship represents a promising method which unites business principles with teaching methods and school administration to connect educational results with labor market requirements. The paradigm shift towards experientials learning in entrepreneurship was already emphasized by Gibb (2002), who called for creativity and new combinations of knowledge. Competence-based approaches highlight that education shapes not only entrepreneurial intention but also broader professional adaptability (Sánchez, 2013). Universities and high schoools alike

are required to adapt to new frontiers of entrepreneurial education (Neck & Greene, 2011; Rae, 2010). Educational entrepreneurship within schools creates an environment that teaches students to become successful professionals while developing their ability to participate in society and take action for social change. Research conducted internationally demonstrates that developing entrepreneurial thinking should start during the early years of education. The European Union identifies entrepreneurship as one of eight essential lifelong learning competences which support personal development and social inclusion and employment readiness. The OECD identifies entrepreneurial skills as essential drivers which propel innovation and economic competitiveness in modern global markets. The strategic frameworks for education exist but their actual implementation in high schools remains inconsistent because they mainly focus on outside-the-classroom activities instead of full-scale integration. The two countries of Romania and Republic of Moldova encounter similar difficulties when trying to match their secondary education system to knowledge-based economic requirements. The educational systems of both countries undergo reforms but high school entrepreneurship education faces challenges from disorganized curricula and insufficient funding and weak business sector partnerships. Teachers together with school administrators need better tools to create learning experiences which will help students develop their entrepreneurial abilities. The research investigates how high schools can develop entrepreneurial competences through new educational approaches which function as incubators for student development. The research investigates management approaches and teaching methods which improve student abilities to take initiative and demonstrate creativity while showing responsibility and working collaboratively and handling finances during their pre-university education. The research uses quantitative and qualitative approaches to study both Romania and the Republic of Moldova which generates comparative data that reveals common grounds for educational innovation. The paper introduces educational entrepreneurship as a school–community ecosystem through its original approach which moves beyond treating it as an independent subject. The LINC model (High School–Innovation–Networking–Community) serves as a replicable framework which enables systematic implementation of entrepreneurial competences in high school education. The research provides essential information for policymakers and practitioners and researchers who aim to create enduring educational strategies which boost innovation and competitiveness in knowledge-based economies.

Literature Review. The Concept of Educational Entrepreneurship The development of educational entrepreneurship emerged through the combination of business entrepreneurial principles with educational systems' mission to develop active innovative citizens. According to Fayolle and Gailly (2015) educational entrepreneurship extends beyond start-up creation because it teaches students to become adaptable and creative initiators. The educational approach demonstrates how schools should establish learning spaces which enable students to develop their entrepreneurial abilities through practical experience. Meta-analyses confirm that entrepreneurship education has a measurable impact on intentions, though contextual factors remain decisive (Bae et al., 2014). Kurucz et al. (2017) explain that educational entrepreneurship combines social and community aspects with economic targets while promoting sustainability and social responsibility. Educational institutions function as innovation centers which connect academic knowledge to practical societal problems. Entrepreneurial Competences in Secondary Education the European Commission (2019) established entrepreneurship competence as one of the eight essential lifelong learning competences. The ability to identify opportunities and transform them into valuable outcomes for others defines this competence. The high school implementation of this competence requires students to learn problem-solving abilities and teamwork skills and financial management competencies. Research evidence demonstrates that experiential learning approaches combined with project-based activities help young people develop entrepreneurial thinking skills. The research by Nabi et al. (2017) proves that students

who participate in entrepreneurial projects during their secondary education develop higher self-efficacy and initiative skills. Lackéus (2015) demonstrated that value creation pedagogy helps students develop responsibility and resilience skills. Managerial and Pedagogical Innovations in High Schools The development of entrepreneurial education depends heavily on both managerial backing and innovative teaching methods. The European Training Foundation (2021) indicates that school leaders maintain essential responsibility for curriculum integration of entrepreneurship through their support of business and community partnerships. Teachers function as entrepreneurial learning facilitators yet they need training and resources to implement active learning approaches (Seikkula-Leino, Ruskovaara & Ikavalko, 2010). Student projects receive support through digital tools and micro-incubation practices which are becoming more prevalent in educational settings. The combination of school-business partnerships according to Pittaway and Edwards (2012) enables students to develop their entrepreneurial skills through genuine business applications. 2.4 International and European Policy Frameworks The OECD (2020) emphasizes that entrepreneurship education must be integrated throughout all academic subjects instead of being taught independently. The European Commission (2019) together with UNESCO (2021) recognize entrepreneurship as a key factor which drives innovation and competitiveness in modern knowledge-based economies. The established frameworks promote member states to modify their educational standards and train teachers while building connections with outside organizations. The Republic of Moldova and Romania have made progress in implementing entrepreneurial competences yet they struggle to establish systematic implementation at the secondary education level. Research conducted in Eastern Europe by Roman et al. (2020) reveals that strategic goals do not match classroom activities which demonstrates the requirement for educational models that unite educational institutions with their communities and business partners.

Methodology. The choice of this design was based on the need to combine the advantages of quantitative analysis – objectivity, comparability and statistical validity – with the depth and contextual richness offered by qualitative analysis. Participants The research was conducted in high schools in Romania and the Republic of Moldova, in the 2024–2025 school year. The sample included 100 students (50 from each country) enrolled in extracurricular courses or projects with an entrepreneurial profile and 20 teachers (10 from each country) responsible for implementing entrepreneurial education. Participants were selected through purposive sampling, to ensure that they had direct experience in entrepreneurial learning activities. Instruments and data collection The quantitative component was based on a questionnaire with Likert-scale items, designed to assess five fundamental entrepreneurial skills: initiative, creativity, collaboration, responsibility and financial literacy. The questionnaire was pre-tested for clarity and consistency before application. The qualitative component consisted of semi-structured interviews with teachers and students, aiming to explore their perceptions, difficulties encountered and examples of good practices. The interviews were conducted both face-to-face and online, with an average duration of 45–60 minutes. Data analysis The quantitative data were analyzed using SPSS. The internal consistency of the instrument was verified by Cronbach's alpha coefficient, and the latent structure of the competencies was explored by exploratory factor analysis (EFA). Descriptive and inferential statistics were applied to compare the responses from the two national contexts. The qualitative data from the interviews were transcribed and thematically analyzed, using an inductive coding process. The emerging themes were grouped into three categories: opportunities, barriers and enabling factors of entrepreneurship education. Validity and reliability To ensure the credibility and robustness of the results, the research used methodological triangulation, combining quantitative and qualitative evidence. The reliability of the questionnaire was confirmed by Cronbach's alpha values, which exceeded the recommended threshold of 0.70. Validity was strengthened by pilot testing and expert evaluation of the instrument. The correlation between

statistical trends and interview narratives increased the explanatory power of the study and reduced the risk of bias.To ensure the internal consistency of the questionnaire, Cronbach's alpha coefficients were calculated for each of the five competence dimensions. All values exceeded the recommended threshold of 0.70, which confirms the reliability of the instrument (see Figure 1).

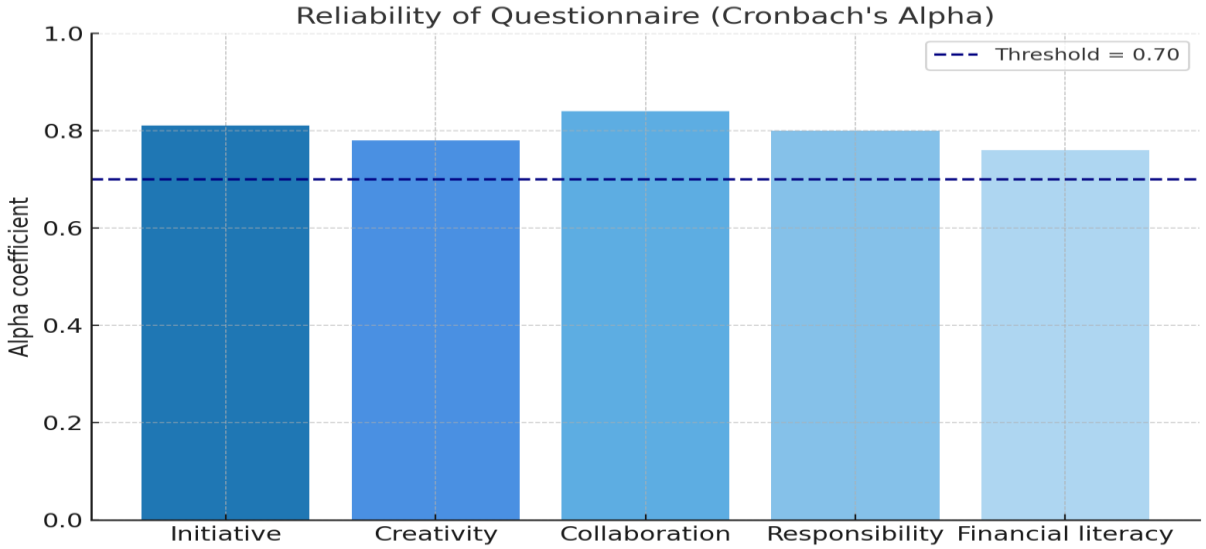

Figure 1. Reliability of Questionnaire (Cronbach's Alpha)
Source: authors' own elaboration, based on survey data

The latent structure of the competences was further examined through Exploratory Factor Analysis (EFA). The analysis identified three main factors that together explained 90% of the variance: (1) initiative and creativity, (2) collaboration and responsibility, and (3) financial literacy. This indicates a coherent grouping of competences, which supports the theoretical model adopted in the study (see Figure 2).

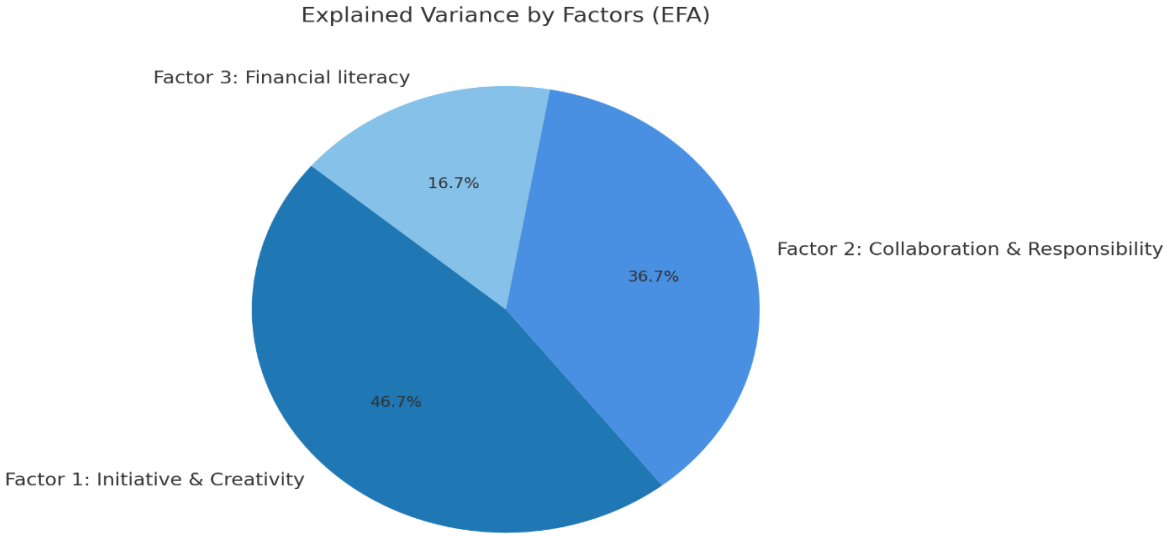

Figure 2. Explained Variance by Factors (EFA)
Source: authors' own elaboration, based on survey data

Findings and Discussion. Qualitative results complement the numerical picture. Students mentioned that practical projects and team activities increased their confidence, ability to find solutions and responsibility. In Romania, the focus was on developing presentation and

communication skills, while in the Republic of Moldova students emphasized the importance of mentoring and collaboration with teachers and external partners. Teachers highlighted the relevance of managerial support and curricular flexibility, but also the need for modern resources. Without these conditions, entrepreneurial initiatives remain fragmented. Overall, the results suggest that entrepreneurship education is effective when conceived as a school-community ecosystem, rather than as a separate discipline. This approach supports integrated skills development and prepares students for the challenges of the knowledge economy.

Proposed model: LINC (High School – Innovation – Networking – Community). Based on the research results, an operational model was outlined to respond to the needs identified in the training of entrepreneurial skills at the high school level. The LINC model proposes an integrated, four-step approach, through which the high school becomes not only a teaching space, but also a true incubator of initiative and responsibility.

Needs diagnosis. The process starts from the specific identification of the skills that students lack, through questionnaires, feedback from teachers and consultations with the local business environment. This stage ensures an adaptation to the realities of each school and community.

Integrated design of skills. Entrepreneurial skills are not treated as abstract objectives, but as concrete results to be achieved through curricular and extracurricular activities. Their transversal integration into different disciplines, but also through dedicated entrepreneurial education modules, is proposed.

Implementation through partnership projects. Students learn through action, developing projects with real impact, carried out in partnership with economic agents, NGOs or public institutions. Examples include school fairs, micro-incubators of ideas and business simulations, all with the support of external mentors.

Authentic assessment. The assessment is not limited to written tests, but includes portfolios, public presentations, feedback from community partners and self-assessment. This allows for a realistic measurement of the progress and degree of student responsibility.

The LINC model brings added value through its replicable and adaptable character. It can be applied in various educational contexts, ensuring a closer connection between school, community and the economic environment. At the same time, it emphasizes sustainability, by cultivating skills that are not lost after graduation, but become part of the professional and civic identity of young people.

Conclusions and implications. The study showed that the development of entrepreneurial skills at high school level becomes truly effective when education is perceived as an ecosystem that connects the school, the community and external actors. The quantitative results validated the reliability and coherence of the competence framework, while the qualitative data highlighted the transformative impact of project-based activities, mentoring and authentic assessment. The essential contribution of this paper consists in presenting the LINC model (High School–Innovation–Networking–Community), a replicable operational framework, structured in four stages: needs diagnosis, competence design, implementation through partnership projects and authentic assessment. This model demonstrates that educational entrepreneurship should not be seen as an isolated discipline, but as a dynamic process, integrated into the organizational culture of the school and supported by partnerships with the socio-economic environment. The implications of the research are varied, for educational policy makers, the results suggest the need to promote entrepreneurship education through curricular flexibility and resources dedicated to innovation. For school managers and teachers, the study offers practical guidance for integrating entrepreneurial skills through active learning methods and collaborative projects. For society, investing in young people's entrepreneurial skills contributes to the formation of a creative, resilient workforce capable of facing the challenges of the knowledge-based economy. In

conclusion, investing in entrepreneurship education does not only mean introducing a pedagogical innovation, but also responding strategically to the demands of the future. High schools, when benefiting from appropriate policies and resources, can become incubators of the entrepreneurial spirit and can play a decisive role in training a new generation of professionals and active citizens, prepared for business and administration in the 21st century.

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