ENHANCING UNIVERSITY'S THIRD MISSION WITH AN INNOVATIVE PROFESSIONAL PROFILE

Elena Cristina UDREA (FĂINĂ) [1],
Mihnea COSTOIU [2],
Augustin SEMENESCU [3,4]

Abstract: This study builds upon the work titled "Strengthening University Third Mission Through a New Professional Profile" (Semenescu et al., 2023) and draws on experiences and analyses conducted by expert institutions and associations in higher education. It emphasizes the active role of universities in innovation and competence ecosystems, highlighting their capacity to equip new talent with innovation and entrepreneurial skills, access applicable knowledge, and establish collaborative partnerships with businesses to foster national innovation ecosystems. The study focuses on exploring universities' missions and roles within socio-economic ecosystems, particularly their relationship with socio-economic partners. Additionally, it presents the findings of a research investigation that gathered perspectives from representatives in academia, business, government, public institutions, and NGOs regarding the implementation of the Senior Learning Facilitator (SLF). The study's results, consistent with previous work, underscore the importance of strategic action plans to foster effective university-business cooperation, support collaboration between academics and professionals in socio-economic/business fields to enhance students' and graduates' education, and advocate for funding programs and instruments. Thus, this research contributes to advancing national-level

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[1] National University of Science and Technology Politehnica Bucharest, 313 Splaiul Independenței, Bucharest, Romania, elena.faina@upb.ro

[2] National University of Science and Technology Politehnica Bucharest, 313 Splaiul Independenței, Bucharest, Romania, mihnea.costoiu@upb.ro

[3] National University of Science and Technology Politehnica Bucharest, 313 Splaiul Independenței, Bucharest, Romania, augustin.semenescu@upb.ro

[4] The Academy of Romanian Scientists, 54 Splaiul Independenței, Sector 5, Bucharest, Romania

cooperation between education enterprises (EEC) by promoting and developing the Senior Learning Facilitator (SLF) professional profile.

Key words: *Education-Enterprise Cooperation (EEC), Senior Learning Facilitator (SLF), university third mission.*

JEL Classification: *I2, M5, A12, A23*

1. Introduction

European and global societies are transitioning towards a learning society shaped by economic, social, political, and technological changes. Universities, however, have not always been responsive to these changes, necessitating their reevaluation. Kamp (2019, p. 5) points out that innovation skills will be key resources for graduates of science and technology universities.

As artificial intelligence emerges, universities must cultivate unique thinking skills to prepare graduates for impactful careers. Graduate employability relies on technical competencies, transversal skills, and innovation and entrepreneurship competencies. Universities play a vital role in preparing students for the transition to a 5.0 society, emphasizing active learning and collaboration. This research aims to explore the missions and roles of universities within socio-economic ecosystems, focusing on their relationship with socio-economic partners. It investigates cooperation types, barriers, and proposes a comprehensive framework for education-enterprise cooperation.

The aim of this study is to provide a comprehensive understanding of the roles and missions of universities within socio-economic ecosystems, with a specific focus on the crucial relationship between academia and socio-economic partners. The study presents the findings of a research project that examined the perspectives of representatives from academia, business, government and public institutions, civil society organizations (NGOs) on the implementation of the Senior Learning Facilitator (SLF) role.

To enhance collaboration between universities and businesses, the interviewees suggested several strategies. These include the development of strategic action plans to effectively work with universities, supporting collaboration between academics and professionals in socio-economic/business fields to improve the education of students and graduates, and establishing funding programs and instruments. The research study provides evidence to support the establishment of the Senior Learning Facilitator (SLF) role, which aims to promote cooperation between education and enterprises at the national level.

By implementing the suggestions provided by the interviewees, the study aims to strengthen university-business cooperation and foster effective partnerships. The Senior Learning Facilitator (SLF) profile is seen as a means to facilitate collaboration, improve the quality of education, and enhance the alignment between academic programs and the needs of the business sector.

Overall, the research study supports the importance of cooperation between universities and enterprises through the Education-Enterprise Cooperation (EEC) framework. By recognizing the significance of the Senior Learning Facilitator (SLF) role and implementing the suggested strategies, the study aims to contribute to the development of a collaborative ecosystem that benefits both academia and the socio-economic/business sectors at the national level.

2. Literature Review

2.1. Higher education institutions - active players in socio-economic ecosystems

The 4th Industrial Revolution, driven by megatrends like globalization, digitalization, and demographic change, is rapidly transforming the labor market. To thrive in this evolving landscape, individuals need to adapt and acquire not only technical skills but also cognitive skills, mindsets, and beliefs about the world. The ability to think critically, communicate effectively, demonstrate leadership, embrace entrepreneurship, adapt to change, and engage in continuous learning has become crucial.

Universities hold a unique position in society as powerful catalysts for innovation, economic development, and social welfare. They are instrumental in achieving the Sustainable Development Goals (SDGs) while also benefiting from their implementation. Universities fulfill multiple roles in creating a sustainable society. Through their didactic role, they provide education that enables individuals to adapt to technical transformations. Their collaborative role allows for interdisciplinary research and teaching, fostering stronger connections between education and research. They also play a vital role in transmitting scientifically proven knowledge and insights. Furthermore, universities contribute through their measurement and evaluation capabilities to assess the impact of actions related to the SDGs. Additionally, they serve as advocates, continuously emphasizing the importance of implementing global goals.

To effectively drive local and regional development, universities must embrace entrepreneurship and innovation. As Aoun (2017) suggests, universities need to create ways of thinking that cannot be easily imitated or replicated by intelligent machines and that will enable graduates to develop careers with societal and economic impact. A robust body of research that has addressed the topic of graduate employability suggests the need to train graduates to become active participants in the learning process and autonomously co-design their lifelong learning (Foer, 2017). Evolving into a "fourth generation university," they actively interact and co-create with socio-economic partners, establishing an environment that fosters both social and economic growth. By developing their own identity beyond traditional education and research, universities become key players in knowledge and technology transfer from academia to industry and society. Collaboration between universities and socio-economic partners is essential for success. The establishment of the Senior Learning Facilitator (SLF) professional profile, as part of initiatives like the SEAL - Seniors' Learning Value project, aims to enhance education-enterprise cooperation (EEC). This profile facilitates effective cooperation between higher education institutions and various stakeholders, ensuring alignment with the needs of the labor market and promoting the development of relevant skills.

In summary, the ongoing transformations in the labor market necessitate a holistic approach to career success that encompasses technical skills, cognitive abilities, and soft skills. Universities, as drivers of innovation and social progress, have a crucial role in preparing individuals for the future. Even though financial support for knowledge-based innovation calls for a multidimensional and complex approach, there is evidence to support that a single ecosystem actor focused approach cannot generate structural change in a short timeframe (Bedford, et al., 2018). A few examples may support the above statement: funding instruments targeted at small and medium-sized enterprises (SMEs), where the high quality of proposals has significantly lowered the success rate (European Commission, 2017); or SME funding to employ PhD graduates, which is generally implemented with very low success rates at national and regional level. In addition, ecosystem approaches have been successful practices with regional, national or international impact.
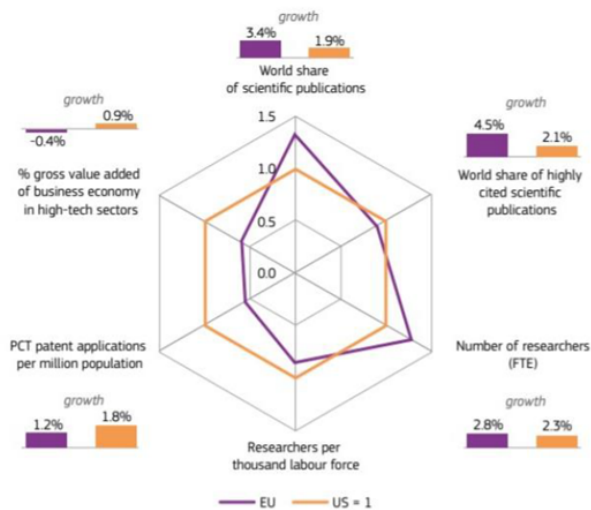

Figure 1. Innovation performance - a comparative perspective

(Lamy et al., 2017)

By embracing entrepreneurship, collaborating with socio-economic partners, and nurturing the SLF profile, universities can contribute to

creating a sustainable society while empowering individuals for the challenges and opportunities of the 4th Industrial Revolution.

2.2. Education – Enterprise Cooperation: Challenges and Opportunities

Education-Enterprise Cooperation (EEC) presents both challenges and opportunities in the context of the 4th Industrial Revolution and the changing dynamics of the labor market. While knowledge is important, a combination of technical and cognitive skills, as well as mindsets and beliefs, is crucial. In engineering, skills such as critical thinking, holistic thinking, entrepreneurial thinking, and continuous learning capacity are highly valued and cannot be replicated by intelligent machines. Additionally, soft skills like advanced communication, interpersonal skills, leadership, adaptability, and teaching play a critical role in STEM fields.

Higher education institutions are perceived as talent development institutions and businesses expect curricular flexibility, innovation and learning outcomes that allow graduates to quickly integrate into a new job (Semenescu et all., 2023).

Cooperation between universities and socio-economic partners is essential in this context. It allows for the transfer of knowledge and technology, enhancing education-enterprise cooperation (EEC). The state of EEC in Romania is being investigated to further explore these dynamics.

Universities, as knowledge creators and disseminators, have a key role in achieving the Sustainable Development Goals (SDGs) and driving innovation, economic development, and social welfare. They fulfill various roles, including education, interdisciplinary research, scientific knowledge transmission, measurement and evaluation, and advocacy for the implementation of global goals. The evolving landscape demands that universities embrace entrepreneurship and innovation, becoming "fourth generation universities" that actively interact and co-create with socio-economic partners to generate added value for local and regional development.

Overall, the 4th Industrial Revolution and megatrends require individuals to adapt their skills and mindsets, while universities have a critical role in preparing students, driving innovation, and contributing to sustainable development. Collaboration between universities and socio-economic partners is crucial for success in this changing landscape.

2.3. The Senior Learning Facilitator Profile

SEAL -Seniors' Learning Value is an ERASMUS+ KA2 Project aimed at designing and experimenting, with new methods, the recruitment and training of trainers and mentors among senior workers, who can thus develop skills and competences according to a personalized learning pathway and act as a learning facilitator with potential empowered functions in peer and informal learning processes in SME-Small & Medium-sized Enterprises- and in Feedback Loop Systems. The SEAL project is aimed to emerge the know-how represented by senior workers, that is to say workers with a very advanced levels of technical competences, that can be strategically employed to facilitate and strengthen the processes of in-company training and/or work-based learning for different potential beneficiaries.

The SLF professional profile took shape from needs assessment and exploratory research activities and consultation with various categories of experts in the field of secondary and tertiary education, educators, industry representatives, policymakers and NGOs.

The SLF profile is made up of three main dimensions: the 3 competence areas that directly mirror the definition of SLF as a professional responsible for generating learning and supporting education-enterprise cooperation (1. Learning process; 2) Labour market/career guidance and 3) bridging education and enterprises), and the competences that, together, make up the building blocks of the SLF profession. The following four categories of skills were developed and then matched with essential skills: managing learning skills; guidance and counselling skills, bridging education-enterprise cooperation skills, and communication skills.

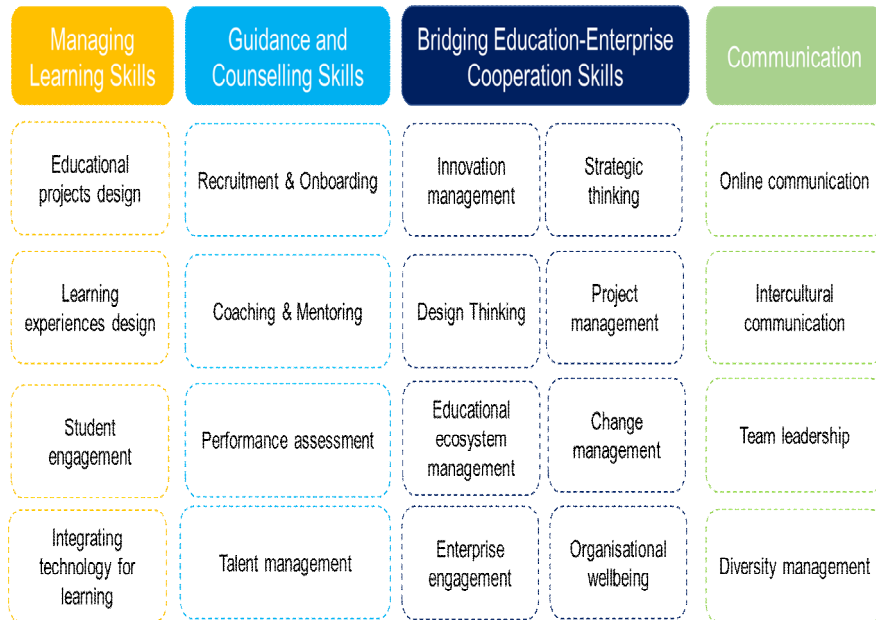The essential skills are listed in the image below.

Managing Learning Skills	Guidance and Counselling Skills	Bridging Education-Enterprise Cooperation Skills		Communication
Educational projects design	Recruitment & Onboarding	Innovation management	Strategic thinking	Online communication
Learning experiences design	Coaching & Mentoring	Design Thinking	Project management	Intercultural communication
Student engagement	Performance assessment	Educational ecosystem management	Change management	Team leadership
Integrating technology for learning	Talent management	Enterprise engagement	Organisational wellbeing	Diversity management

Figure 2. SLF Skills Framework

3. Research Methodology

3.1. Participants

In order to achieve the objectives outlined in Introduction, 20 professionals were interviewed, purposefully selected based on their affiliation to the following categories of organizations: academia, business, government and public institutions, civil sector (NGOs) – see 3.

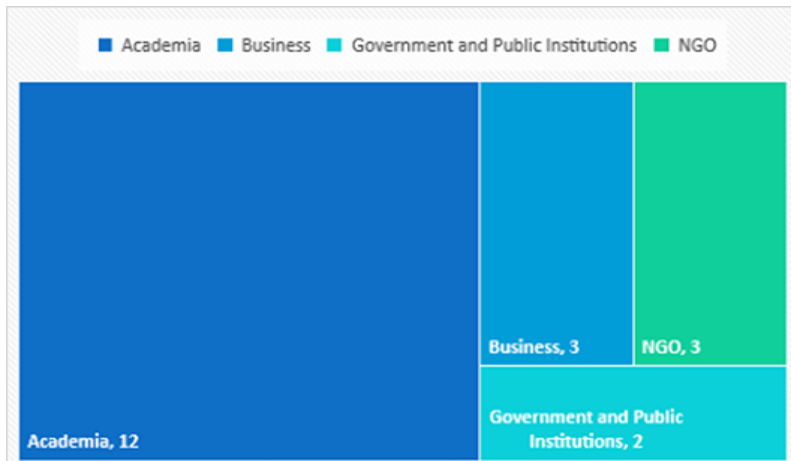In terms of gender, the selected group is unbalanced (only 6 female participants).

Figure 3. Distribution of the interviewees based on their affiliation (n=20)

Almost all respondents are senior professionals in their respective field, with over 10 years of work experience. 8 out of 20 participants occupy an executive position in their organizations.

3.2. Materials

20 computer-assisted, semi-structured individual interviews have been carried out between February and April. The interview was based on an interview guide. The first point in the interview guide has an introductory role, facilitating the discussion. Also at the introductory stage, data were obtained on the respondent's position in the organisation to which he/she belongs, the field in which he/she works and whether he/she has work experience in other fields. The second section focused on investigating views on the EEC, followed by testing the EEC profile and collecting recommendations on the implementation of the profile at national and regional level.

3.3. Procedure

Individual interviews were organised online, using the computer-assisted web interview (CAWI) method on the Zoom platform. Before the

conversation began, the researcher administering the interview introduced the interviewee to the purpose and objectives of the research and the institution under whose auspices the research is being conducted. The researchers who administered the interviews agreed in advance with the respondents when the interview would take place. Interviews were recorded, identifiers were removed from the transcript, each respondent was assigned an identification number, and responses were centralized to facilitate analysis. Prior to the start of the interview, each respondent completed an informed consent form to formally consent to participate in the research and to use the responses for research purposes.

4. Results and Discussion

4.1. Education – Enterprise Cooperation

The extent to which EEC takes place is influenced by specific factors related to individuals, organizations, and the supporting mechanisms available at the national level. At the individual level, the interviewees reported themselves to be active initiators of EEC activities. The lack or limited availability of organizational support and funding mechanisms limit the EEC. The absence of comprehensive policies makes individuals and organizations to focus on separate parts of the EEC process. Some of the interviewees argued for a vertically integrated approach to EEC, where three levels are defined: individuals – organizations – regions.

As the interviewed representatives pointed out, EEC takes place at all three levels, but the lack of synergies is a major drawback. Moreover, the goals of the three different parties are not fully aligned.

The academics argued that the universities tend to stick to long-term policies and development strategies. At the same time, the industry partners are guided by short-term strategies. In other words, there is a disjunction between stability and predictability (in universities) and flexibility and impact (in businesses).

In the following, types of EEC activities, and perceived barriers and drivers of university-business cooperation are discussed. Based on the participants' experiences, a number of three cooperation areas have been identified in education, research and valorisation of research results, and management. Given the exploratory nature of the study, these activities are inexhaustive. As all the participants argued, there is room for deepening and extending EEC in all those fields.

4.2. Senior Learning Facilitator Profile

The collaboration between the university and companies can be stimulated by the functioning of innovation ecosystems or regional networks/clusters/platforms integrating private companies, universities, research institutes, and NGOs.

Participation in consortia and professional associations to which universities are affiliated networks provides access to examples of good practice and transfer of knowledge and expertise, ultimately contributing to innovation. The creation European Universities as a result of the European Commission's initiative is a relevant example from the perspective of innovation, cooperation policies and curriculum design.

Positive opinions and comments have been expressed in relation to the concept of SLF, defining it as relevant, useful, impactful and with significant potential to strengthen EEC.

From a perceptual perspective, the participants evaluated positively the concept of SLF, defining it as relevant, useful, impactful and with significant potential to strengthen EEC. The Senior Learning Facilitator could have the ability to create meaningful connections with both HEIs and businesses. The respondents' opinions converged in three clusters of perceptions, namely SLF as a promising initiative; SLF as an inspiring practice particularly in academia, and the perceptions of more reluctant interviewees clustered in the depends-on-strategy category (see 4).
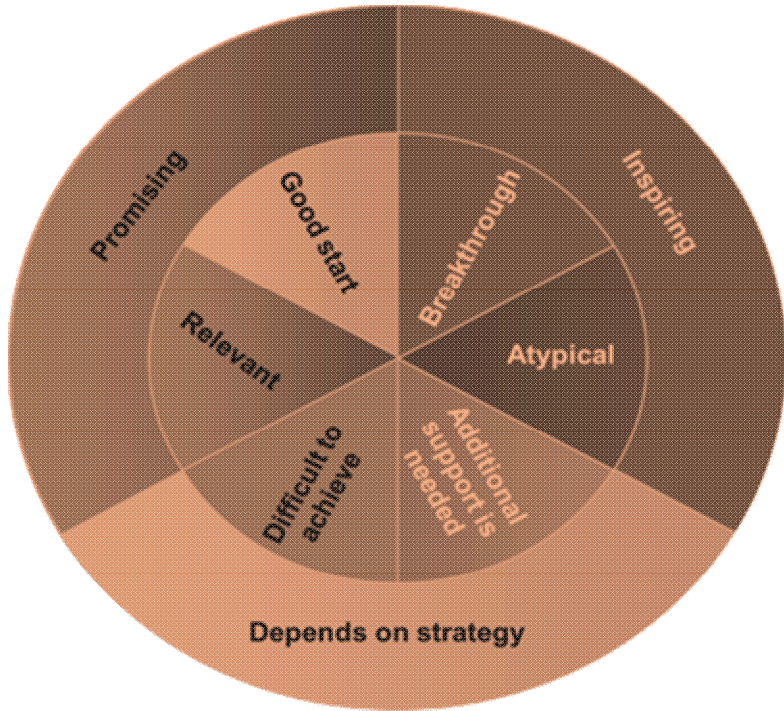
Figure 4. Clusters of perceptions and their respective attributes

Based on the participants' views and opinions, three segments of SLF supporters have been identified, namely the Enthusiastic Professionals, the Reserved Optimists, and the Handle-with-Care Participants. Most of the participants assessed positively the SLF Competence Framework. As expected, the most positive views and insights were expressed by the interviewees in the segments of Enthusiastic Professionals and Reserved Optimists. From the positive perspective, the insights collected pointed out that the framework is comprehensive, ambitious, and covers the sensitive areas of EEC. The more reluctant comments on the SFL Competence Framework have mentioned the wide range of skills included in the framework. Consequently, this could result in hard-to-find candidates and expensive investments in their training. Similarities with other professions and occupation have been identified, in particular with the career counsellors already working in universities.

Table 1. Segments of interviewees according to their overall attitude on SLF

Segment	Relevant Quotes on SLF	General attitude towards EEC
Cluster Inspiring Practice		
Enthusiastic Professionals *Mostly academics that have been extensively and intensively involved in EEC*	'Absolutely, no matter how we call it such an approach I think it should be on the top of HEIs' agenda, from my perspective. Somehow, connecting with business and industry is part of an organizational culture of openness and relevance. […] Universities should make it happen.' (C.H., full professor) 'The message we send to our students is that between university and business, between university and the labor market there is a bridge, and that the university ensures not only the level of schooling and transfer of knowledge but also the next step that interests our young people and their families: co-careering which will empower them to eventually support their own career path.' (G.P., associate professor)	Universities play an active role, and they are 'architects of the future'. The respondents in this segment perceive that educating future generations is the biggest impact HEIs may have on society. No longer do universities have to prepare their students for success in their first job, but for success in future learning, work, and life. Given this context, a position of senior learning facilitator is a **breakthrough** tool that has the potential to ensure internal cohesion (among various departments of HEIs) and more solid synergies with businesses and society. Nevertheless, the SLF concept is **atypical** for the Romanian higher education landscape, and it implies a certain level of strategic development commitment and maturity. SLF is undoubtedly perceived as a highly skilled academic.
Cluster Promising Future		
Reserved Optimists *Mostly business representatives, actively involved in EEC*	'What all companies want is skillful, ready to work and future ready. We rarely have such graduates. It is the job of the universities to prepare those people and help them with that (i.e. professional insertion)' (V.T., Head of department). `It is a good thing (i.e. SLF), but universities have other issues to solve. Again, it is a good start, but we need to hear from them that they can deliver high quality graduates, research outcomes and support businesses with concrete results in their work. This is not something that happens very often' (C.M., head of department).	The persons in this segment found the concept **impactful,** having the potential to be a **good start** of a systemic change in doing EEC. The voices of Reserved Optimists pointed out the need of a paradigm shift from teaching subject matters to teaching students. Therefore, undergraduates and postgraduates should get a genuine flavor of research, community work, and interact with possible role models in business and industry. SLF is a talent management instrument and should be 'handled' by HEIs. Adopting SLF would challenge universities to empower leadership and be active players in EEC.

Cluster Depends on Strategy		
Handle with care *NGO and Public institutions representatives, also academics*	'Yes, it is very generous, and it is a very challenging subject with some limitations. If there is one thing I personally reproach universities is that they have extremely reduced availability to make changes at that pace that we need. They are undeniably stuck in a paradigm where 'we think, we do not act'. And I think such a position would allow us to be more connected, socially and business engaged.' (A.P., NGO representative) 'It is a great initiative. But would this work? I mean … we have seen many great initiatives, but they are not sustainable in the long run. If this position is not going to be made mandatory in universities, it is not going to work. […] Universities struggle with so many problems … this *per capita* financing scheme, student recruitment, student attrition, rankings, and research production. Strengthening the cooperation with industry is not the top priority, particularly in comprehensive universities' (C.L., counselor)	They believe the SLF concept is appealing and could make a difference in EEC, but the universities do not have the means and openness to keep up with rapid technological, societal, and economic changes, therefore they will not be willing to promptly embrace this particular change. This segment considers that universities have adopted a more passive role in EEC and they currently continue to be complacent and just react. The views in this segment share a common perceptual ground with the Enthusiastic Professionals, perceiving the SLF initiative as **great** and **impactful**. Nevertheless, the lack of a legislative framework could hinder the impact of introducing such a position in universities. As regards the pre-university education institutions, they are seen as not being powerful enough to support the change, mainly because they do not have an extensive EEC experience. Dual education could be the first context of the SLF inception in VET education.

The core mission of SLF is to bridge the communication and exchange between academia and business. Some of the participants recalled what they have experienced in international contexts, where big and small companies were a constant presence in universities. Additionally, they stressed that EEC in not only about creating opportunities for internships and professional practice stages for students but consolidating the presence of businesses in universities. Sharing research infrastructures, organizing big events (e.g., career fairs) are important ways of developing EEC. Even so, both academics and business representatives commonly expressed the idea that talent mobility is key

to ensuring an effective university-business cooperation. In the process, the role of SLF is to seize opportunities and build upon them. The Learning process area of skillfulness was highly praised, including by the persons who generally expressed more reluctant views. The motivation is associated with empowering universities to deliver on their primary mission, which is (quality) education. With the contribution of other departments and professionals, the SLF could design strategies employers are seeking to accomplish in terms of curriculum co-design, co-teaching, experiential learning, and the use of innovative pedagogies to boost learning outcomes. In line with the idea of talent management and development, some insights touched on the need to better counsel students on their future careers, education, and professional development. This set of skills is highly relevant to boost employability. Nevertheless, some concerns have been expressed by the participants working in Academia. They have identified a potential role overlapping of SLF and career counselors already working in Romanian universities.

Business representatives and some academics have suggested that the portfolio of soft skills could be enlarged by including negotiation skills, grit/perseverance, and creativity. More particularly, creativity relates to innovation applied in curriculum design and problem solving. One concrete suggestion mentioned the need to be familiar with innovation methodologies such as design thinking. Since participation in international professional organizations is highly regarded in Academia, SLF will have an active presence in events and task forces related to business-university cooperation, the future of learning and work etc. Nevertheless, drafting internal policies on EEC and contributing to university's strategic planning could be included into SLF's service portfolio.

Figure synthetizes the services and potential activities in three areas of EEC.
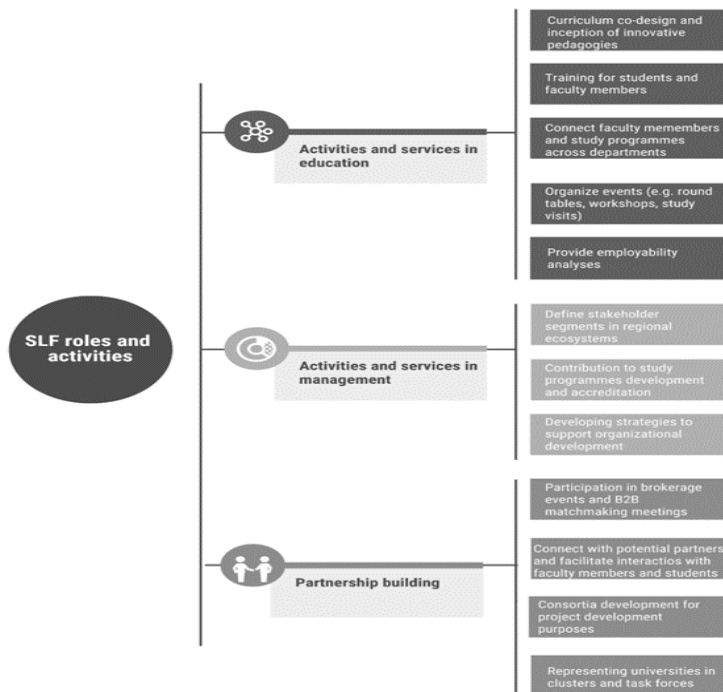
Figure 5. Types of activities and services for SLF

4.3. SLF profile implementation at the local and national levels

The general opinion is that SLF could help universities cope with the challenges related to their primary mission: to boost learning relevance, embed innovative approaches and curriculum flexibility in the programmes they design and relate more effectively to external stakeholders. Therefore, the needs SLF could address point towards universities. To be able to initiate and conduct change processes, SLF will be affiliated to a higher education institution. The degree of SLF Competence Framework complexity has entangled the projection of a clear career path.

Although the career path has not been revealed clearly, some recommendations and potential routes emerged. Figure represents graphically one possible career path for SLF.
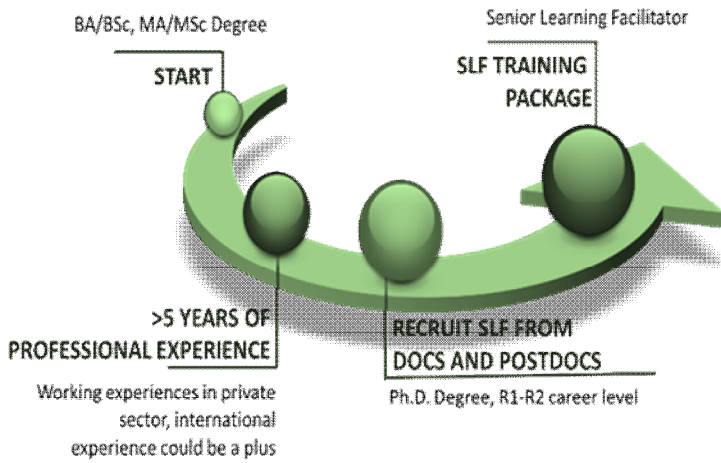
Figure 6. Possible career path proposed for SLF (1)

The second career path in Figure builds upon an extensive academic experience and proposes two additional layers: international mobilities and participation in professional associations or task forces covering SLF areas of expertize.
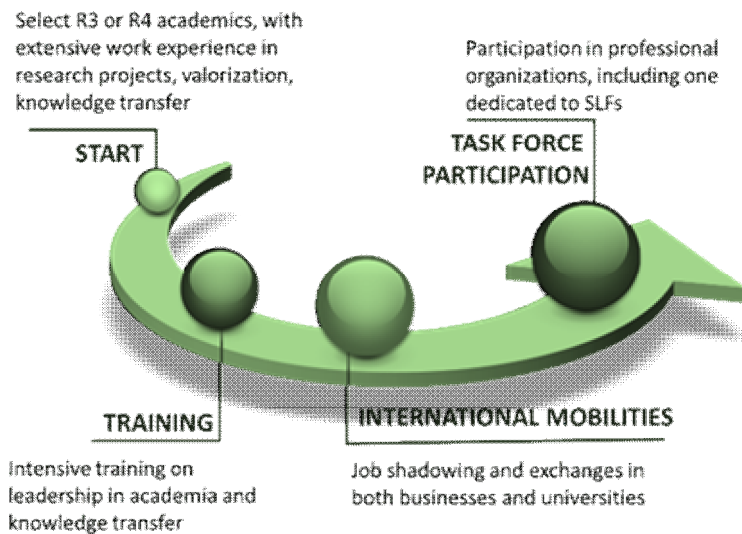

Figure 7. Possible career path proposed for SLF (2)

5. Conclusion

In conclusion, this study focused on exploring and evaluating mechanisms to strengthen education-enterprise cooperation (EEC) in Romania. Through a qualitative approach, the relevance of a new professional profile, the senior learning facilitator (SLF), was examined. The findings revealed that under favorable conditions, EEC in Romania has the potential to positively impact teaching and learning processes, as well as learning outcomes.

The study highlighted the shifting perceptions of higher education institutions (HEIs) and businesses. HEIs are increasingly seen as talent development institutions, while businesses seek curricular flexibility, innovation, and learning outcomes that enable graduates to quickly integrate into new roles. However, the role of HEIs as providers of innovation and entrepreneurship is not yet fully recognized. Existing cooperation activities between Romanian academics and the private and public sectors are mostly individually initiated, indicating a need for a systemic approach to foster business-university partnerships with financial and institutional support.

While there were positive examples of EEC identified by participants, there was a lack of commitment to building long-term strategic partnerships. This limited engagement negatively affects the relevance of study programs, the alignment of skills with labor market needs, and ultimately, graduates' employability.

Additionally, the study emphasized the potential of the SLF role as a catalyst for learning innovation and community building. Internal and external cooperation opportunities can be harnessed through this construct. Further exploration is needed to determine the specific directions for engagement in partnerships with universities, along with assessing the feasibility of introducing the SLF role in the country. This assessment should include identifying short- and medium-term measures to align the SLF role with the real needs and opportunities revealed through stakeholder consultations.

Overall, the study provides insights into the current state of EEC in Romania and highlights the potential benefits of strengthening cooperation between academia and the business sector. Further efforts are necessary to foster long-term partnerships and effectively integrate the SLF role to

address the evolving needs and opportunities in education-enterprise collaboration.

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