ELIX

ELIX ROADMAP

European labour mobility-led Career and Service-Learning System in Higher Education - ELIX

2024-1-SI01-KA220-HED-000252281

hochschule burgenland
University of Applied Sciences

fifty-fifty
Social Innovation & Cohesion Institute

PYLON ONE

Co-funded by the European Union

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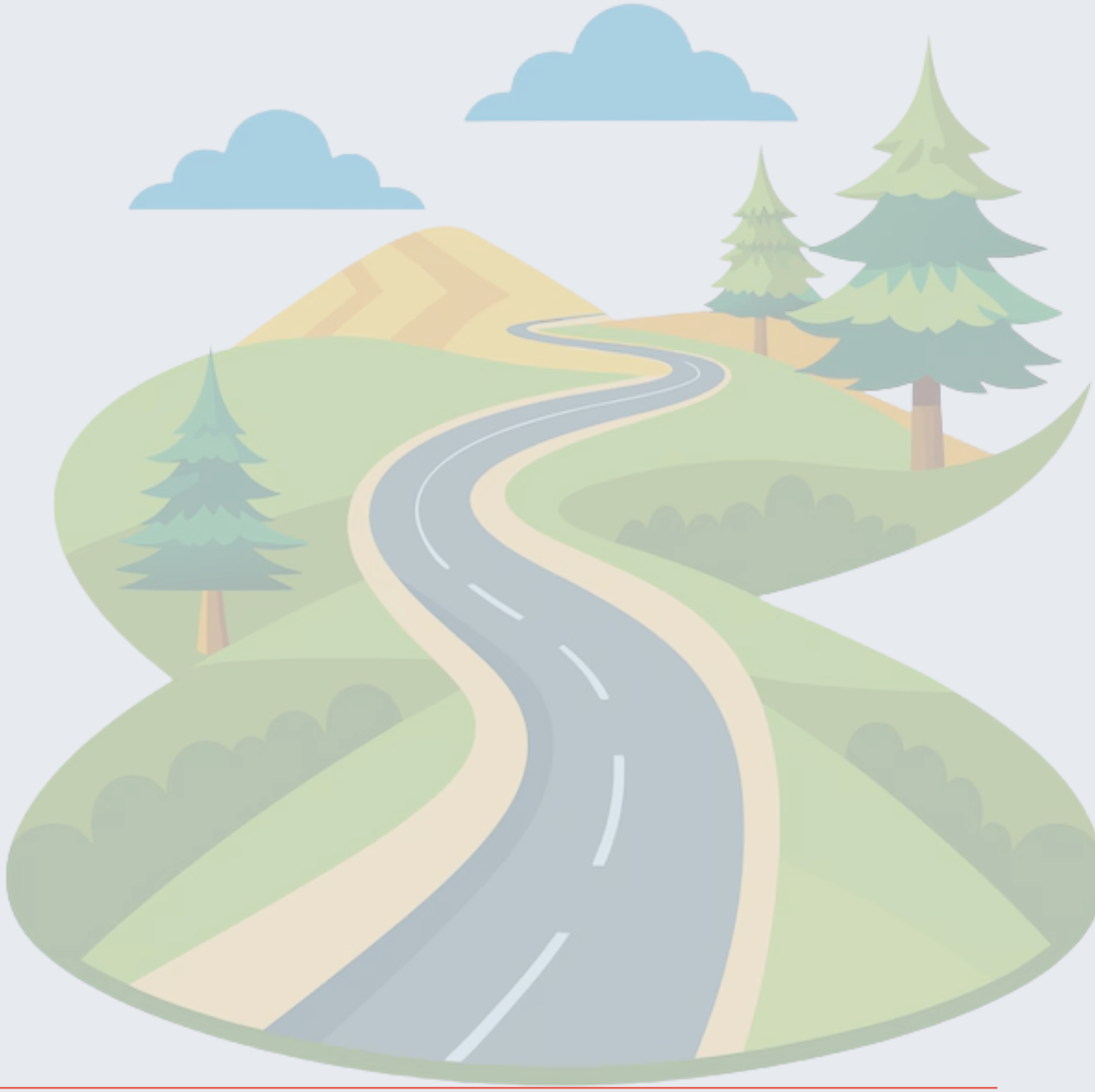

Introduction

Basic information

European labour mobility-led Career and Service-Learning System in Higher Education
Acronim: ELIX
Tender: KA220-HED - Cooperation partnerships in higher education - Call 2024 Round 1
Project number: 2024-1-SI01-KA220-HED-000252281
Leading partner: University of Novo mesto Faculty of Economics and Informatics (Slovenia)
Partners:

- University of Applied Sciences Burgenland (Austria)
- University of Economics in Bratislava (Slovakia)
- Social Innovation and Cohesion Institute Fifty-Fifty (Greece)
- PYLON ONE (Greece)
- Educons University (Serbia)

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Background of the ELIX project

Rapid technological progress and globalisation have widened the gap between the skills taught by higher education institutions and those needed by the labour market. Employers often see a shortage of graduates with the appropriate practical skills and competencies crucial for success in the modern work environment. The ELIX project aims to fill this gap by integrating real-world experiences and partnerships with industry and entrepreneurship education into curricula, ensuring students acquire the skills and knowledge needed to succeed in the 21st-century economy. In an age of rapid change and uncertainty, lifelong learning and adaptability are becoming crucial. Traditional higher education models often focus on acquiring theoretical knowledge rather than developing transferable skills such as critical thinking, communication and resilience. ELIX recognizes the urgency of equipping students with these essential skills and mindset, preparing them to successfully face complex challenges and thrive in a rapidly changing world.

Higher education institutions are responsible for promoting civic engagement and social responsibility among students. Traditional teaching methods, primarily based on lectures, often fail to develop these important values effectively. The ELIX project aims to bridge this gap by integrating Community Service Learning (CSL) into curricula, allowing students to use their knowledge and skills to solve real-world challenges in collaboration with local communities and organizations. By integrating CSL into the curriculum, ELIX enhances student engagement and cultivates critical thinking, problem-solving, and teamwork skills essential for success in today's dynamic workforce.

Description of the project's scope

The ELIX project stands at the forefront of innovation within higher education (HE), intertwining innovative teaching methodologies, digital integration, and entrepreneurial cultivation to foster a holistic learning environment. At its core, ELIX pioneers a transformative pedagogical approach through Community Service Learning (CSL), which immerses students in real-world scenarios, providing direct experiences that transcend conventional classroom boundaries. By integrating CSL into the curriculum, ELIX enhances student engagement and cultivates critical thinking, problem-solving, and teamwork skills essential for success in today's dynamic workforce. ELIX achieves this by implementing a multifaceted approach centred around Community Service Learning (CSL).

This innovative pedagogical model integrates real-world experiences into the curriculum, allowing students to apply theoretical knowledge in practical settings. Additionally, ELIX incorporates innovative teaching methodologies such as project-based learning, flipped classrooms, and experiential workshops to further engage students and foster critical thinking skills. ELIX embraces digital technologies to enhance learning outcomes and minimize its environmental impact. The project utilizes digital platforms and tools to facilitate student and partner communication, collaboration, and resource access. For example, ELIX might utilize online learning modules, virtual collaboration spaces, and mobile applications to deliver content and facilitate interaction. By leveraging digital solutions,

ELIX not only increases accessibility and flexibility in learning but also reduces paper consumption and promotes eco-friendly practices, aligning with the goal of advancing the green capabilities of the higher education sector. ELIX actively fosters innovation and entrepreneurial mindset among students through experiential learning opportunities and industry partnerships. ELIX enables cross-border cooperation and networking among universities, students, and socio-economic actors in Slovenia, Serbia, Greece, Austria, and Slovakia. By leveraging the diverse expertise and resources of partner institutions and stakeholders, ELIX improves the quality of teaching and learning, fosters cultural exchange, and prepares students for the challenges and opportunities of a globalized world.

Partners

The University of Novo mesto Faculty of Economics and Informatics (UNM FEI) is a distinguished higher education institution specialising in providing education, conducting research, and offering advisory services, focusing on management and business for both commercial and non-commercial entities. Accredited since 2006, UNM FEI offers Bologna programs at the first- and second-cycle levels, encompassing fields such as Economic Theory, Accountancy, Finance and Marketing, Business Law, Management, Entrepreneurship and Organization, Information Technologies, Communications, and Human Resource Management. With accredited Bologna programs and a focus on economic theory, entrepreneurship, and organization management, UNM FEI is well-positioned to support the development of career pathways grounded in civic learning principles. Its emphasis on fostering leadership skills and promoting corporate responsibility aligns with ELIX's goal of nurturing students' holistic development and preparing them for active citizenship.

Founded in 2006, Project Management College is Serbia's only institution dedicated to Project Management education. It offers undergraduate, master's, and PhD programs focused on project management methodologies, processes, and technologies. The college follows a 3+2 system for basic and master's studies, with a small PhD cohort. The programs cover business areas like finance, marketing, HR, and sales, with project management as the central focus. The faculty includes over 20 full-time professors and has a strong reputation for research and publications in the field. The college aims to equip students with broad business knowledge and specialized project management skills. PMC Faculty can add massive value to the project, since the organisation and its members (professors and staff) have big experience in creating several digital training programmes and adjusting courses.

Similarly, the University of Economics in Bratislava (EUBA) offers valuable insights and resources to enhance ELIX's impact. EUBA is the largest university in Slovakia, offering comprehensive education in economics, management, humanities, and informatics at the bachelor, master, and doctoral levels. With over 7,000 students and 107,000 graduates, EUBA is a member of the European Higher Education Area and the European Research Area. The university offers 19 bachelor's, 31 master's, and 16 doctoral programs, with some available in English, French, and German. EUBA prioritizes quality improvement, internationalization, and fostering collaborations with over 230 universities globally. The university aims to create a dynamic academic environment, promoting innovation, peer relationships, and continuous feedback to enhance internal and external communication.

University of Applied Sciences Burgenland (UAS Burgenland), with its two campuses in Eisenstadt and Pinkafeld, has offered unique degree programmes with the right mixture of theory and practical training for more than 30 years. Today it has got one of the best academic reputations. Thousands of graduates have established their careers in senior positions. They offer a wide range of bachelor's and master's degree programmes in five areas: Business Studies (with a special focus on Central and Eastern Europe), Energy & Environment, Health, Information Technology and Social Work. We take the best of Burgenland, add an intercultural perspective and combine it with innovation and research. Students profit from this and their interest in their well-being – therefore, no one at the University of Applied Sciences Burgenland is thought of as just a number!

Fifty-Fifty (Greece) and PYLON ONE (Greece) bring a wealth of experience in implementing projects that complement ELIX's objectives. Through initiatives like "Elevating Youth Voices with Storytelling & Animation" and "DiTRAL – Digital Training Lab for Trainers working with Disabled Athletes," Fifty-Fifty demonstrates its commitment to empowering youth and promoting inclusivity through innovative educational approaches. Additionally, projects like "BBX – Become Busy Xelerator" align with ELIX's focus on supporting youth entrepreneurship empowerment and enhancing digital skills among young people. Similarly, PYLON ONE's diverse activities in education, environmental protection, social inclusion, and entrepreneurship align with various aspects of the ELIX Project. Their involvement in projects to enhance skills and knowledge among specific target groups further complements ELIX's objectives of empowering individuals and communities through education and innovation.

Primary beneficiaries/target audience

Students are the primary beneficiaries and participants of the ELIX project. They are the focus of initiatives aimed at integrating community service learning (CSL) into the academic curriculum, enhancing their engagement with societal issues, and developing their skills in areas such as empathy, communication, teamwork, and cultural awareness. Through participation in community service projects and experiential learning activities, students are empowered to become active citizens and contribute meaningfully to their communities. Through participation in community service-learning initiatives, students will benefit from direct, experiential learning opportunities that complement traditional classroom instruction.

Participation in community service-learning initiatives enhances students' employability and career readiness by providing them with practical experience and skills relevant to the job market. For example, students might collaborate with local organizations or businesses to address community needs, thereby gaining valuable direct experience while simultaneously deepening their understanding of academic concepts. Also, students may participate in innovation challenges, startup incubators, or internships with local businesses to develop practical skills and entrepreneurial acumen.

HEI educators play a crucial role in successfully implementing the ELIX project. They are responsible for integrating community service learning into the academic curriculum, designing innovative teaching methodologies, and providing guidance and support to students throughout their learning journey. HEI educators also contribute to developing institutional policies and practices that promote civic engagement and social responsibility within higher education institutions. By equipping educators with the necessary training, resources, and support, the ELIX project aims to enhance their capacity to deliver high-quality education and foster a culture of civic engagement among students. The ELIX project offers HEI educators opportunities for professional development and skill enhancement.

Educators involved in the project gain exposure to innovative teaching methodologies, pedagogical approaches, and best practices in community service learning, enriching their teaching repertoire and enhancing their effectiveness in the classroom.ELIX provides mentorship and networking opportunities to connect students with experienced professionals and mentors in their field of interest. By immersing students in real-world contexts and providing them with the support and resources needed to pursue innovative ventures, ELIX empowers them to become catalysts for change and innovation within their communities and beyond. ELIX catalyses the development of innovation and entrepreneurial skills among students, instilling in them the mindset and capabilities needed to thrive in an increasingly competitive global landscape.

Objectives

The ELIX project focuses on employability, career counselling, digital skills, and competencies. It brings numerous opportunities and innovations into higher education, integrating innovative teaching methodologies, digital connectivity, and the promotion of an entrepreneurial mindset, thereby creating a comprehensive and supportive learning environment.

Specific objectives:

- Fostering professional development and lifelong learning among participants.
- Promoting civic engagement and social responsibility, with a focus on Community Service Learning (CSL).
- Enhancing collaboration and partnerships between educational institutions, market actors, and community stakeholders.
- Developing innovative tools and resources for integrating CSL practices into higher education curricula.
- Providing guidelines and training for educators to better support students in their career paths.

Expected outcomes:

- Increased awareness and understanding of local career pathways among stakeholders.
- Strengthened capacity of educators to integrate career learning practices (CSL) into their teaching approaches.
- Improved access to virtual community service-learning experiences through an innovative online platform.
- Enhanced skills and knowledge of students and teachers through educational resources and training modules.
- Improved understanding and application of civic engagement and professional development.

Importance of results alignment with project objectives

The ELIX project focuses on employability, career guidance, digital skills and competencies. It brings numerous opportunities and innovations to higher education, combining state-of-the-art teaching methodologies and digital integration and fostering an enterprising spirit, thus creating a comprehensive and stimulating learning environment.

1) Through innovative teaching methodologies and experiential learning opportunities, ELIX seeks to create a dynamic learning environment that inspires students to participate in their educational journey actively, leading to higher attendance and retention rates:

OBJECTIVE 1: Improve Student Engagement and Retention Rates (Percentage change in student attendance and retention rates compared to baseline data). Recognizing the importance of equipping students with the practical skills and competencies needed for success in the workforce, the ELIX project prioritizes the enhancement of employability skills and career readiness.

2) By providing students with hands-on experiences, career development programs, and industry partnerships, ELIX aims to empower graduates with the skills and confidence to thrive in their chosen career paths:

OBJECTIVE 2: Enhancing Employability Skills and Career Readiness (Percentage of graduates employed in fields related to their academic studies within six months of graduation - 80% of participating students report enhanced communication, teamwork, problem-solving, and digital literacy skills upon completion of ELIX initiatives, indicating increased readiness for the job market).

3) In today's rapidly evolving economy, there exists a significant gap between the skills taught in higher education institutions and those demanded by employers. The ELIX project seeks to bridge this gap by collaborating closely with industry partners to ensure that academic curricula are relevant, up-to-date, and aligned with the evolving needs of the labour market. By facilitating stronger connections between education and industry, ELIX aims to enhance the employability of graduates and drive economic growth:

OBJECTIVE 3: Aligning Academic Curricula with Labor Market Demands (percentage of graduates employed in fields related to their academic studies within six months of graduation - A targeted increase of 15% in the percentage of graduates securing employment in fields directly related to their academic background within the first two years of ELIX implementation, demonstrating improved alignment between education and workforce needs).

4) Innovation and entrepreneurship are essential drivers of economic growth and competitiveness in the modern world. The ELIX project is committed to fostering a culture of innovation and entrepreneurship among students. Through initiatives such as startup incubators, innovation challenges, and entrepreneurship education programs, ELIX empowers students to unleash their creativity, develop entrepreneurial skills, and pursue innovative ventures that address real-world challenges:
OBJECTIVE 4: Fostering Innovation and Entrepreneurial Skills (number of student-led startups).

Objectives of the roadmap

With a specific goal of fostering collaboration among stakeholders, we organized think tank sessions, inviting labour market actors, career counsellors, representatives from both the economic and non-economic sectors, and the interested local community to participate. Additionally, a comprehensive quantitative study was conducted among students on one side and labour market actors on the other to obtain a clear snapshot of the needs in local career pathways.

Each activity represented in the roadmap is meticulously designed to achieve specific outcomes that align with the overarching goals of the project, particularly:

- Identifying existing local career pathways and refining them to better meet the evolving needs of the community.
- Enhancing career development and promoting civic engagement among students.

By engaging diverse stakeholders in dialogue and collaboration, these efforts aim to foster a shared understanding of local challenges and opportunities. This will enable more effective and targeted measures, including the following actions within future project activities:

- Designing a structured framework for integrating Community Service Learning (CSL) into higher education curricula.
- Identifying effective strategies for facilitating CSL experiences that enhance career development and lifelong learning, benefiting students in their career journeys.
- Defining actionable steps to advance career opportunities within the community.
- Developing a toolkit with guidance materials that equip educators with the necessary resources to support students in developing lifelong career plans.
- Organizing the Triple ELIX Common Teaching and Accreditation Programme around three key pillars.

OUTCOMES

Within Work package 2 – ELIX Career management Pathways Framework based on Community Service Learning Model for Academic Training and Tutorship, we pursued a specific objective:

- To facilitate collaboration among stakeholders, including labor market actors, career consultants, and community representatives, by organizing localized think tank sessions in each partner country to identify and refine local career pathways.

Task 1: Organising and coordinating participants, including labour market actors, career consultants, and community stakeholders for the Localized Career Pathways Thinktank Series.

Task 2: Facilitated focused discussions and interactive think tank workshops over a two-day period to identify and refine local career pathways.
The localized think tank sessions, served as a forum for collaboration among stakeholders (labour market actors, career consultants and community stakeholders). By engaging diverse stakeholders in dialogue and collaboration, these sessions aimed to foster a shared understanding of local challenges and opportunities, paving the way for more effective and targeted interventions and to identify and refine local career pathways.

Task 3: Organising conducted in-depth analysis of current trends and challenges in the job market to inform discussions and develop innovative solutions.

Task 4: Collaborating with stakeholders to produce a comprehensive roadmap outlining actionable steps for advancing career opportunities within each partner community.
All partner organisations conducted surveys or interviews with stakeholders involved in the think tank sessions, toolkit development, and teaching programme design to gauge their satisfaction with the process and outcomes. The main goal was gathering qualitative feedback from educators and community stakeholders on the perceived impact of the career pathways think tank sessions, toolkit guidance, and teaching programme on student learning and community engagement.
Through these tasks was created comprehensive roadmap for advancing career development and civic engagement at the local level. This roadmap will not only identify existing local career pathways but also refine them to better meet the evolving needs of the community to foster a shared understanding of local challenges and opportunities to make a way for more effective and targeted interventions.Based on the results and findings of individual local communities in each partner country, we will continue with tasks 6 and 7.

Task 5: Researching and compiling practical methodologies and resources for integrating Career Service Learning (CSL) practices into teaching approaches within High education Institutions.

Task 6: Aligning the toolkit with the CMS framework outlined in EU Resolutions to ensure relevance and effectiveness.

The development of toolkit guidance for HEI educators, is geared towards building the capacity of educators to integrate the Community Service Learning practices into their teaching approaches. The design of a Triple ELIX Common teaching and Accreditation Programme on CSL will provide a structured framework for delivering quality education and will be anchored on key pillars such as Civic engagement and social responsibility, Career Development and Lifelong Learning, and Collaboration and impactful partnership.

METHODOLOGY

Research gap

There is a lack of empirical research that systematically examines the role or impact of community-based learning in various settings, such as professional organizations, local communities, or (online) communities of practice, on the long-term career development of individuals, particularly young people. There is a shortage of studies focusing on how participation in community-based learning affects the acquisition of specific competencies, the enhancement of employability, and career entry and advancement.

Aims

1. Identifying current trends in the labour market.
2. Identifying the skills gap in the labour market.
3. Identifying stakeholders' knowledge of social phenomena connected to the market needs to align them more effectively with career education in academic institutions.
4. Developing a comprehensive plan for improving youth employability (practical aim).

Research questions for Stakeholders:

1. What are the key current trends and challenges in the labour market, and which competencies are identified as essential for successful integration into this market?
2. How do current trends and challenges in the labour market influence the development of new competencies and the identification of skill gaps?
3. What is the stakeholders' knowledge of social phenomena related to market needs that could contribute to more effective alignment with career education in academic institutions?
4. What key elements should a plan for improving youth employability include, and what specific and actionable measures/instructions would be necessary for its effective implementation?

Research questions for Students:

1. What do students perceive as the most significant current social phenomena?
2. Which competencies do students consider essential for successful integration into the labour market, and which would they like to further develop to better respond to the social needs of the labour market?
3. How do students assess various categories of competencies, such as soft skills, career competencies, active citizenship, and digital competencies, in relation to their personal and professional growth?
4. What forms of support do students identify as most necessary and effective in their academic and career development to address social needs within the labour market? How can they be actively involved in shaping their career paths, integrating knowledge about social phenomena (e.g., through online platforms, etc.)?

METHODOLOGY

We employed both quantitative and qualitative research methodologies. In the first phase, we conducted a series of think tank sessions, utilizing panel discussions as a data collection method.

Sample

Milestones of Think Tank series

Country	Target group	Think Tank Formation	Number of participants
Slovenia	Stakeholders	13.–14.11.2024	36
	Students	11.–12. 11. 2024	38
Austria	Stakeholders	12.–13. 11. 2024	38
	Students	18., 25. and 26. 11. 2024	19
Slovakia	Stakeholders	12.–13. 11. 2024	38
	Students	21. 11. 2024	24
Greece	Stakeholders	13.–14.11.2024	18
	Students	11.–12. 11. 2024	20
Serbia	Stakeholders	20. 11. 2024	35
	Students	16. 11. 2024	20

In the next phase, we conducted a survey targeting two key groups: students and stakeholders. For each target group, we developed a tailored questionnaire, which was distributed via email. Participation in the study was anonymous and voluntary.

Milestones of Quantitative analysis (Survey)

Country	Duration	Number of participants: Stakeholders	Number of participants: Students
Slovenia	9. 12. 2024–14. 1. 2025	34	99
Austria	9. 12. 2024–14. 1. 2025	31	68
Slovakia	9. 12. 2024–14. 1. 2025	35	108
Greece	9. 12. 2024–14. 1. 2025	36	105
Serbia	9. 12. 2024–14. 1. 2025	35	101

ROADMAP IN SLOVENIA

Introduction

In the Slovenian higher education landscape, as in other European countries, a growing disparity is evident between the academic knowledge and skills acquired through higher education and the competencies required by the increasingly dynamic and technologically advanced labour market. Globalization and digital transformation introduce new challenges that demand high levels of adaptability and lifelong learning. However, traditional higher education models often fail to adequately foster the development of transferable skills such as critical thinking, complex problem-solving, interdisciplinary collaboration, and innovation.One of the key challenges of the Slovenian higher education system is the lack of systematic and sustainable cooperation between higher education institutions, economic entities, and local communities. Studies (e.g., Education at a glance: OECD indicators. Organisation for Economic Co-operation and Development) indicate that practical training programs, which facilitate the early integration of students into the workforce, are often insufficiently developed or implemented on a limited scale. The absence of systematic linkages between academia and the labour market results in a misalignment between employer expectations and graduate competencies, impeding their employability. In the study Empowering Individuals through Career Guidance and Lifelong Learning, CEDEFOP reports that employers frequently claim that while young graduates possess the necessary theoretical knowledge, they often lack practical experiences and soft skills, such as communication abilities, teamwork, entrepreneurial thinking, and adaptability to rapidly evolving business environments.

Additionally, students' perceptions of the relevance of their academic programs significantly influence their educational and professional trajectories. A lack of clear connections between academic curricula and subsequent employment opportunities can lead to diminished motivation for study, consequently contributing to higher dropout rates from higher education institutions. Like other European nations, Slovenia is witnessing an increasing trend of early university dropout rates, highlighting the need for innovative teaching approaches that enhance student engagement in real-world social and economic processes during their studies.The ELIX Project directly addresses the core challenges of the Slovenian higher education system by introducing innovative pedagogical methods that enhance student engagement and improve their employability. One of the central strategies of the project is the implementation of Community Service Learning (CSL), a transformative approach that bridges academic education with professional and societal environments.The Slovenian higher education model still predominantly relies on traditional educational approaches, emphasising theoretical knowledge while focusing less on developing practical competencies.

This results in limited opportunities for experiential learning, allowing students to apply their acquired knowledge in real-world contexts. The ELIX Project acknowledges the critical role of developing transferable competencies, such as entrepreneurial thinking, innovation, digital literacy, resilience, and interdisciplinary collaboration—competencies that employers identify as essential for success in the modern labour market as stated in the study of European Commission Education and training monitor: Skills for the digital era.Furthermore, the project promotes collaborative partnerships between universities, businesses, and non-governmental organisations, fostering a sustainable ecosystem where students gain practical experience and develop key competencies for their future careers. By integrating CSL into academic curricula, the ELIX Project allows students to apply their knowledge and skills to address real-world societal and economic challenges in cooperation with local communities and organizations.In doing so, the ELIX Project not only bridges the gap between higher education and the labour market but also contributes to greater social inclusion, the promotion of active citizenship, and the strengthening of competencies for sustainable development. Through a comprehensive approach to education, the project establishes the conditions for the long-term enhancement of the quality of higher education in Slovenia and the improved success of graduates in transitioning to the workforce.

Overview of completed tasks

UNM actively contributes to the development of localised career pathways by fostering collaboration among key stakeholders and implementing strategic initiatives to enhance career opportunities and civic engagement with the following tasks:

Task 1: Organized and coordinated participants, including labour market actors, career consultants, and community stakeholders, for the Localized Career Pathways, Think Tank Series.

Task 2: Facilitated focused discussions and interactive workshops over two days to identify and refine local career pathways. These sessions fostered stakeholder collaboration, promoting a shared understanding of local challenges and opportunities to drive targeted and effective interventions.

Task 3: Conducted an in-depth analysis of labour market trends and challenges to inform discussions and develop innovative solutions.

Task 4: Collaborated with stakeholders to create a comprehensive roadmap with actionable steps for enhancing career opportunities within partner communities. Partner organisations collected qualitative feedback through surveys and interviews, assessing the impact of think tank sessions, toolkit guidance, and teaching programs on student learning and community engagement.

These efforts resulted in a strategic roadmap for advancing career development and civic engagement at the local level. This roadmap identifies and refines existing career pathways and adapts them to evolving community needs, fostering meaningful and targeted interventions.

Achieved goals and results

In the following, we present specific results achieved through the completed tasks (previously presented). The first part outlines the findings from the think tank focus groups, followed by an in-depth analysis of the survey on labour market trends, competencies and youth employability conducted with students and stakeholders.

Think Tank Series

STUDENTS

Basic information

Number of participants: 38 students: 22 bachelor students (3rd year) Management and Business and 16 master students (1st and 2nd year) Management and Business
Date of implementation: 11/11/2024 and 12/11/2024
Mode of delivery: Live in UNM lecture rooms

Results

Most students agreed that the social trends that have the greatest impact on the labour market are changing values, digitalisation, environmental demands, and migration flows. Some added demographic change, global-local development, the wars in Ukraine and Israel, and, for one respondent, the importance of mental health. All respondents mentioned a lack of communication and digital skills; most also mentioned the ability to work in stressful situations, teamwork, and some also mentioned leadership skills and critical thinking. When asked what opportunities there are to integrate knowledge of social phenomena into their studies and career planning, most mentioned networking and collaboration with practitioners, more work experience, and mentoring from practitioners. Most students would like online courses and e-learning, online databases, social networks, podcasts, and participation in forums. Some students also want applied project work based on current challenges in business and outside of business.

Table 1: Thematic analysis of students' statements on social and market trends, skills gaps, and training delivery

Themes	Categories	Codes	Quotes
The impact of social trends on the market	**Changing values**	-Young people are demanding working from home, and flexible working hours, while leisure time is gaining in importance -Society is demanding a more inclusive and equitable workplace culture	*-... the most important social phenomenon is the change in values. I regularly see in my work that young people place more importance on leisure than proving themselves at work, getting a pay rise and being promoted ...Young people want to work from home, flexible working hour ...* (Interviewee 1) *-The change in values brings with it an emphasis on an inclusive and fair culture in the workplace.* (Interviewee 13)
	Digitalisation	-Artificial intelligence replaces certain jobs and creates new ones -Digitalisation requires digital marketing	*Digitalisation and the impact of technology. Digitalisation and AI are replacing some jobs but also creating new professions.* (Interviewee 2) *-Digitalisation, together with the change in value, requires an innovative approach such as digital marketing.* (Interviewee 9)
	Environmental requirements	Extreme weather events, the energy transformation, the trend towards eco-products and the reuse of materials are driving the sustainable transformation of companies and jobs	*- Occurrence of extreme weather events (e.g. flooding), concern about the energy transformation (electric cars, solar self-sufficiency, etc.) ...* (Interviewee 3) *- The fight against climate change, the growing trend towards environmentally friendly products and the reuse of materials ... have an impact on the search for sustainable solutions and the creation of new jobs in the field of sustainable development ...* (Interviewee 7)
	Migration flows	Migration flows affect the increased share of low paid jobs	*The most important social phenomenon now, in my view, is the migration flow to Europe, which in turn affects other trends. There are more migrants coming from the eastern countries, e.g. in haulage companies.* (Interviewee 4)
	War in Ukraine and Israel	The war in Ukraine and Israel is affects the deterioration of the European market	*The challenges of sustainable development and the wars in Ukraine and Israel. In particular, the war in Ukraine affects the competitiveness of the European market due to the high price of electricity and the depletion of the budgetary resources.* (Interviewee 5)

	Demographic change	Ageing population has an impact on the shortage of certain jobs	*... demographic challenges, such as an ageing population and a declining working population, leading to labour shortages in certain areas.* (Interviewee 8)
	Globalisation and localisation	Globalisation and localisation require companies to adapt to a rapidly changing environment	*Globalisation and localisation require companies to adapt to a rapidly changing international and local environment. Therefore, companies need employees who have intercultural competences and are ready for change.* (Interviewee 7)
	Mental health	The social importance of mental health is not sufficiently recognised in the workplace	*There is a growing awareness of mental health in society, but the market is not really responding. There is still a lot of pressure on employees.* (Interviewee 7)
Competence gaps for inclusion in the higher education curriculum	**Communication and digital competencies**	Increased integration of digital and communication skills in applied projects	*I would like to see more content to improve digital and communication skills.* The best way to do this is through applied projects. (Interviewee 16)
	Flexibility	More flexibility to work in simulating stressful environments	*The flexibility to work in stressful environments. The current work environment is increasingly stressful, and many people are unable to adapt.* (Interviewee 1)
	Teamwork	More teamwork in applied projects	*I would like to see more emphasis on the teamwork and communication in my programme, for example in applied projects.* (Interviewee 4)
	Leadership	More leadership skills in applied projects	*I would like to further develop my communication and leadership skills so that they help me in my professional life.* (Interviewee 8)
	Critical thinking	More critical thinking, based on practical examples	*Developing critical thinking about which risks paying particular attention to in critical situations in practise.* (Interviewee 9)
How to integrate missing content into the higher education curriculum	**Professional work and networking with labour market experts**	-Networking with labour market experts -Networking and organisation of events (conferences, workshops, events) with practitioners -Increased integration of work placements in the curriculum	*The most necessary and effective forms of support for study and career development would be networking and mentoring by experienced professionals who provide guidance and support; networking with labour market experts, more networking and events such as conferences and workshops with practitioners, more practise and participation in projects that enable the application of theoretical knowledge in practise, and of course more practise in the curriculum* (Interviewee 3).
	Practical workshops and applied project tasks	Workshops with challenges and data, more applied project assignments	*-We should introduce more seminars and project assignments that enable a deepening of certain current issues that the market needs.* (Interviewee 4) *-Practical workshops to analyse real economic data to better understand the impact of certain factors and develop critical thinking.* (Interviewee 9)
	Online tools	Online courses and e-learning, online databases, social networks, podcasts, forums	*There is a need to introduce various online tools such as webinars and e-learning, online databases, social networks, podcasts, participation in forums/groups, etc.* (Interviewee 7)

STAKEHOLDERS

Basic information

Number of participants 36 (12 from companies, 12 from NGOs and 12 from research organisations)
Date of implementation: 13/11/2024 and 14/11/2024
Mode of delivery: live in the UNM conference rooms

Results

The participants unanimously emphasised that social trends such as changing values, digitalisation, demographic change, and migration flows have a major impact on the labour market. Individual participants also pointed to the demands of environmental protection, global-local impact, the importance of mental health, and reflection. Among the main occupational gaps, respondents highlighted the lack of technical and caring professions. They also emphasised the need for communicators who can lead effectively, motivate staff, and connect with the external environment. Future professions include digital media content creators, particularly influencers, and digital professionals, such as experts in artificial intelligence, virtual reality, and augmented reality. Most respondents pointed to a lack of key skills such as communication, initiative, teamwork, flexibility, and collaboration, while individuals also emphasised empathy. They unanimously suggested more internships in degree programs and networking with experts from the labour market as important steps to improve the curriculum. In addition, the use of various online tools to develop skills and gain practical experience was suggested.

Table 2: Thematic analysis of students' statements on social and market trends, skills gaps, and training delivery

Themes	Categories	Codes	Quotes
The impact of social trends on the labour market	**Changing values**	Key social trends such as: -Individualisation of society, lack of cooperation, -Disrespect for authority, -Lack of altruism, -Young people's demands for quick solutions, high incomes, and more free time are leading to more conflicts	*Nowadays, everyone looks after themselves, people no longer respect authority, everyone expects quick solutions ... and young people want to work from home, flexible working hours, high salaries ..., which leads to more conflicts between workers and in society in general.* (Interviewee 3) *-There is also a lack of co-operation between people, but also between sectors, for example between higher education and business. Business must also take responsibility for educating students.* (Interviewee 22)
	Digitalisation	-Artificial intelligence replaces certain jobs and introduces new ones -Digitalisation reduces creative thinking and leads to a lack of certain jobs	*- Digitalisation and AI create new jobs such as influencers, which means that young people want to be just that and not work ...* (Interviewee 5) *- Digitalisation is negative ... young people can't no longer think, there is no more creativity, they don't go into caring professions and other professions where you have to work physically ... This leads to a lack of jobs.* (Interviewee 19)
	Migration flows	Migration flows affect labour supply, especially in low wage sectors	*Migration flows change everything, especially labour supply, by filling gaps in the labour force, especially in sectors where demand for labour is high, e.g. construction and care.* (Interviewee 8)
	Demographic change	The ageing of society is affecting the shortage of certain jobs	*I would immediately say demographic change, the ageing of society, and the shortage of staff in care homes and in healthcare.* (Interviewee 1)
	Mental health	The younger generation is not immune to pressure, so there is a lot of absenteeism	*Because the younger generation is not as resilient to pressures in society and in the workplace, there is a lot of absenteeism.* (Interviewee 14)
	Environmental requirements	Climate change affects the sustainable transformation of companies	*-Climate change requires companies to adapt to sustainable transformation.* (Interviewee 3)
	Globalisation and localisation	Globalisation and localisation require employees to adapt to	*Globalisation and localisation require employees to adapt to dynamic market*

			and local specificities through flexibility, innovation, and adaptability (Interviewee 7).
	Civil society participation	Civil society participation at all levels of society requires a willingness to co-operate	*I would add that public participation, deliberation, requires us to participate. And this is about the willingness to develop joint solutions, not just to give opinions.* (Interviewee 7)
Labour market trends with emerging job roles	**Technical and caring professions**	Shortage of technical and caring professions	*The shortage of skilled labour in technical and caring professions is becoming an increasing challenge for society, as it affects the smooth functioning of industry, and the provision of high-quality care to the population.* (Interviewee 33)
	Communicators	Shortage of staff who can lead and communicate well	*There is a serious shortage of staff who know how to motivate, inspire, engage, coordinate... this is useful everywhere, not just here. And in the end, AI alone do not anything.* (Interviewee 21)
	Content creators for digital media	Content creators for digital media (influencers)	*With the rise of digital platforms, the demand for content creators who know how to appeal to the audiences is increasing. Influencers are in high demand. (*Interviewee 37)
	Digitalisation experts	AI, virtual reality experts	*The use of AI, and virtual reality, is expanding into areas such as education, healthcare and entertainment, increasing the need for experts in this field.* (Interviewee 15).
Gaps in students' competences and curriculum integration	**Communication skills**	More content on communication and work organisation with feedback on progress	*There is a lack of soft skills, organisational skills. They also don't know how to evaluate what is important to them. More work should be done on this, and they should receive feedback.* (Interviewee 19)
	Flexibility in practise	More flexibility through simulation of stressful environments	*The flexibility to work in stressful environments. More simulation of a stressful environment.* (Interviewee 1)
	Self-initiative through problem solving	Self-initiative through practical problem solving	*Self-initiative, which is linked to what you know and can do, and problem solving with practical real-world problems - not running away from things you don't know but facing up to solving real world problems* (Interviewee 8).
	Teamwork and collaboration	Teamwork and collaboration through teamwork	*I put a lot of emphasis on teamwork, and collaboration. You must recognise that you are part of chain. And linked to that, co-operation between institutions.* (Interviewee 9)
	Empathy through role-play	Empathy and altruism through role play	*We must teach them empathy and altruism; otherwise, our generation will not be able to live in old age. Who will look after us? Preferably through role-play, they must try it out for themselves.* (Interviewee 4)
Developing a roadmap for youth employability and the involvement of higher education institutions and the world of work	**Professional work experience and networking with labour market experts**	-Increase the integration of professional work placements into the curriculum -Career Day	*- The experience, the internship, where students can get to know the staff and we can get to know them.* (Interviewee 33) *- A careers day for employers is useful, with a presentation on one profession, with handouts and everything... We'd be happy to come to you.* (Interviewee 5)
	Online tools	Virtual simulations and workshops, platforms	*I suggest utilising platforms such as LinkedIn, Glassdoor, Indeed and Handshake, that allow students to explore job opportunities and connect with employers, while tools such as Practice Labs and Virtual Internships offer the opportunity to gain practical skills and participate in real projects* (Interviewee 7).

Summary of the findings of the focus groups at the University of Novo mesto

Focus groups with 38 students from the University of Novo mesto and 36 stakeholders revealed that social trends such as changing values, digitalization, and migration clearly have a major impact on the labour market. The students focused on environmental requirements and the stakeholders on demographic changes. Communication and digital skills, flexibility, initiative, teamwork, leadership, and critical thinking were highlighted as key skills often lacking in the labour market. Both groups agree that study programs need to be improved by emphasising practical skills and links to the labour market. Both suggested integrating professional practice more into the curriculum and increasing cooperation with experts from the field. The students suggested practical workshops and applied project tasks based on current economic challenges as additional steps to improve employability. Students also expressed a desire to have access to online courses and databases and to participate in forums. The use of online tools such as LinkedIn, Glassdoor, and Indeed can help students research job opportunities and labour market requirements and connect with employers. In addition, virtual simulations such as practice labs and virtual internships allow students to develop practical skills and gain experience in real-life projects, further preparing them for the challenges of the modern labour market.

Quantitative analysis

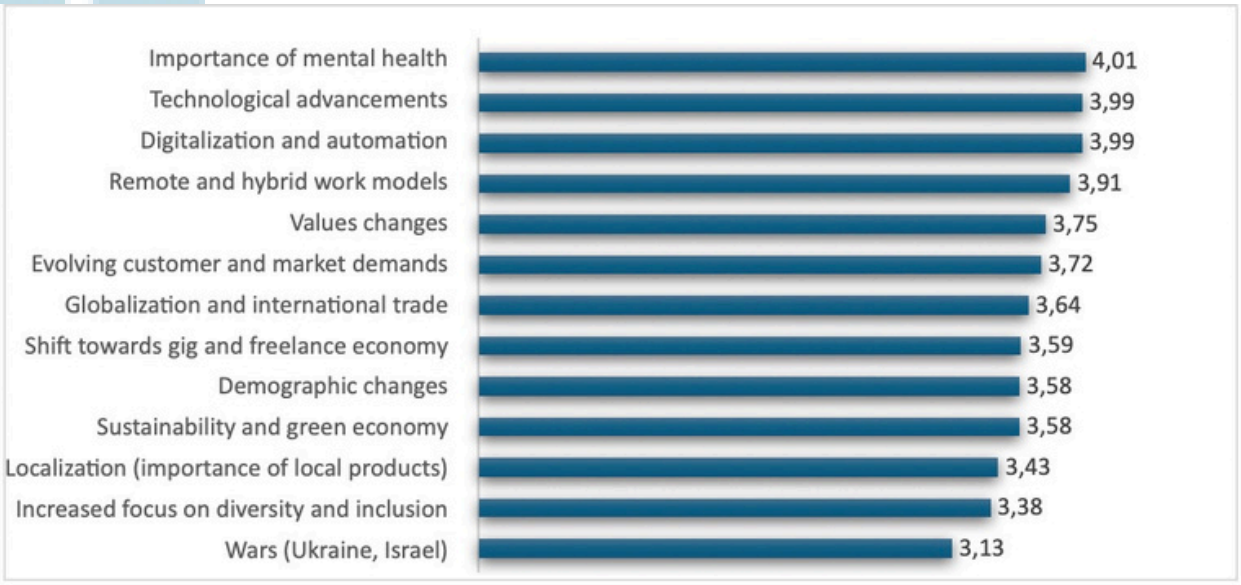
Survey on Labor Market Trends, Competencies, and Youth Employability for Students

This initiative seeks to explore current labour market trends, identify essential competencies, and develop effective measures to enhance youth employability. Your insights as a key stakeholder are invaluable in helping us align career education with market needs, address skill gaps, and foster collaboration between higher education institutions and industry.

Perception of Current Social Phenomena

Initially, we asked a group of students to assess the importance of selected current social phenomena. We found that all of the listed social phenomena are considered important to very important by students. The students identified mental health as the key social factor ($\bar{x}$ = 4.1; σ = 1.015), followed by digitalization and automation ($\bar{x}$ = 3.6; σ = 1.36) and technological advancements ($\bar{x}$ = 3.99; σ = 1.025), which are reshaping the nature of work, with the possibility of hybrid and remote work models ($\bar{x}$ = 3.91; σ = 0.959) being the fourth most important factor. According to the average values, the factors deemed important but ranked lower are wars, focus on diversity and inclusion, and localization (the importance of local products).

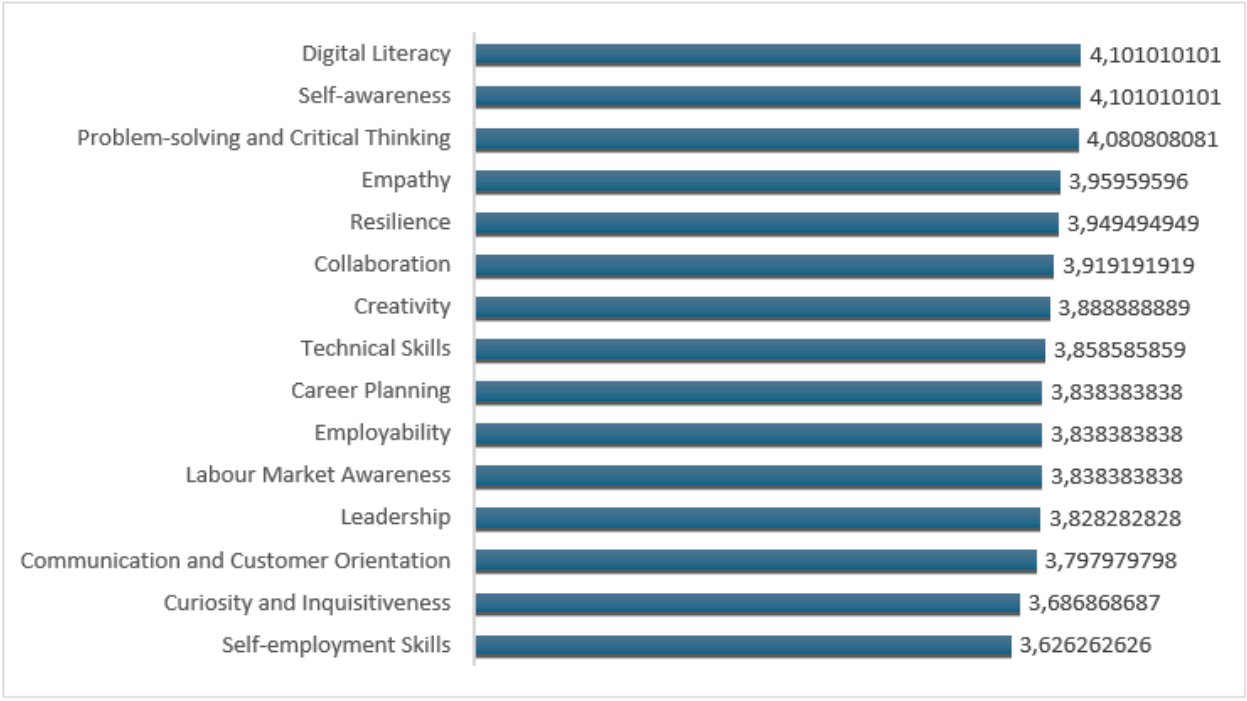
Figure 1: Perception of Current Social Phenomena



Essential Competencies for Labor Market Integration

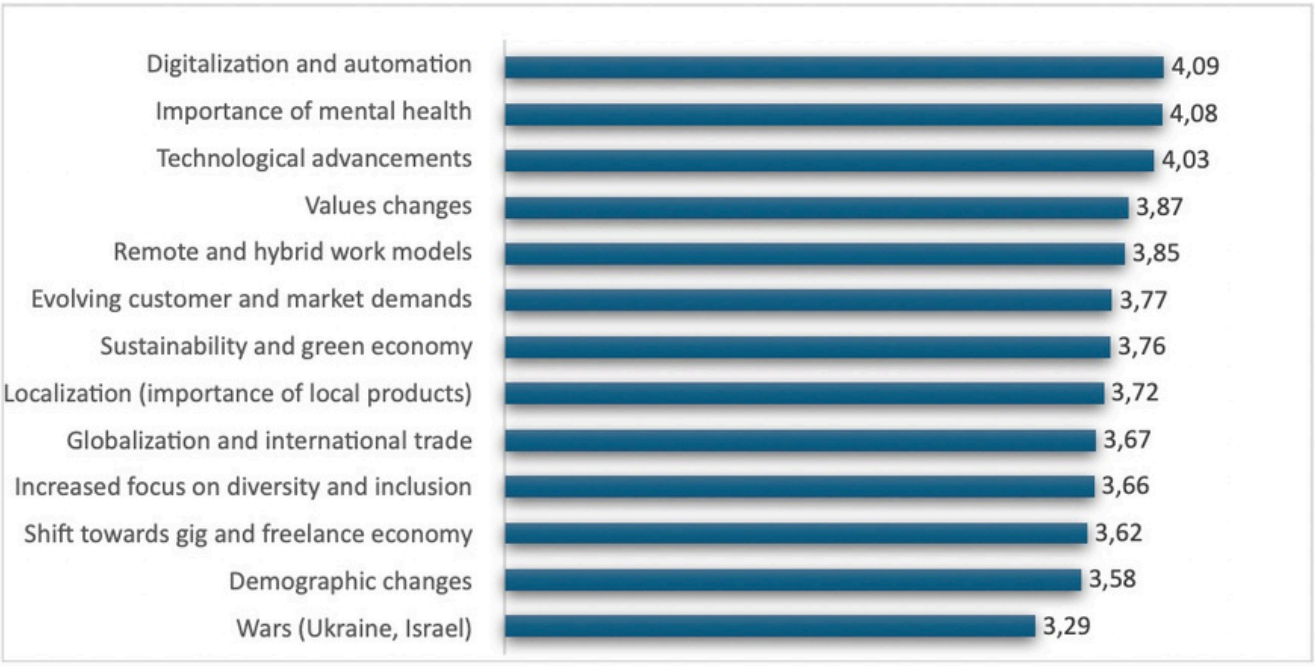
According to respondents, the key competencies for a successful transition from education to the labour market are digital literacy ($\bar{x}$ = 4.10; σ = 0.995), self-awareness ($\bar{x}$ = 4.10; σ = 0.974), problem solving and critical thinking ($\bar{x}$ = 4,08; σ = 0,955). Other competencies, such as empathy, cooperation, and resilience (so-called soft skills), are also important. However, self-employment skills, as well as curiosity and inquisitiveness, are considered less important.

Figure 2: Perceived Importance of Competencies for Labour Market Integration



We asked students to what extent each of the above trends requires them to develop competencies to better adapt to the needs of the labour market and society. Students believe that they will need to develop competencies to a considerable extent in all the areas mentioned. The most significant areas for competency development are digitalization and automation ($\bar{x}$ = 4.09; σ = 0.959), mental health care ($\bar{x}$ = 4.08; σ = 1.047), and technological advancement ($\bar{x}$ = 4.03; σ = 0.886). On the other hand, wars and demographic changes are perceived as requiring less investment in competencies.

Figure 3: Need for New Competencies Due to Emerging Trends



Students believe they are moderately well prepared to address the challenges and competency gaps listed. They assess that they lack appropriate soft skills ($\bar{x}$ = 3.63; σ = 1.046), are not adequately digitally literate ($\bar{x}$ = 3.62; σ = 1.037), and anticipate difficulties in adapting to workplace culture ($\bar{x}$ = 3.59; σ = 0.979). They also recognize potential problems arising from a lack of critical thinking and problem-solving skills, practical experience, and specific technical and professional knowledge. However, they are least concerned about turnover or a lack of employee retention strategies, as well as legal and administrative barriers to employment.

Support for Academic and Career Development

Based on students' self-assessment of their involvement in shaping their career paths, we find that they are moderately engaged. They are primarily involved in engaging internships or practical placements, participating in career workshops or webinars and using online platforms to learn about social phenomena. They are less involved in collaboration on project addressing societal issues or in networking with professionals and alumni. This suggests that while students actively seek experiential learning opportunities, there may still be gaps in structured career guidance and support mechanisms that could further enhance their career development. They would recommend using all the mentioned activities for shaping career paths, as outlined above.

Figure 4: Self-Perceived Readiness to Address Competency Gaps and Challenges

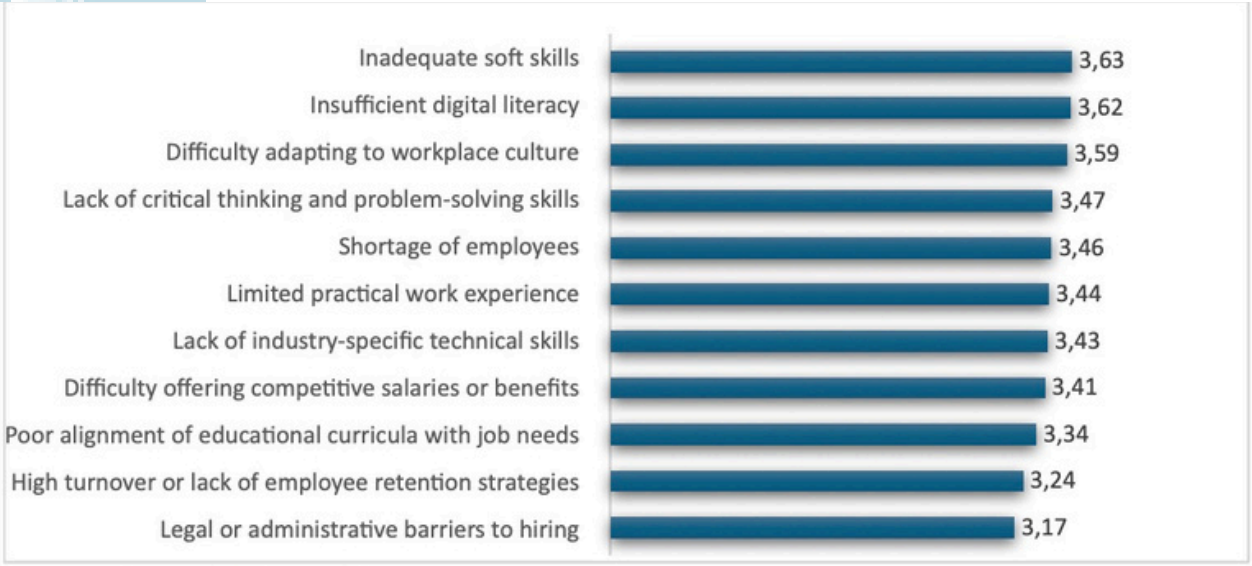


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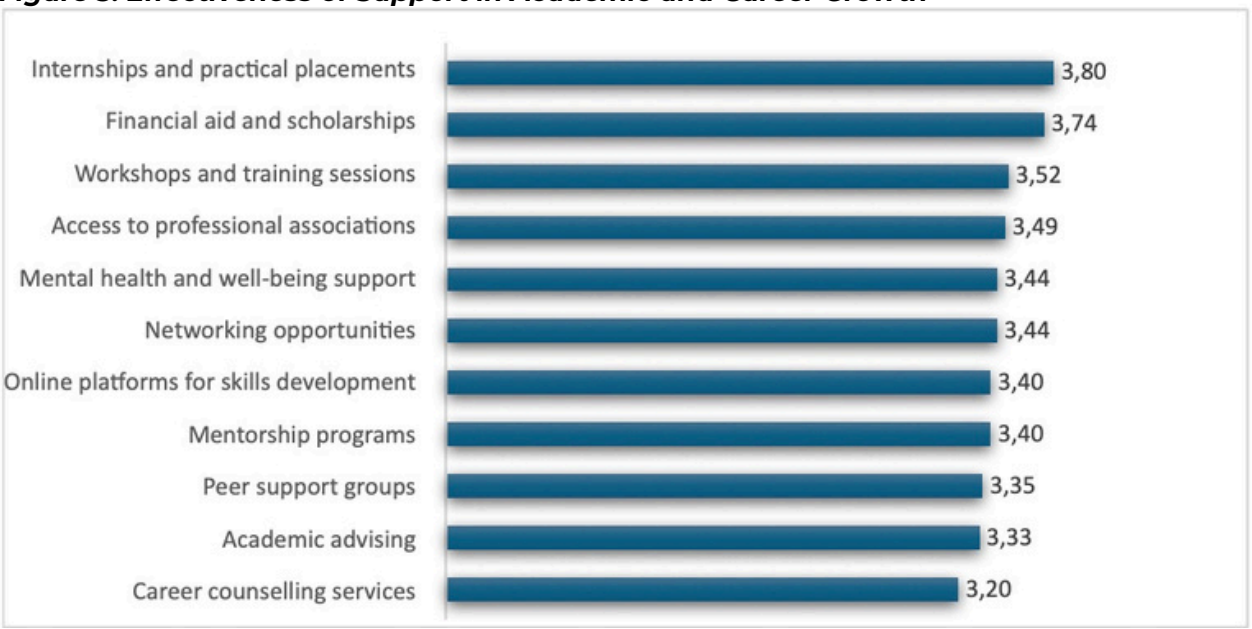
Figure 5: Effectiveness of Support in Academic and Career Growth



They provided suggestions and comments on how universities can better support students in preparing for the labour market while addressing social needs. In order to better support students in preparing for the labour market, universities could focus on the following areas:

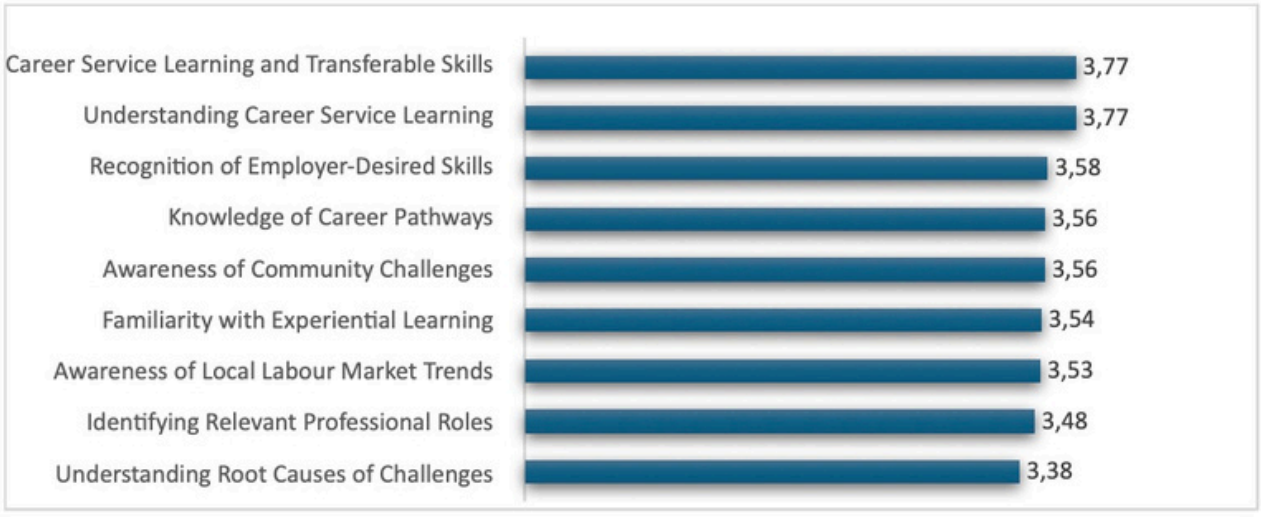
- Offering more career-oriented workshops and lectures.
- Providing practical training opportunities, collaborating with employers, and developing soft skills.
- Increasing cooperation between universities and the labour market.
- Incorporating more practical teaching, focusing on skills relevant to students' future careers.
- Introducing more current topics that are close to students' interests.
- Organizing seminars and workshops based on real-life examples and from various fields.

- Offering workshops tailored to specific student groups with a particular interest, as roundtable discussions tend to be too general and not engaging.
- Promoting continuous learning and offering more opportunities for practical internships.
- Organizing more field trips, such as visits to companies, and encouraging participation in business events.
- Holding events with successful entrepreneurs who can serve as role models for students, providing first-hand information about the real world.
- Providing more opportunities for practical internships in companies at the right level, addressing questions from students.
- Organizing more career days, seminars, and lectures both locally and internationally, with student-friendly transport and entrance fee options.
- Ensuring that universities focus not only on current theories but also on practical knowledge that will be useful in students' future jobs.
- Promoting internships in various companies and involving students in hands-on experiences.

Knowledge about Career Service Learning

As part of the research, we also examined students' understanding of current social issues and the labor market. We found that students are moderately aware of current issues. They report that they understand the concept of Career Service Learning and its purpose in higher education ($\bar{x}$ = 3.77; σ = 0.967), as well as how Career Service Learning can help them develop transferable skills (e.g., teamwork, problem-solving, leadership) ($\bar{x}$ = 3.77; σ = 1.018). They moderately recognize the skills and qualifications that employers seek in their area of expertise, are aware of the main challenges currently facing the community and are quite well-informed about the potential career pathways available in their field of study.

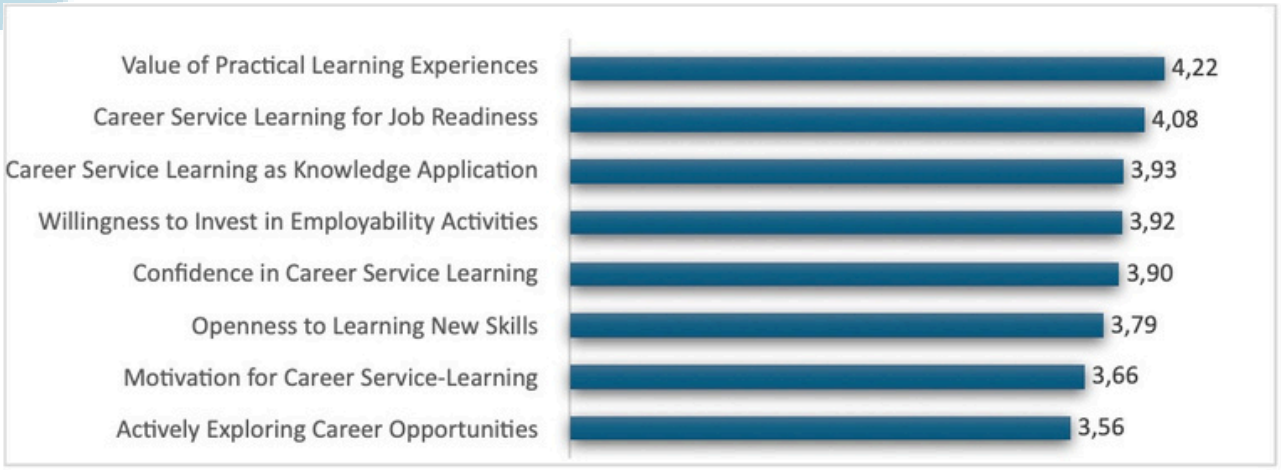
Figure 6: Understanding of Community Issues and Labour Market



Attitudes toward Career Service Learning

Regarding their understanding of community issues and labour market students' self-assessment show, that they are quite familiar with these topics. They recognise practical learning experiences as valuable for their career development ($\bar{x}$ = 4.22; σ = 0.910) as well they believe Career Service Learning can enhance their readiness for the job market ($\bar{x}$ = 4.08; σ = 0.933). However, we observe lower motivation to engage in Career Service Learning activities as part of their education ($\bar{x}$ = 3.66; σ = 0.960) and lack of commitment to actively exploring career opportunities during their study time ($\bar{x}$ = 3.56; σ = 1.022)

Figure 7: Attitudes toward Career Service Learning



Behavioural Intentions and Actions

Students assessed the competencies in community enterprise development by rating the following statements, as shown in Figure 9. They are aware of their personal strengths and how they can contribute to the community labour market ($\bar{x}$ = 3.77; σ = 0.855). They are moderately skilled in continuously working on enhancing skills and knowledge relevant to the community labour market ($\bar{x}$ = 3.37; σ = 0.965) and in self-reflection of own experiences in the community labour market to identify the area of improvement ($\bar{x}$ = 3.37; σ = 0.965). We observe the lower level of readiness to actively seek out and embrace new opportunities and challenges within the community labour market ($\bar{x}$ = 3.11; σ = 1.039) and to effectively build and maintain relationships with community members and stakeholders to support the community labour market ($\bar{x}$ = 3.11; σ = 0.999).

Figure 8: Behavioural Intentions and Actions

Survey on Labor Market Trends, Competencies, and Youth Employability for Stakeholders

Labor Market Trends and Challenges

The most significant trends shaping the labour market and influencing workforce needs (Figure 10) are value chances ($\bar{x}$ = 4.50; σ = 0.564), demographic chances ($\bar{x}$ = 4.44; σ = 0.746) and technological advancement ($\bar{x}$ = 3.62; σ = 1.037) as well as digitalisation and automation ($\bar{x}$ = 3.62; σ = 1.037). Otherwise, stakeholders recognise all factors as medium to quite important as they are mental health issues, new remote and hybrid work models, globalization and international trade. In their opinion, the war and the increased focus on diversity and inclusion are expected to have less impact on the labour market.

As shown in Figure 11, the major challenges organizations face in integrating new employees into the labour market include a shortage of employees ($\bar{x}$ = 4.50; σ = 0.821), as well as difficulty offering competitive salaries or benefits ($\bar{x}$ = 4.38; σ = 0.739). Other significant challenges faced by organizations include inadequate soft skills ($\bar{x}$ = 4.15; σ = 0.784), high turnover or lack of employee retention strategies ($\bar{x}$ = 4.03; σ = 0.937), limited practical work experiences, lack of industry-specific technical skills, lack of critical thinking and problem-solving skills, as well as poor alignment of educational curricula with job needs. Challenges such as insufficient digital literacy or legal and administrative barriers to hiring are considered less significant.

Figure 9: Significance of Trends in Shaping Labour Market and Workforce Needs

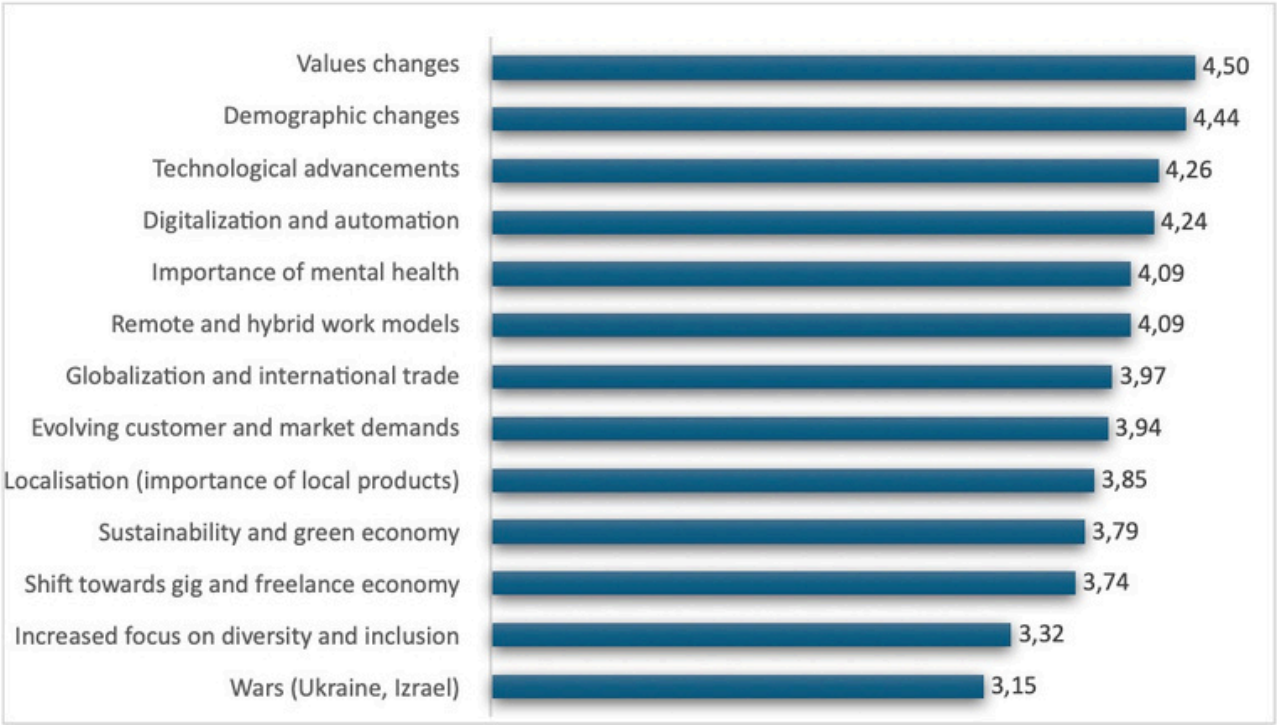
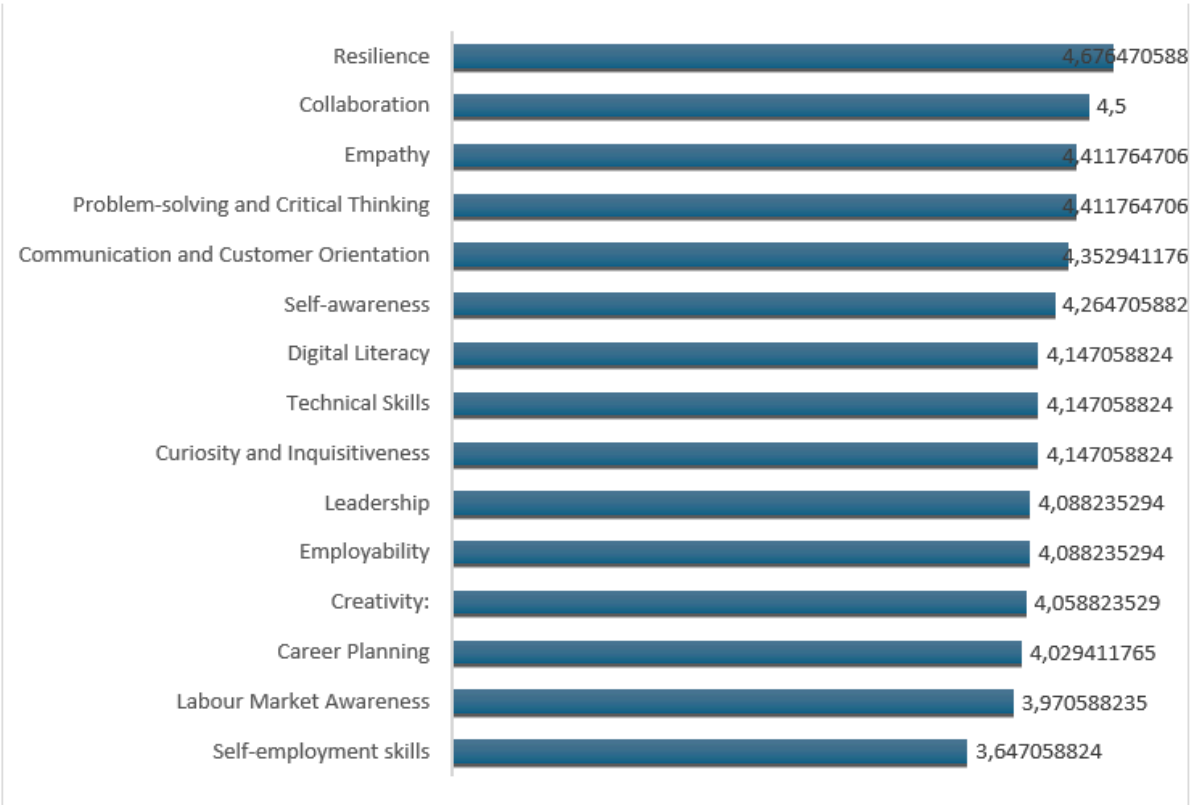


Figure 10: Challenges in Integrating New Employees into Labour Market

According to the stakeholders, all listed competencies are crucial for successful labour market integration (figure 11). Among them, resilience ($\bar{x}$ = 4.68; σ = 0.475) and collaboration ($\bar{x}$ = 4.50; σ = 0.615) are the most important, followed by empathy ($\bar{x}$ = 4.41; σ = 0.609) and problem-solving and critical thinking ($\bar{x}$ = 4.41; σ = 0.609). Self-employment skills appear to be less important.

Figure 11: Essential Competencies for Labour Market Integration



Impact of Trends on Competencies and Skill Gaps

We checked with stakeholders how critical the following skill gaps are (Figure 13), that they have observed in recent graduates or new employees. Stakeholders notice that graduates lack critical thinking and problem-solving ($\bar{x}$ = 4.41; σ = 0.475), communication skills ($\bar{x}$ = 4.24; σ = 0.781), as well as time management and organizational skills ($\bar{x}$ = 4.15; σ = 0.744). A large deficit is recognised with emotional intelligence and self-awareness, adaptability to change, teamwork and collaboration. However, recent graduates or new employees are generally strong in digital literacy and IT competencies.

To address the recognized skill gaps, organizations often use various approaches, such as internal training programs, mentoring and coaching, recruiting professionals with pre-existing skills, and utilizing e-learning platforms and online learning. They also frequently engage in partnerships with educational institutions and collaborate with government or industry bodies. Some organizations have internship programs, upskilling or re-skilling initiatives, cross-industry collaborations for shared training, and the development of clear career progression frameworks. Less common are the implementation of job rotation or offering financial incentives for employee skill development.

Figure 12: Critical Skill Gaps in Recent Graduates or New Employees

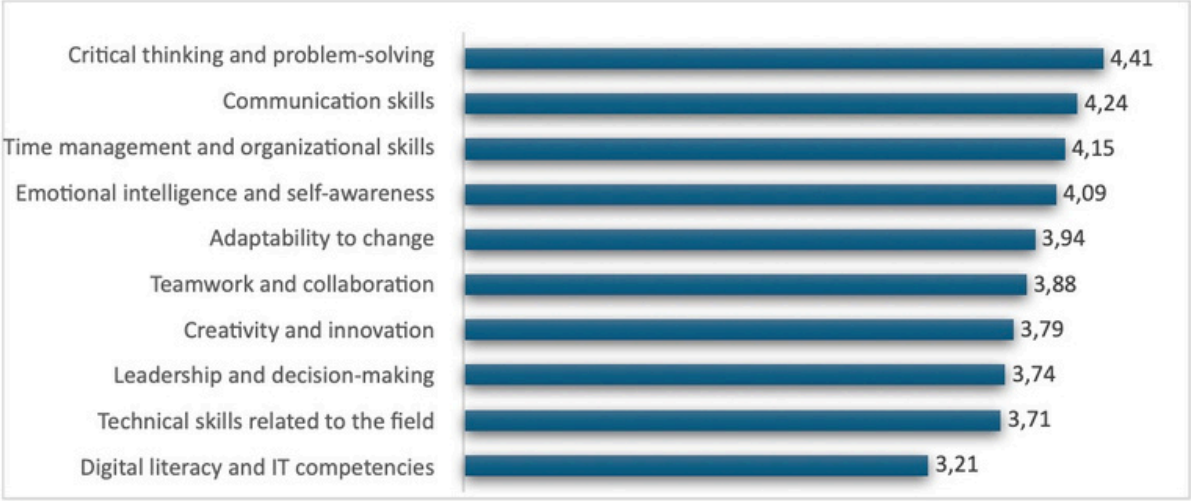


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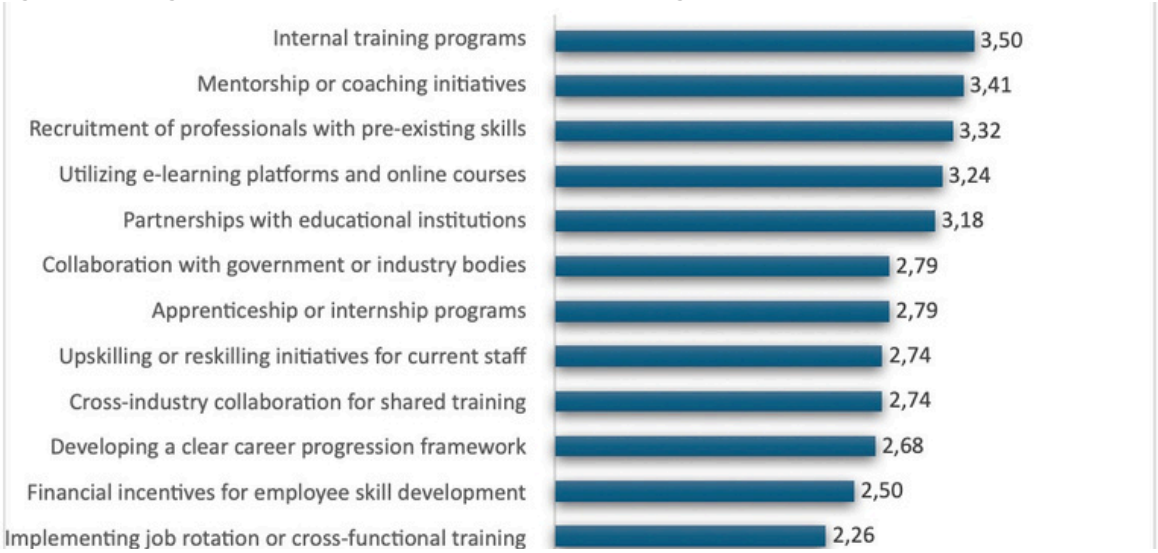
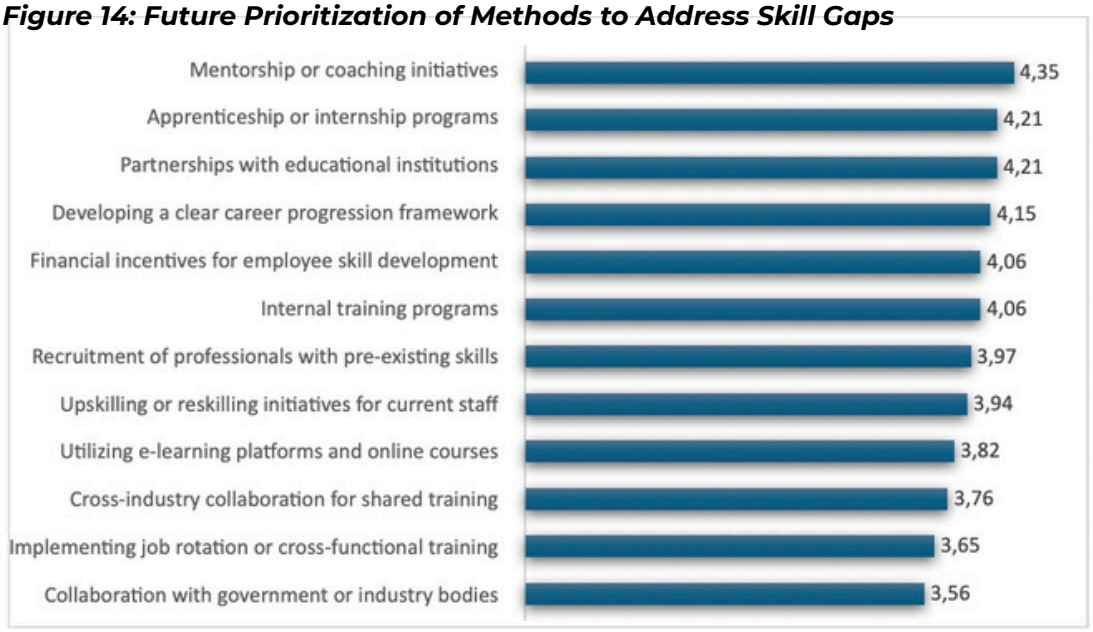
Figure 13: Organizational Approach to Addressing Skill Gaps



Organizations are aware that, in accordance with the rapidly changing business environment and the demands of the labour market, they must develop and adapt human resource management models and approaches. Their future prioritization of methods to address skill gaps will focus on mentorship or coaching initiatives ($\bar{x}$ = 4.35; σ = 0.597), apprenticeship or internship programs ($\bar{x}$ = 4.21; σ = 1.038), enhanced cooperation with educational institutions ($\bar{x}$ = 4.21; σ = 0.487). The development of clear career progression frameworks, as vell as financial incentives for employee skill development must receive greater emphasis in services development. Internal training programs, e-learning platforms and online courses, upskilling and reskilling, job-rotation, cross-industry collaboration will also remain important models for strengthening employee's competencies in the future.

Figure 14: Future Prioritization of Methods to Address Skill Gaps



Social Phenomena and Career Education

The role of academic institutions in better aligning career education programs with labour market needs is also very important. This is why we asked stakeholders how academic institutions could approach reducing the skill gap and successfully integrating graduates into the labour market. Stakeholders rated all listed approaches as very to extremely important. They strongly recommend integrating practical internships and on-the-job training ($\bar{x}$ = 4.62; σ = 0.551), promoting lifelong learning opportunities ($\bar{x}$ = 4.47; σ = 0.706), enhancing partnerships between academia and industry ($\bar{x}$ = 4.47; σ = 0.615), as well as including industry professionals in curriculum design and teaching ($\bar{x}$ = 4.41; σ = 0.925). The faster adaptation of study programs to respond quickly to labour market changes and encouraging interdisciplinary approaches in education are also highly recommended. Special focus should also be placed on developing soft skills.

Figure 15: Improving Alignment of Career Education with Labour Market Needs

Stakeholders gave some specific examples of collaboration between them and educational institutions that have been effective in addressing mentioned issues:

- We engage through professional visits, lectures, and expert training.
- Students of pedagogy come to us for internships as part of their practice. They need to complete 8 sessions. The goal of the internship is to familiarize them with the operation of youth centres and employment opportunities, although many of them...
- As a high school, we regularly collaborate with employers through mandatory student internships, meetings with employers, and organizing career days for employers and students. We also carry out...
- Mentoring, scholarship, and internship programs have been successful so far, but there is not enough collaboration from academic institutions with companies regarding possible internship programs. It is very dependent...
- Our organization serves as a learning base for social work students and collaborates in the practical education of students from the Faculty of Social Work.
- I provided mentoring to students at my workplace.
- I am responding in the role of an employee at an academic institution; as I understand, this survey is intended for us, but employees in working organizations. This may skew the results of the research if we are not considered.
- We collaborate excellently with the Faculty of Arts at the University of Ljubljana in preparing materials for foreigners who are preparing for or already active in the labor market. They also provide materials for independent work in the home environment if they cannot attend...
- Collaboration of employees on master's theses, filling out surveys; delivering lectures and workshops by employees at educational institutions; active participation in career days organized by educational institutions.
- We collaborate on specific programs for developing youth competencies.
- We collaborate with higher education institutions.
- Study while working.
- Our organization offers internships for students and runs a Workplace Training program. We also collaborate with high schools, where we conduct workshops based on their needs.
- We involve students in study internships and mentoring for trainees.
- We collaborate with academic institutions to promote entrepreneurship and also for internships. In practical work, we observe that young people learn the most because they get a feel for what it is like to work in a particular field.

Improving Youth Employability

Stakeholders rated the listed specific and actionable measures for effectively implementing a plan to improve youth employability as extremely important. They strongly recommend mentorship and career guidance initiatives ($\bar{x}$ = 4.62; σ = 0.493) and providing structured internship and practical work experiences ($\bar{x}$ = 4.56; σ = 0.705). They are also strongly in favour of offering financial incentives or subsidies to organizations hiring and training young employees. Additionally, they support creating industry-aligned curricula in academic institutions and the development of soft skill training programs.

Figure 16: Importance of Measures for Enhancing Youth Employability

We asked stakeholders how significant the following ways are in which their organization can contribute to the successful implementation of measures to improve youth employability. The majority is willing to support the development of soft skills ($\bar{x}$= 4.44; σ = 0.613) and providing mentorship or coaching programs for young employees ($\bar{x}$= 4.29; σ = 0.719). Partnering with academic institutions to align educational programs, offering internships and apprenticeships for practical experiences, and engaging in career fairs and networking events are also high on their priority list. However, stakeholders are less willing to participate in policy discussions or advocacy for youth employability, invest in technology or digital platforms for training and development, or provide funding or resources for youth-focused initiatives.

Figure 17: Importance of Measures for Enhancing Youth Employability

Comparative analysis – Introduction of main findings and recommendations

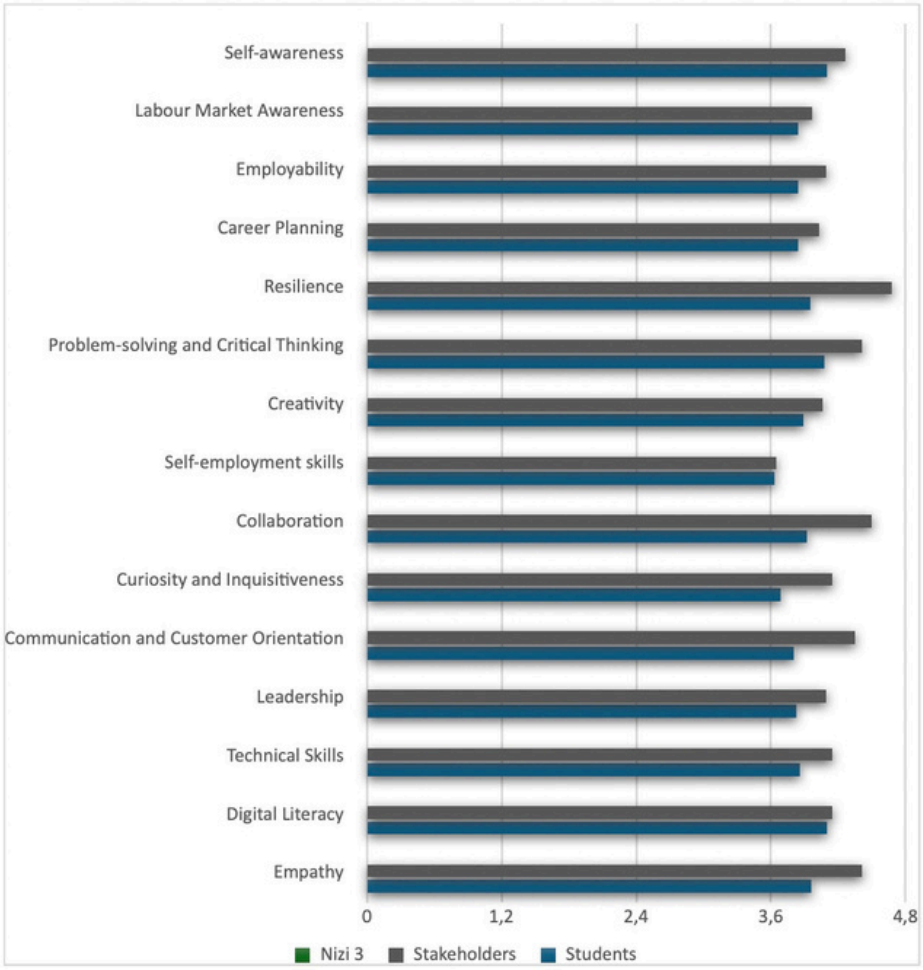
The qualitative research, based on interviews with students and stakeholders, and the quantitative research, which enabled tracking data from a selected sample, provided valuable insights into the current challenges of the labour market, the competencies required to manage these challenges, the readiness of students for the transition to the labour market, and the need for aligning competencies with the demands of the economy (stakeholders).

The comparison of students' and stakeholders' perspectives highlights both alignment and divergence in their views on the labour market and necessary competencies for success.

Both studies reveal the following:

- While both groups recognize the importance of soft skills, digital literacy, and practical learning experiences, stakeholders place greater emphasis on resilience, collaboration, and adaptability, while students are more focused on technical skills and digital literacy. The importance of practical experience is emphasized, with both groups recognizing that internships and collaboration with companies significantly help students transition to the labour market.
- Both groups rated digital skills as crucial for a successful entry into the labour market.
- Students identified mental health as a key factor influencing the labour market, followed by digitalization, automation, and technological advancements. Hybrid and remote work models were also significant, with students placing substantial importance on understanding these social trends. Digitalization and automation were seen as reshaping the nature of work. Stakeholders emphasized values, demographic changes, and technological advancements as the top social trends. Demographic changes and digitalization were also considered crucial. While both groups identified similar social trends, stakeholders placed more importance on demographic changes, while students prioritized mental health and the evolving work environment, such as remote work.
- Students highlighted digital literacy, self-awareness, problem-solving, and critical thinking as crucial competencies for entering the labour market. They recognized soft skills such as empathy, cooperation, and resilience as important but placed less emphasis on them compared to technical skills. Their main competency development areas were digitalization and mental health care. Stakeholders placed the highest importance on resilience and collaboration, followed by empathy and critical thinking. They also emphasized soft skills, but unlike students, they rated resilience and collaboration more highly.

Figure 18: Key competences perceived by stakeholders and students



- Stakeholders also identified gaps in critical thinking and problem-solving skills in recent graduates. Students self-assessed their readiness for the labour market, identifying significant gaps in soft skills, digital literacy, and workplace culture adaptation. They expressed concerns about the lack of critical thinking and practical experience but were less worried about turnover or legal barriers.
- Stakeholders observed that recent graduates struggled most with critical thinking, communication, time management, and adaptability. They also highlighted the lack of industry-specific technical skills and alignment between educational curricula and job market needs.
- Students valued practical learning experiences, believing they enhance career readiness. They recognized the potential benefits of Career Service Learning but showed less motivation to engage in such activities. Students also wanted more access to online resources to improve their employability.
- Stakeholders strongly recommended integrating practical internships, industry partnerships, and soft skills development into education. They supported mentoring and career guidance initiatives and endorsed stronger collaboration between academia and industry to improve employability.
- Students believe that their education should focus more on practical workshops, applied projects, and integration with industry professionals to improve employability.
- Stakeholders also recommend a focus on integrating internships, promoting lifelong learning, and enhancing industry-academia partnerships. They emphasize curriculum alignment with industry needs and soft skills development.

The key to improving youth employability lies in bridging these perspectives, particularly by fostering more collaborative efforts between education institutions and industry/stakeholders and providing students with opportunities to develop both soft and technical skills that align with labour market demands.

Guidelines for action

Based on research results, we recommend the following actions:

- Empower students as active citizens: Encourage students to actively engage with their communities by creating platforms for them to address social issues. Educational institutions should integrate programs that develop students' understanding of social responsibility, including sustainability and ethical business practices. These skills can be fostered through collaborative projects with local organizations and stakeholders.
- Integrate practical experience into education: Both students and stakeholders highlighted the importance of practical experience for career readiness. Universities and educational institutions should prioritize internships, apprenticeships, and collaborative projects with industry partners. Additionally, career services can be enhanced to include tailored advice, mentorship, and industry-specific workshops to prepare students for real-world challenges.
- Promote lifelong learning: Given the rapid pace of technological change, stakeholders stressed the importance of lifelong learning. Educational institutions should work closely with industry partners to develop programs for continuous professional development, offering courses on emerging technologies, digital literacy, and industry-specific skills.
- Strengthen digital literacy and soft skills: Students identified digital literacy and soft skills (e.g., empathy, communication, and critical thinking) as crucial competencies for entering the labour market. To address this, educational institutions should incorporate these into the curriculum through workshops, group projects, and practical exercises. Stakeholders should also contribute by offering mentoring programs that emphasize both technical and soft skills development.
- Improve career services and mentorship: Enhancing career guidance services will help students navigate the transition from education to employment. Services should include job search assistance, networking opportunities, and specialized programs aimed at fostering critical thinking, problem-solving, and communication skills.
- Enhance industry-academia collaboration: Both students and stakeholders emphasized the need for better alignment between educational curricula and industry needs. Educational institutions should form strategic partnerships with local businesses and industries to co-create curricula that reflect the current job market. Regular industry consultation and collaboration should be integrated to ensure that students acquire the skills that are in high demand.
- Encourage Collaborative projects and applied research: Promote applied research and projects that involve students, local businesses, and industry experts. This can result in innovative solutions to local challenges while giving students hands-on experience.
- Strengthen community-based learning: Encourage learning opportunities that connect students with their local communities, such as community service projects or collaborative initiatives with local organizations to tackle social issues. This will help students understand the real-world application of their studies while contributing positively to society.

By implementing these guidelines, educational institutions, stakeholders, and local communities can foster a more connected and prepared workforce that is equipped to navigate the challenges of a rapidly changing labour market.

Next planned activities

Based on the findings of the research and considering the role of the University of Novo mesto, there are next steps proposals to improve career opportunities in community:

1. Strengthen Practical Experience Integration and collaboration with local businesses and industries to expand internship and work-placement opportunities for students. Both students and stakeholders emphasized the importance of practical experience (e.g., internships) for improving employability and easing the transition from education to the labour market.

- UNM can leverage its existing connections with stakeholders to facilitate these partnerships.
- UNM can create mutually beneficial projects, internships, and real-life case studies that provide students with hands-on experience.

2. Expand Digital Literacy Programs and develop targeted workshops and courses that focus on digital literacy and technological advancements.

- UNM can offer specialized training programs in digital tools, software, and emerging technologies. By collaborating with tech companies, the university can introduce certificate programs focused on areas like coding, cybersecurity, artificial intelligence, and data analysis, ensuring that students are well-prepared for the digital economy.
- UNM can introduce courses and webinars that focus on remote work skills, such as digital communication, project management tools, and virtual teamwork strategies. These programs will help students adapt to modern work environments and meet the demands of a hybrid workforce.

3. Promote Soft Skills Development: Incorporate soft skills training (e.g., teamwork, communication, adaptability, resilience) into the curriculum.

- UNM can integrate soft skills development into its curriculum, through workshops, group projects, and extracurricular activities.
- UNM could collaborate with local stakeholders to design workshops and courses that focus on these essential competencies.

4. Create Lifelong Learning Opportunities: Develop continuing education programs for professionals and alumni to promote lifelong learning and career advancement.

- UNM could offer short-term certifications, micro-credentials, or online courses that allow individuals to update their skills as market demands evolve.

5. Focus on Mental Health Support: Develop comprehensive mental health and well-being programs to help students navigate the stressors of academic and career transitions.

- UNM could integrate well-being practices and resources into the student experience.

6. Enhance Career Services and Guidance: Strengthen career counselling services by offering more personalized career advice, networking events, and mentorship opportunities. UNM can create partnerships with local stakeholders to support these initiatives.

- UNM can organize career guidance workshops, job search support, and networking events that link students with potential employers in their communities.

7. Foster Industry-Academia Collaboration: Increase collaboration with local industries by involving industry experts in curriculum design, research projects, and teaching.

- UNM can regularly consult with industry partners to review and revise its curriculum, ensuring that students are prepared for current job market demands. The university can also set up advisory boards with industry professionals to provide ongoing feedback and guidance on program relevancy.

ROADMAP IN AUSTRIA

Introduction

In the Austrian higher education sector, a disparity is evident between the academic knowledge and skills acquired through higher education and the competencies required by the increasingly dynamic and technologically advanced labour market. Globalization and digital transformation introduce new challenges that demand high levels of adaptability and digital literacy. However, traditional higher education models often fail to adequately foster the development of transferable skills such as critical thinking, complex problem-solving, interdisciplinary collaboration, and innovation.

Austrian Students facing the demand for flexibility in work schedules, the importance of inclusivity in workplace culture, and the rise of hybrid work preferences. Therefore, the need of developing digital proficiency, especially in artificial intelligence and social media management are crucial competencies for modern professions. Additionally, students' perceptions of the relevance of their academic programs significantly influence their educational and professional trajectories. A lack of clear connections between academic curricula and subsequent employment opportunities can lead to diminished motivation for study, consequently contributing to higher dropout rates from higher education institutions. These includes also the awareness rising for students regarding the demanded competencies.

Studies (e.g., Education at a glance: OECD indicators. Organisation for Economic Co-operation and Development) indicate that practical training programs, which facilitate the early integration of students into the workforce, are often insufficiently developed or implemented on a limited scale. The absence of systematic linkages between academia and the labour market results in a misalignment between employer expectations and graduate competencies, impeding their employability. In the study Empowering Individuals through Career Guidance and Lifelong Learning, CEDEFOP reports that employers frequently claim that while young graduates possess the necessary theoretical knowledge, they often lack practical experiences and soft skills, such as communication abilities, teamwork, entrepreneurial thinking, and adaptability to rapidly evolving business environments. Especially the stakeholders in the labour market stressed the importance of AI expertise and and cross-disciplinary skills including communication, leadership, adaptability, and resilience.

The ELIX Project directly addresses the core challenges of the Austrian higher education system by introducing innovative pedagogical methods that enhance student engagement and improve their employability. One of the central strategies of the project is the implementation of Community Service Learning (CSL), a transformative approach that bridges academic education with professional and societal environments.

The Austrian higher education model relies in some educational approaches still on traditional economical and pedagogical perspectives, and therefore emphasising theoretical knowledge based on traditional theories and models while focusing less on developing practical competencies. This results in limited opportunities for experiential learning, allowing students to apply their acquired knowledge in real-world contexts. The ELIX Project acknowledges the critical role of developing transferable competencies, such as entrepreneurial thinking, innovation, digital literacy, resilience, and interdisciplinary collaboration—competencies that employers identify as essential for success in the modern labour market as stated in the study of European Commission Education and training monitor: Skills for the digital era.

Furthermore, the project promotes collaborative partnerships between universities, businesses, and non-governmental organisations, fostering a sustainable ecosystem where students gain practical experience and develop key competencies for their future careers. By integrating CSL into academic curricula, the ELIX Project allows students to apply their knowledge and skills to address real-world societal and economic challenges in cooperation with local communities and organizations.

In doing so, the ELIX Project not only bridges the gap between higher education and the labour market but also contributes to greater social inclusion, the promotion of active citizenship, and the strengthening of competencies for sustainable development. Through a comprehensive approach to education, the project establishes the conditions for the long-term enhancement of the quality of higher education in Austria and the improved success of graduates in transitioning to the workforce.

Overview of completed tasks

UASB actively contributes to the development of localised career pathways by fostering collaboration among key stakeholders and implementing strategic initiatives to enhance career opportunities and civic engagement with the following tasks:

Task 1: Organized and coordinated participants, including labour market actors, career consultants, and community stakeholders, for the Localized Career Pathways, Think Tank Series.
Task 2: Facilitated focused discussions and interactive workshops over two days to identify and refine local career pathways. These sessions fostered stakeholder collaboration, promoting a shared understanding of local challenges and opportunities to drive targeted and effective interventions.
Task 3: Conducted an in-depth analysis of labour market trends and challenges to inform discussions and develop innovative solutions.
Task 4: Collaborated with stakeholders to create a comprehensive roadmap with actionable steps for enhancing career opportunities within partner communities. Partner organisations collected qualitative feedback through surveys and interviews, assessing the impact of think tank sessions, toolkit guidance, and teaching programs on student learning and community engagement.

These efforts resulted in a strategic roadmap for advancing career development and civic engagement at the local level. This roadmap identifies and refines existing career pathways and adapts them to evolving community needs, fostering meaningful and targeted interventions.
Achieved goals and results
In the following, we present specific results achieved through the completed tasks (previously presented). The first part outlines the findings from the think tank focus groups, followed by an in-depth analysis of the survey on labour market trends, competencies and youth employability conducted with students and stakeholders.

Think Tank Series
STUDENTS

Basic information
Number of participants: 19 students from bachelor and master programs (variety of fields such as Business Relations, HR Management, Marketing, and Communication)
Date of implementation: three focus groups on 18/10/2024, 25/11/2024 and 26/11/2024
Mode of delivery: Mixed (online and in-person at UASB, application for online: MS Teams)

Results
The focus groups with bachelor and master students revealed that digitalization, changing values, and demographic shifts are among the most impactful trends on the labour market. Students emphasized the demand for flexibility in work schedules, the importance of inclusivity in workplace culture, and the rise of hybrid work preferences. They also highlighted digital proficiency, especially in artificial intelligence and social media management, as crucial competencies for modern professions.

Key skill gaps identified include communication, teamwork, resilience, and adaptability. Students also noted the importance of digital literacy and leadership, particularly for managing workplace stress and navigating technological challenges.

To address these gaps, students suggested integrating real-world applications into their studies, such as project-based tasks, internships, and networking with professionals. Many also expressed a desire for more online tools and resources, including e-learning platforms, virtual labs, and recorded lectures, to better prepare them for future workplace demands.

Thematic analysis of students' statements on social and market trends, skills gaps, and training delivery.

Table 3 Trends and Phenomena Observed in the Labour Market

Themes	Categories	Codes	Quotes
Changing Work Values	**Demand for flexibility and balance**	Young people prioritize flexible hours and mental health.	*"Young people want to work from home, flexible working hours, and value leisure time more." (Interviewee 32)*
	Fair workplace culture	Emphasis on equity and inclusivity.	*"The shift in values includes a greater emphasis on creating inclusive and fair workplace cultures." (Interviewee 34)*

	creates jobs	automation on job roles and skill demands.	*simultaneously creating new professions." (Interviewee 35)*
	Digital proficiency as a core skill	Fundamental requirement across most job sectors.	*"Digital competence is a requirement for adapting to current market demands." (Interviewee 36)*
Demographic Shifts	**Ageing workforce**	Creating shortages in key job sectors.	*"An ageing population leads to labour shortages in certain areas." (Interviewee 33)*
Hybrid Work Trends	**Balancing remote and in-person work**	Preferences shift post-remote work experiences.	*"Many now prefer hybrid options or even a return to offices for social interaction." (Interviewee 40)*

Table 4 Competencies Identified as Gaps

Themes	Categories	Codes	Quotes
Digital Skills	**Digital and AI literacy**	Understanding AI tools and their application.	*"We need more advanced digital skills, including how to analyze data and use AI tools effectively." (Interviewee 36)*
	Social media management	Effective use of platforms for work goals.	*"There's a lack of focus on how to use social media as a tool for communication and marketing." (Interviewee 37)*
Soft Skills	**Communication**	Confidence and teamwork remain lacking.	*"Young professionals struggle with communication and the ability to ask for help in challenging situations." (Interviewee 32)*
	Resilience and adaptability	Coping with stress and rapid change.	*"Resilience and stress management are critical but often not taught." (Interviewee 38)*

Table 5 Proposed Methods to Integrate Competencies into Education

Themes	Categories	Codes	Quotes
Professional Exposure	**Networking and mentorship**	Engagement with industry experts.	*"Universities need to bring more external experts into the classroom to teach what is happening outside." (Interviewee 39)*
	Internships	Practical experience in relevant fields.	*"Partnerships with companies for internships would prepare us better for real-world challenges." (Interviewee 34)*
Learning Formats	**Project-based learning**	Hands-on tasks reflecting industry scenarios.	*"Workshops to analyze real data and solve current market issues would be very beneficial." (Interviewee 40)*
	Online and hybrid tools	Accessibility through digital platforms.	*"Using Moodle or Teams to offer recordings and materials in advance would help with preparation." (Interviewee 41)*

STAKEHOLDERS

Basic information

Number of participants 38 stakeholders from businesses, NGOs, research institutions, and academia
Date of implementation: five focus groups on 18/10/2024 and 12/11/2024 and 13/11/2024
Mode of delivery: Mixed (online and in-person at UASB)

Results

The stakeholders emphasized the profound impact of digitalization, demographic shifts, and migration on the labour market. Stakeholders stressed the critical need for AI expertise, cross-disciplinary skills, and leadership capabilities to address the demands of evolving industries. They also noted that younger workers struggle with mental health challenges, resilience, and workplace adaptability.

Stakeholders identified several key skill gaps, including communication, ethical decision-making, and team management. They also highlighted a lack of proficiency in cybersecurity and data protection, which are increasingly essential. Stakeholders emphasized the importance of teaching leadership, empathy, and intercultural collaboration to prepare graduates for a diverse and dynamic job market.

To bridge these gaps, stakeholders recommended closer collaboration between academia and industry, with a focus on internships, mentorship, and project-based learning. They also advocated for more role-playing exercises and digital training tools, such as AI platforms and virtual simulations, to enhance both technical and soft skills.

Table 6 Impact of Social Trends on the Labour Market

Themes	Categories	Codes	Quotes
Changing Values	**Shift to individualism and quick solutions**	Lack of cooperation, disrespect for authority, and focus on personal gain.	*"Nowadays, everyone looks after themselves, people no longer respect authority, everyone expects quick solutions." (Interviewee 3)*

	Workplace fairness and collaboration	Need for cooperation across sectors like education and business.	*"Business must also take responsibility for educating students." (Interviewee 22)*
Digitalisation	**Impact on creativity and physical jobs**	Technology creates new roles while reducing traditional ones.	*"Digitalisation and AI create new jobs, but there's less interest in professions requiring physical work." (Interviewee 19)*
	Demand for AI experts and influencers	Growing need for specialized digital roles and media creators.	*"Influencers and AI experts are becoming essential across industries." (Interviewee 5)*
Demographic Changes	**Ageing workforce**	Shortages in technical and caring professions.	*"The ageing population is causing a severe shortage in healthcare jobs." (Interviewee 1)*
Migration Flows	**Impact on low-wage labor supply**	Migration fills critical gaps in demanding industries.	*"Migration flows are essential for meeting labor needs in sectors like construction and care." (Interviewee 8)*
Mental Health Awareness	**Younger generation struggling with stress**	Rising absenteeism due to lack of resilience.	*"The younger generation is not immune to pressures, leading to high absenteeism." (Interviewee 14)*

Table 7 Competencies Identified as Gaps

Themes	Categories	Codes	Quotes
Soft Skills	**Communication and empathy**	Lack of skills to motivate, inspire, and lead effectively.	*"There's a serious shortage of staff who know how to motivate, engage, and coordinate." (Interviewee 21)*
	Ethical decision-making	Critical thinking and ethical judgment in technological contexts.	*"We need people who can critically evaluate AI outputs and consider ethical implications." (Interviewee 4)*
	Adaptability and resilience	Difficulty managing change and accepting new work environments.	*"Students often struggle to adapt to varying expectations across departments." (Interviewee 19)*
Digital Skills	**AI literacy and cybersecurity**	Need for advanced knowledge in AI tools and data privacy.	*"Graduates lack understanding of cybersecurity and data protection, which are critical today." (Interviewee 15)*

Leadership Skills	**Team management**	Skills to build, lead, and manage diverse teams effectively.	*"Training in leadership, including team building and conflict resolution, should be mandatory." (Interviewee 18)*

Table 8 Recommendations for Higher Education

Themes	Categories	Codes	Quotes
Professional Integration	**Increased internships**	Opportunities to engage with real-world projects and workplace settings.	*"Internships should be an integral part of the curriculum to bridge the gap between theory and practice." (Interviewee 5)*
	Mentoring by practitioners	Regular interaction with labor market experts.	*"Connecting students with experienced professionals helps them prepare for future challenges." (Interviewee 7)*
Applied Learning	**Project-based problem solving**	Tasks that address current market demands and challenges.	*"Students need hands-on experience solving real-world problems to develop critical skills." (Interviewee 8)*
	Role-playing for empathy	Activities fostering emotional intelligence and teamwork.	*"Empathy and altruism should be taught through role-playing exercises to prepare students for caregiving roles." (Interviewee 4)*
Technological Access	**Digital platforms and tools**	Training with AI tools, virtual labs, and simulation software.	*"Platforms like LinkedIn and virtual internships are crucial for career preparation." (Interviewee 15)*

Summary of the findings of the focus groups at the University of Applied Sciences Burgenland

The focus groups with students and stakeholders revealed significant insights into the evolving labour market and the competencies needed to thrive within it. Both groups highlighted the transformative effects of digitalization, demographic changes, and shifting societal values on job roles and workplace expectations. Students emphasized the need for flexibility and inclusivity, while stakeholders stressed the importance of AI expertise and cross-disciplinary skills.

Key gaps identified by both groups include communication, leadership, adaptability, and resilience. Students also pointed to a need for better preparation in teamwork and digital literacy, while stakeholders highlighted ethical decision-making, cybersecurity, and empathy as critical areas for development.

Both groups agreed that academia must strengthen ties with industry by integrating practical experiences such as internships, mentorships, and real-world projects into study programs. Additionally, the use of online tools, digital platforms, and interactive workshops was recommended to ensure that graduates are equipped to meet the challenges of a rapidly changing labour market.

Quantitative analysis

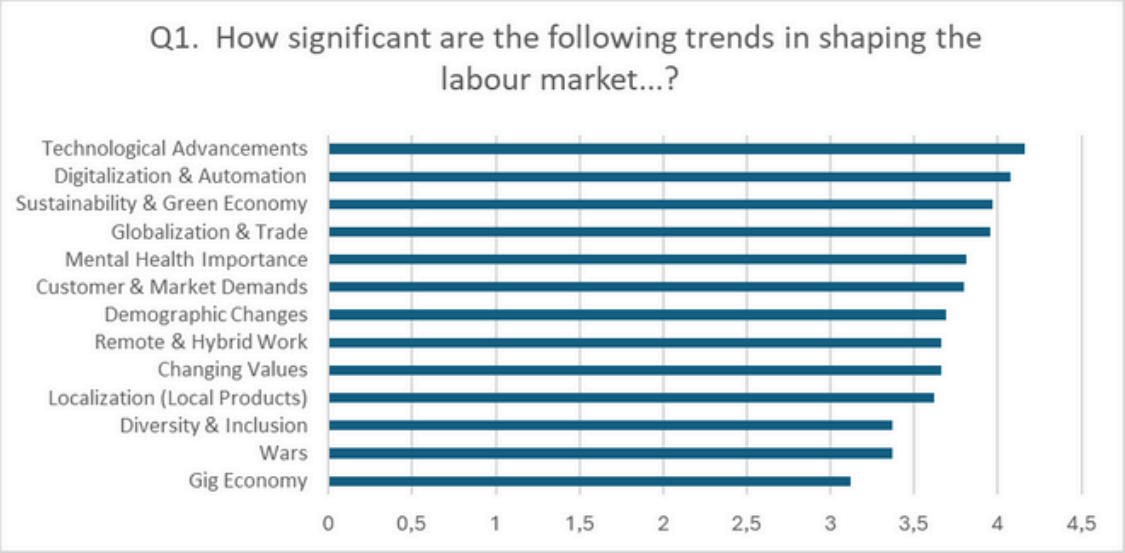
Survey on Labor Market Trends, Competencies, and Youth Employability for Students

The Austrian survey on labour market trends, key competencies, and youth employability provides a comprehensive analysis of students' perceptions regarding their career readiness and alignment with industry demands. The findings highlight the evolving expectations within the labour market and how well academic programs equip graduates with necessary skills. Students identified digital literacy, problem-solving, and leadership as critical areas for their professional success, while also emphasizing the need for stronger industry collaborations and practical learning experiences. This section explores key insights from the student perspective and compares them with stakeholder priorities to formulate actionable recommendations for bridging the education-employment gap.

Perception of Current Social Phenomena

Students evaluated various social trends regarding their impact on necessary competency development for future employment. The results indicate that mental health awareness, digitalization, and technological advancements are seen as the most pressing factors influencing skill requirements. The increasing importance of remote and hybrid work models and sustainability-related competencies is also evident. Conversely, wars and the shift toward a gig economy are perceived as less critical for competency development.

Figure 19: Relevance of Social Trends for Competency Development



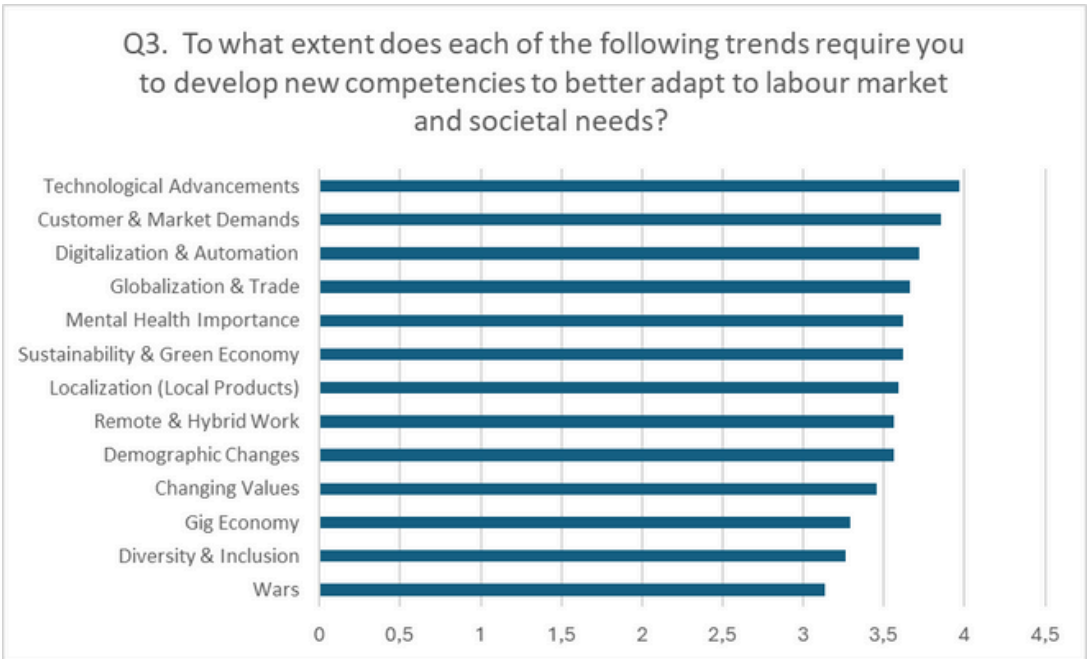
Essential Competencies for Labor Market Integration

Students identified several key challenges when transitioning into the workforce. Lack of relevant work experience, insufficient practical skills, and unclear career paths emerged as the most significant barriers. Many students feel underprepared for professional roles due to limited exposure to real-world projects and industry-specific training during their studies. Additionally, gaps in soft skills, such as leadership, teamwork, and communication, were highlighted as areas where students seek more support. Job market competitiveness and uncertainty about employer expectations further contribute to employment difficulties. These findings underscore the need for stronger career guidance, more opportunities for internships and hands-on learning, and better alignment between academic programs and labor market requirements to ensure smoother transitions from education to employment.

Figure 20: Students' Perception of Barriers to Employment

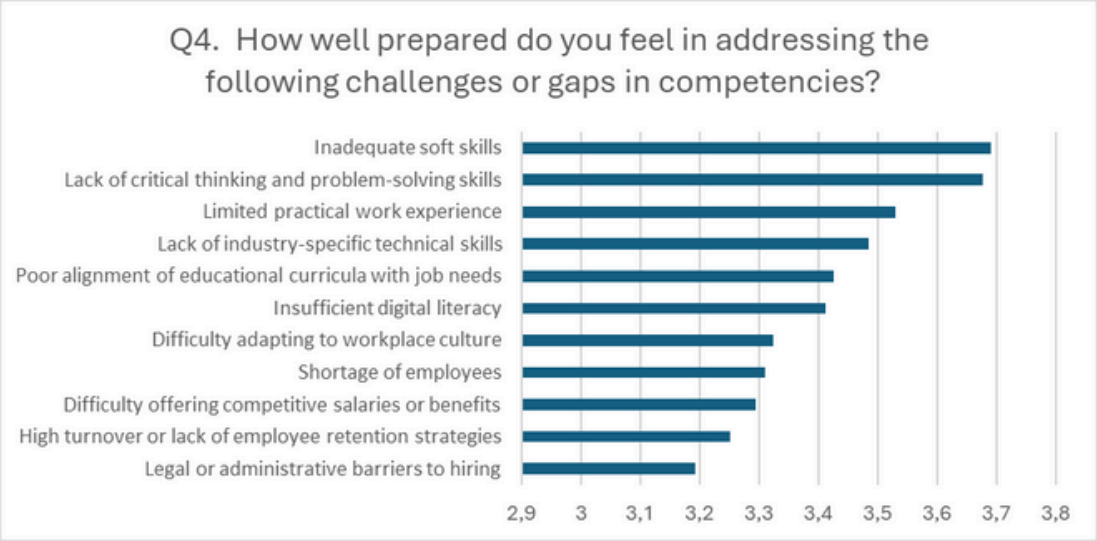
Students rated the importance of various competencies for their future careers, with problem-solving, communication, teamwork, and adaptability ranking as the most critical. Many students feel confident in their ability to collaborate and adapt to different work environments, but express concerns about leadership, career planning, and decision-making skills. Digital literacy and AI-related competencies were acknowledged as increasingly important, though students recognize that more training is needed to fully prepare for technology-driven workplaces. While students generally feel they possess a strong foundation in critical thinking and creativity, they acknowledge the need for further development in self-employment skills, networking, and career-specific expertise. These insights suggest that academic programs should focus on providing structured opportunities for leadership development, real-world problem-solving, and digital skills training to better equip students for the evolving job market.

Figure 21: Students' Self-Assessment of Essential Competencies



Students assessed their readiness to face key challenges in the labour market. The findings highlight that while students feel relatively confident in their digital literacy and teamwork abilities, there are gaps in leadership, problem-solving, and critical thinking skills. Additionally, preparedness for handling workplace stress and adapting to new work environments was rated lower, suggesting a need for targeted training and real-world application opportunities.

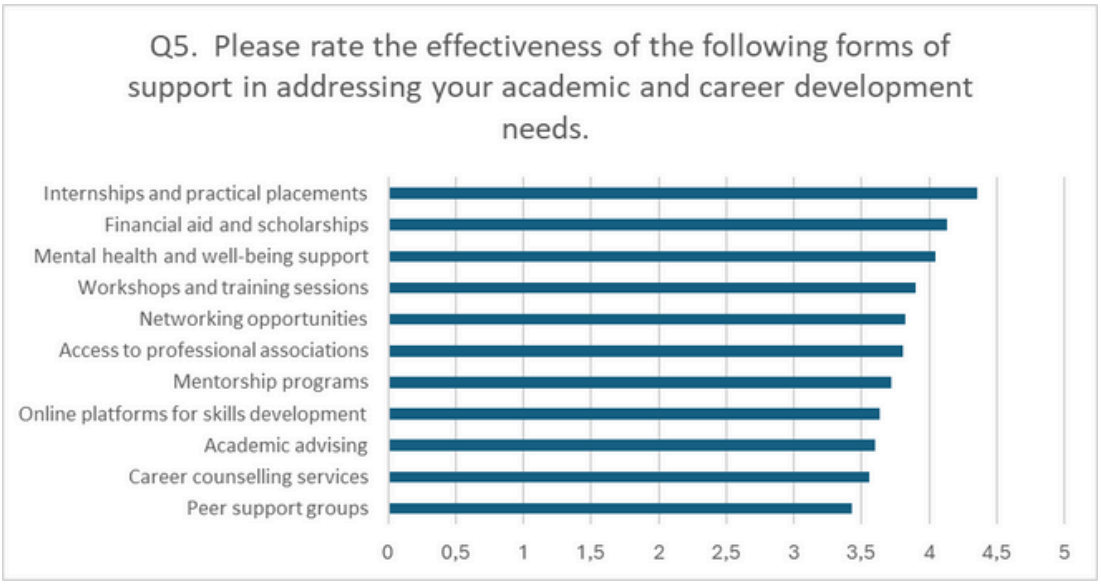
Figure 22: Student Preparedness for Labour Market Challenges



Support for Academic and Career Development

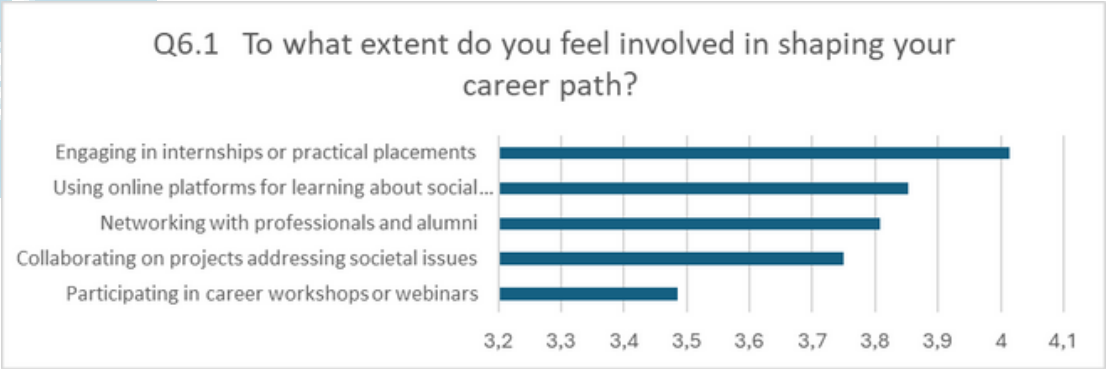
Students were asked to evaluate various career development support measures offered by universities. Internships, mentoring programs, and career counselling received the highest effectiveness ratings, underlining their role in bridging the gap between education and employment. In contrast, online career services and alumni networks were seen as less effective, indicating areas for potential improvement in institutional career guidance.

Figure 23: Perceived Effectiveness of Career Support Services



The results reveal that participation in career workshops and networking events is relatively high, yet many students express a desire for more hands-on experience, such as project-based learning and mentorship opportunities. The suggested activities align with findings from other parts of the survey, reinforcing the demand for practical career readiness initiatives.

Figure 24: Participation and Suggested Career Activities

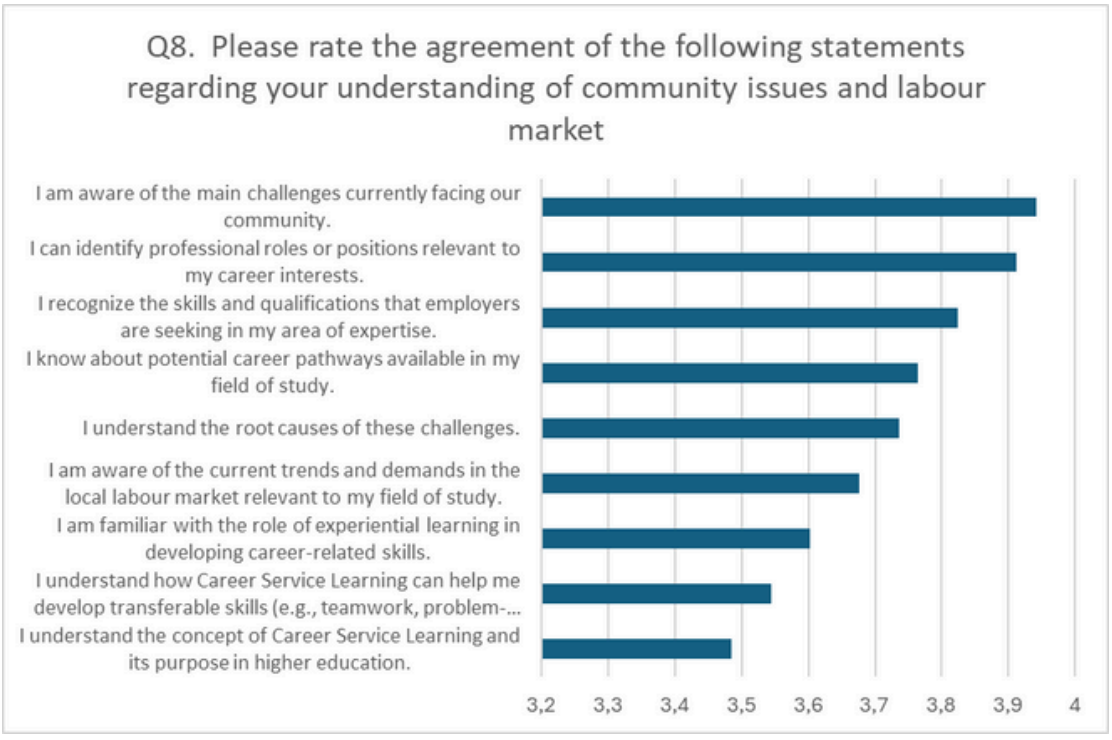


When asked in an open question (Q7) for suggestions on how support could be improved, students emphasized the need for more practical learning, including interactive case studies, workshops, and expert-led discussions. Many highlighted the importance of career fairs, networking projects, and stronger university-employer connections. Suggestions also included more direct industry exposure, such as company partnerships, part-time job opportunities, and sustainability sector roles. Some students advocated for less academic workload and more hands-on experience. These insights suggest that universities should expand career-focused initiatives and strengthen industry collaboration to better prepare students for the job market.

Knowledge about Career Service Learning

Students were asked about their understanding of Career Service Learning (CSL) and its connection to professional development. The data suggest that while many students recognize the general concept of CSL, fewer understand its practical applications or relevance in community-based career experiences. This highlights a need for better communication and integration of CSL in academic programs.

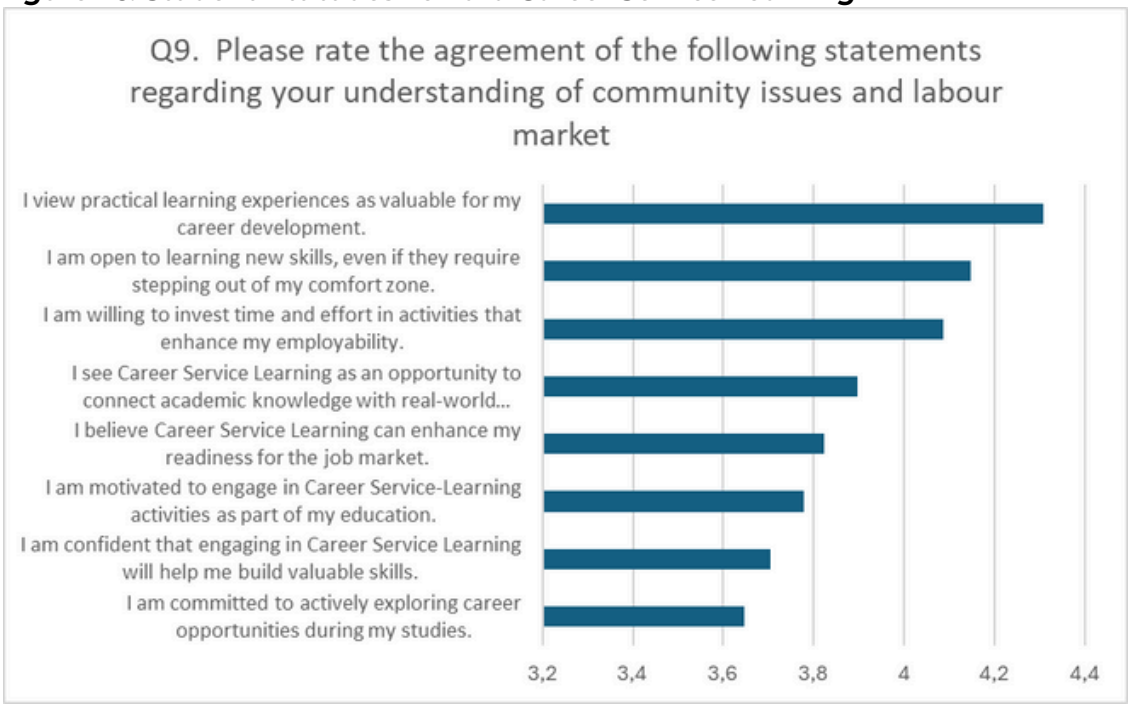
Figure 25: Student Awareness of Career Service Learning (CSL)



Attitudes toward Career Service Learning

Survey results show that most students have a positive perception of CSL, particularly regarding its role in fostering professional skills and civic engagement. However, the degree of enthusiasm varies, with some students questioning the direct career benefits of CSL participation. These findings suggest that universities should further emphasize the practical advantages of CSL experiences.

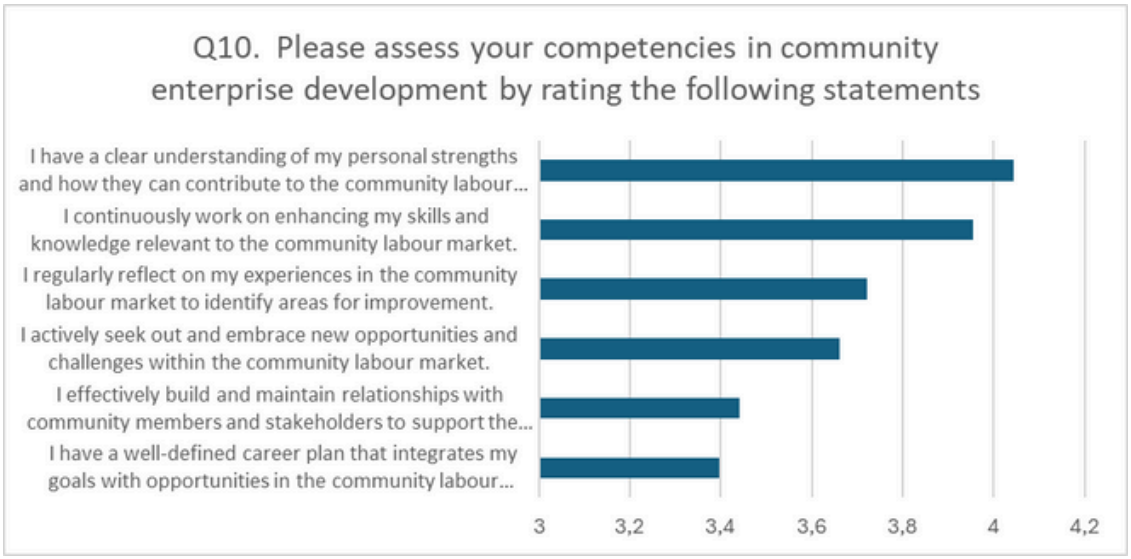
Figure 26: Student Attitudes Toward Career Service Learning



Behavioral Intentions and Actions

Students were asked about their career planning behaviors and future actions. While many report actively seeking internships and acquiring industry-relevant skills, there is less engagement in structured career planning activities such as long-term goal setting and professional coaching. This suggests that universities could enhance career services to support structured career development.

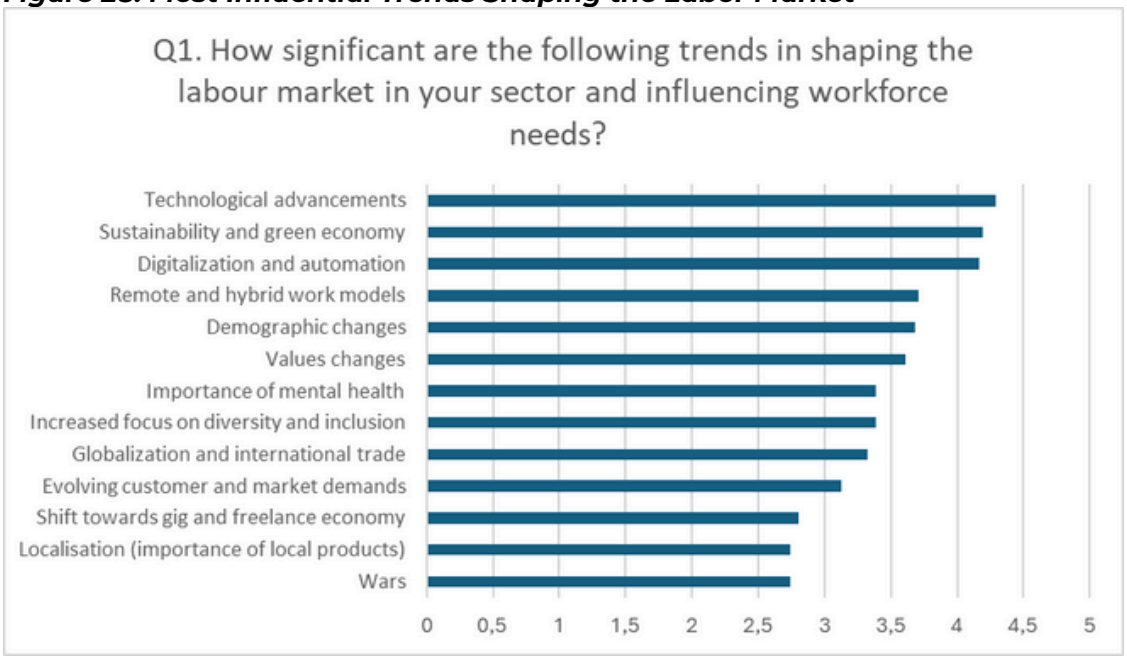
Figure 27: Students' Career-Related Intentions and Actions



Labor Market Trends and Challenges

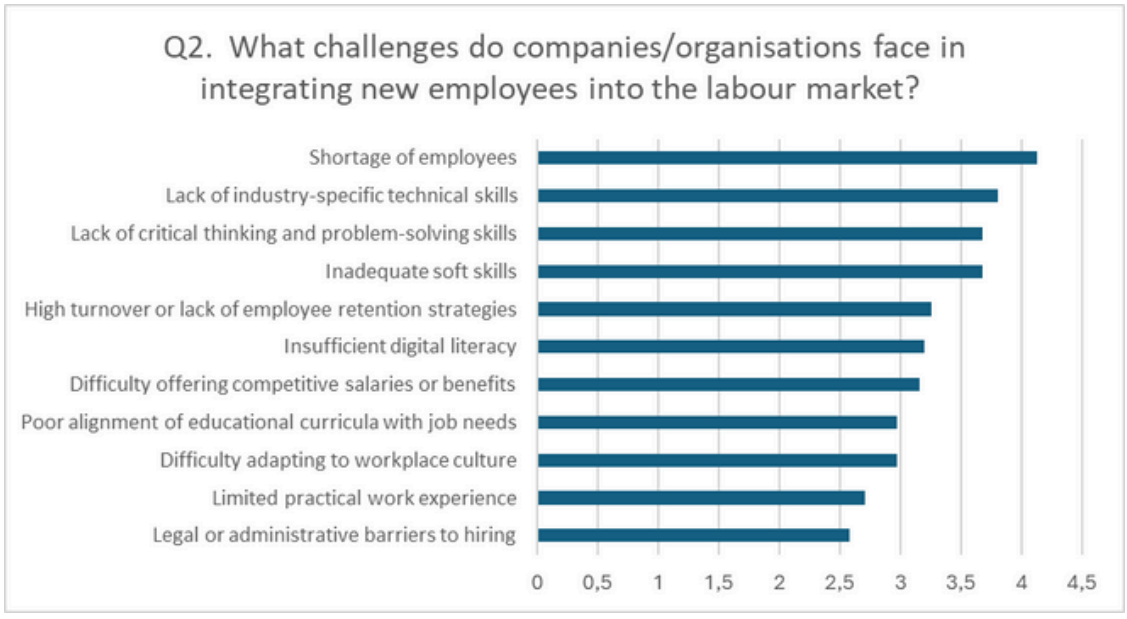
Stakeholders identified digitalization, automation, and sustainability as the most significant labor market trends. Technological advancements, evolving customer demands, and demographic changes were also ranked highly, reflecting the need for continuous adaptation. In contrast, wars, localization of products, and the shift toward the gig economy were considered less influential. These insights highlight the increasing demand for digital skills, sustainability-focused competencies, and agile work practices in modern workplaces.

Figure 28: Most Influential Trends Shaping the Labor Market



Stakeholders reported that the shortage of skilled employees, lack of technical competencies, and insufficient soft skills are the most pressing barriers to workforce integration. Many also pointed to the limited practical experience of graduates, which makes the transition into employment more challenging. High employee turnover and salary competitiveness were also noted as obstacles. These findings suggest that stronger collaboration between education providers and businesses is needed to ensure graduates develop the necessary skills before entering the job market.

Figure 29: Key Challenges in Workforce Integration



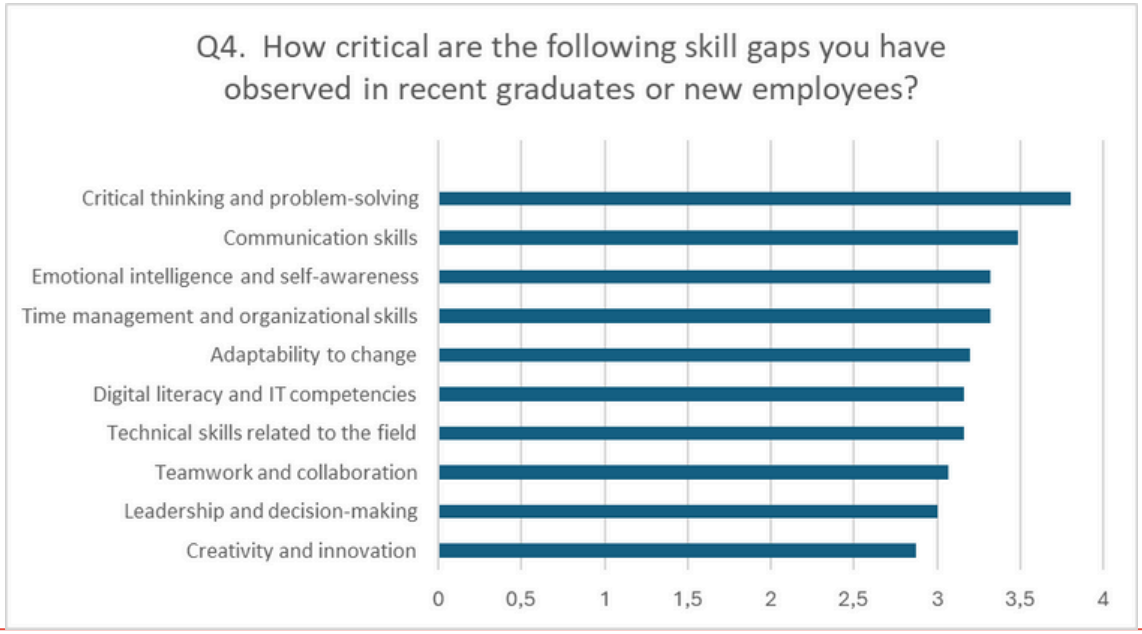
Stakeholders highlighted problem-solving, critical thinking, and communication skills as the most essential competencies for workforce readiness. While students also valued these skills, stakeholders placed greater emphasis on leadership, practical work experience, and digital literacy. The findings suggest that graduates need more opportunities to develop industry-relevant skills through hands-on projects, leadership training, and digital upskilling.

Figure 30: Competencies Rated Most Important by Employers

Impact of Trends on Competencies and Skill Gaps

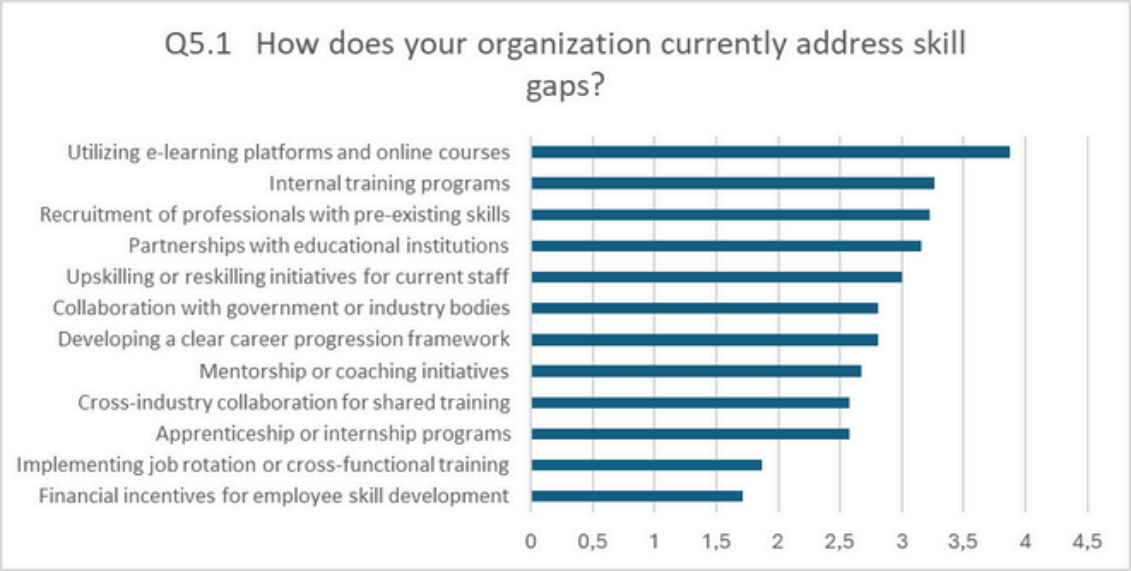
Employers identified technical expertise, problem-solving, and leadership as the most common deficiencies among graduates. Many also noted gaps in adaptability, communication, and resilience, which are essential for navigating dynamic work environments. The findings reinforce the need for applied learning opportunities, leadership training, and industry collaborations to bridge these gaps.

Figure 31: Most Critical Skill Gaps in Graduates



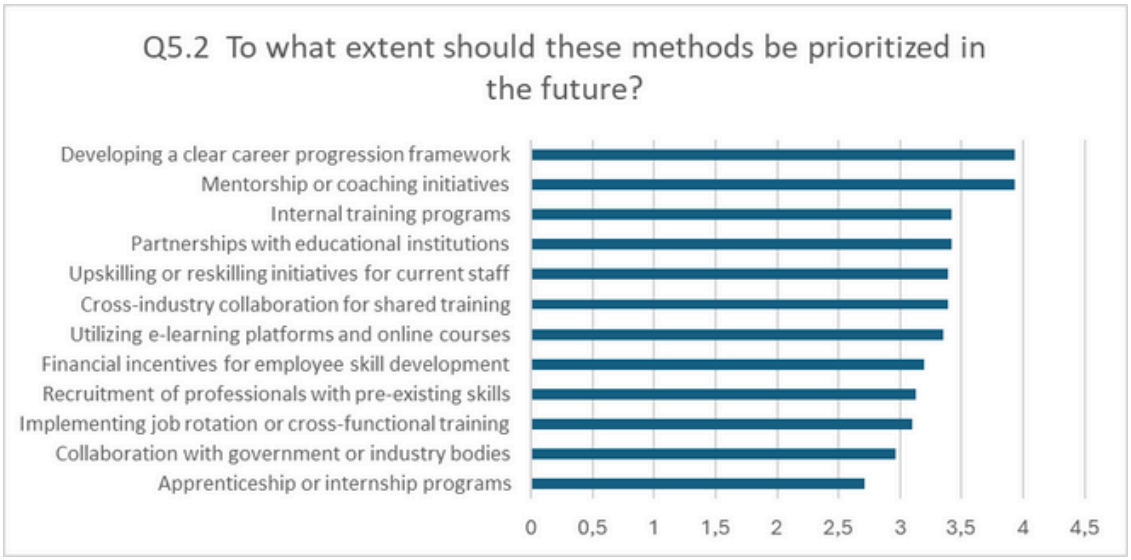
Stakeholders rated internal training programs, mentorship, and academic-industry partnerships as the most effective methods for addressing skill gaps. However, cross-sector collaboration and government incentives received lower scores, suggesting room for improvement in these areas. Expanding structured training initiatives and stronger business-academia connections could help better prepare graduates for the workforce.

Figure 32: Effectiveness of Current Approaches to Closing Skill Gaps



Looking ahead, stakeholders emphasized expanded mentorship programs, better integration of work-based learning, and upskilling opportunities as key strategies. Digital transformation training and stronger industry engagement were also highlighted as essential. These findings suggest that education systems must evolve to incorporate lifelong learning and industry-driven curricula to meet future workforce demands.

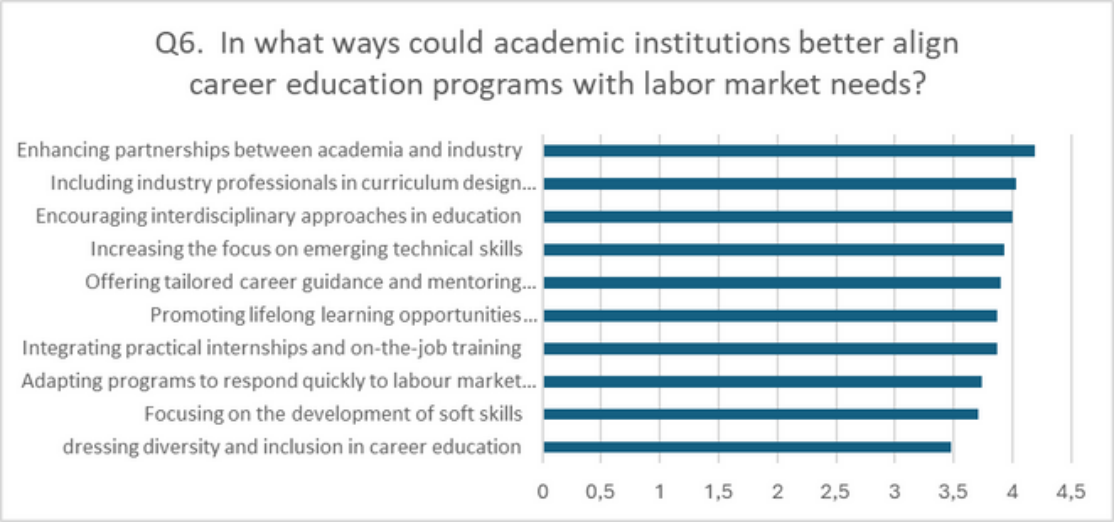
Figure 33: Stakeholder Prioritization of Future Skill Development Strategies



Social Phenomena and Career Education

Stakeholders stressed the importance of strengthening practical learning experiences, improving digital competencies, and fostering employer collaborations. Many emphasized greater involvement of industry professionals in curriculum design to ensure students acquire relevant skills. These insights indicate that a closer link between education and the labour market is crucial for preparing future professionals.

Figure 34: Most Important Strategies for Career Education Reform



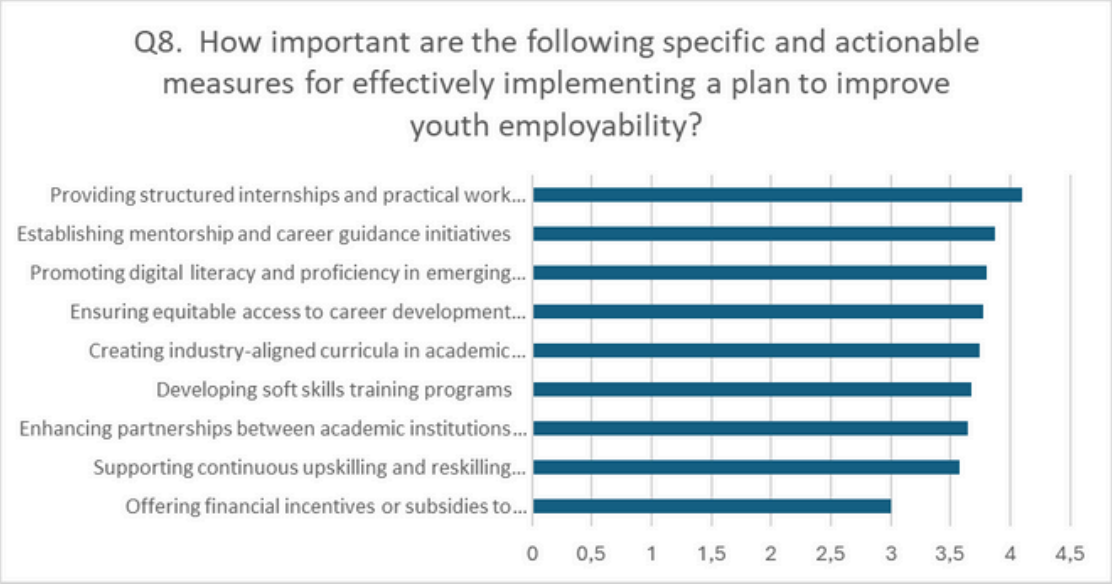
When asked in an open question (Q7) to give examples of effective collaboration between organizations and academic institutions, Stakeholders mentioned various forms of collaboration between organizations and academic institutions. Examples included alumni associations and participation in EU-funded industry-university collaborations. One organization described cooperation with a local university to develop terminology databases for a specific industry, while another highlighted joint research projects. Specific institutions such as Hochschule Burgenland and Akademie Burgenland were named as partners in continuing education and quality exchanges. Internships with international organizations, applied projects in consumer behaviour, and job fairs were also cited as forms of cooperation. Some responses referred to course-based projects where students solve real-world business problems, while others noted that collaboration is still in early stages or that no relevant partnerships were known.

These responses illustrate different ways in which academic institutions and businesses engage in workforce development, research, and industry-specific training.

Improving Youth Employability

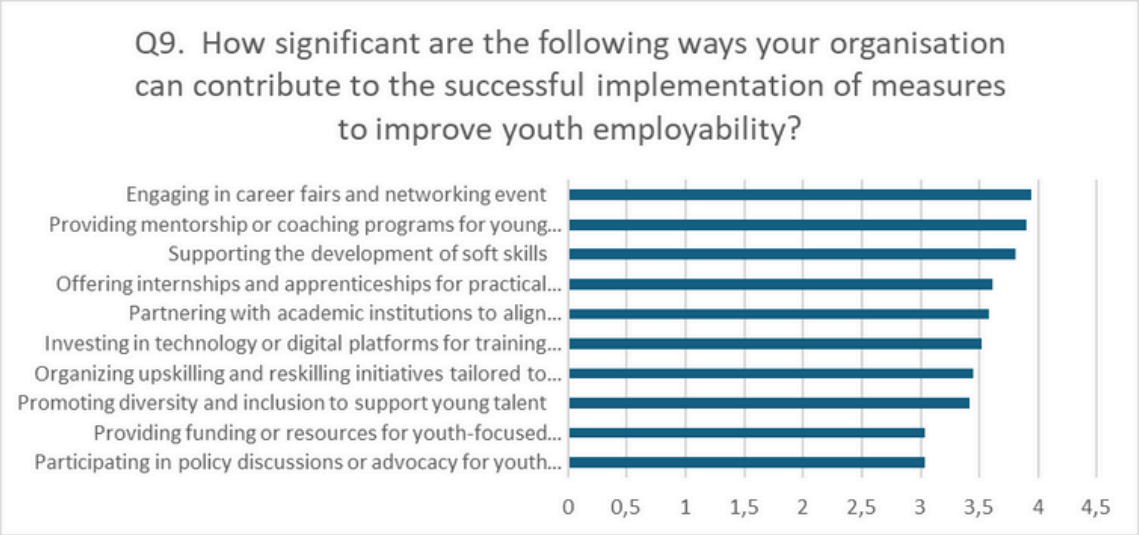
Internships, structured mentorship programs, and digital skills training were ranked as the most effective ways to improve employability. Stakeholders also highlighted the need for better career guidance, networking opportunities, and hands-on experience. These findings reinforce the call for stronger career services and more industry engagement in education.

Figure 35: Most Effective Measures to Enhance Graduate Employability



Employers see internships, partnerships with universities, and structured career development programs as the most impactful ways to support young talent. Offering job shadowing opportunities, industry workshops, and early career mentoring were also seen as crucial. This highlights the need for closer cooperation between businesses and academic institutions to ensure graduates are well-prepared for the workforce.

Figure 36: How Companies Can Support Young Professionals



Comperative analyse – introduction of main findings and recommendations

Local challenges and opportunities

The Austrian labour market is undergoing rapid transformation due to technological advancements, digitalization, demographic changes, and evolving work values. Students and stakeholders both recognize these shifts but emphasize different aspects. While students are particularly concerned about workplace flexibility, mental health awareness, and digital competencies, stakeholders highlight the growing need for specialized technical skills, leadership development, and cross-industry collaboration.

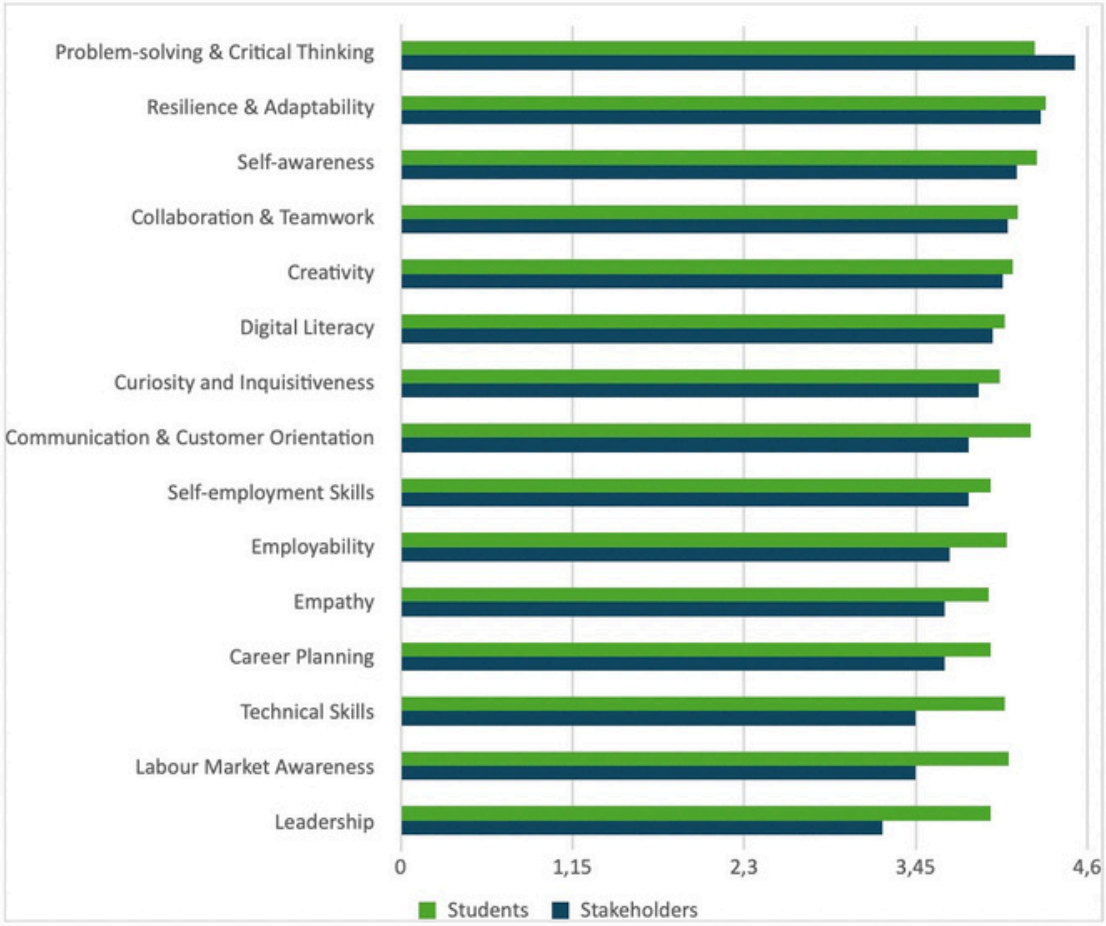
A major challenge remains aligning academic education with industry needs. Stakeholders stress that graduates often lack practical experience and industry-relevant competencies, making the transition into employment more difficult. However, Austria's strong university-business ecosystem presents opportunities to close these gaps through internships, mentoring programs, and industry-driven curriculum design.

Competency gaps

Both groups identified communication, teamwork, leadership, problem-solving, and adaptability as essential yet underdeveloped competencies. Additionally, stakeholders noted a significant gap in digital literacy, cybersecurity awareness, and AI-related expertise, which are increasingly in demand across industries.

Students feel insufficiently prepared for job market expectations, particularly in intercultural competence, career planning, and employability skills. Stakeholders echo this concern, emphasizing that graduates need stronger critical thinking skills, ethical decision-making capabilities, and real-world project experience to be competitive in the labour market.

Figure 37: Importance Rating Gaps in Competencies (Q3)



Guidelines for action

1. Awareness of Real Challenges and the Real World of Work

Both students and stakeholders emphasize the need for stronger problem-solving, critical thinking, and adaptability skills. Stakeholders further highlight technical skill shortages, lack of work experience, and insufficient leadership capabilities among graduates. To address these gaps, career education should place greater emphasis on applied learning formats, such as real-world consulting projects, case-based learning, and collaborative research between students and businesses.

2. Strengthening Career Readiness Through Practical Experience

Internships remain the most effective employability measure according to both groups. However, while bachelor students already engage in internships, master's students have fewer structured opportunities for applied learning. Industry-driven capstone projects, co-teaching models with practitioners, and structured career coaching should be expanded to ensure that all students benefit from hands-on industry exposure before entering the workforce.

3. Enhancing Soft Skills and Digital Competencies
Employers consistently rate communication, teamwork, leadership, and resilience as essential yet underdeveloped among graduates. Additionally, digital literacy, data-driven decision-making, and AI-related skills are increasingly seen as core competencies across industries. Universities should integrate targeted soft skills training, digital transformation courses, and entrepreneurship programs into all curricula to ensure graduates are prepared for rapidly evolving job markets.

4. Expanding Industry Collaboration and Lifelong Learning
Stakeholders stress the need for stronger academic-industry partnerships in designing career education programs. Companies should play a more active role in shaping curricula, participating in skill development workshops, and providing direct mentorship to students. Additionally, lifelong learning and upskilling initiatives should be expanded, ensuring that graduates remain competitive and adaptable throughout their careers.

5. Aligning Educational Programs with Emerging Labor Market Trends
The most impactful labor market trends identified include digitalization, sustainability, and evolving customer demands. Graduates must be prepared to navigate shifting workforce structures, including remote work models, automation, and the gig economy. Career education should provide students with greater exposure to industry-relevant technological tools, sustainability practices, and agile work environments, ensuring they are equipped for long-term professional success.

Next planned activities

Short-Term (Next 12 Months)
Structured mentoring programs should be launched, pairing students with industry professionals to provide career guidance. Job application bootcamps and mock interviews should be expanded to prepare students for competitive hiring processes. Industry-sponsored real-world projects should be integrated into curricula, ensuring that both bachelor and master students gain practical work experience.

Medium-Term (1–3 Years)
Academic institutions should formalize long-term partnerships with industry leaders, allowing for co-created learning programs and joint research initiatives. Digital transformation training programs should be implemented, equipping students with AI, data analysis, and automation skills. Entrepreneurial education should be strengthened through business incubation programs, allowing students to develop and scale innovative solutions.

Long-Term (3+ Years)
Applied career education should become an institutionalized model, ensuring that all students receive structured exposure to industry-driven learning throughout their studies. Lifelong learning pathways should be established, offering graduates and professionals continuous opportunities for upskilling and reskilling. In collaboration with industry and government, policy frameworks should be developed to promote workforce adaptability, ensuring that education remains aligned with evolving labor market demands.

ROADMAP IN SLOVAKIA

Introduction

Accelerated digital transformation, reshaping work, learning, and societal interactions have led in EU on one side to job losses and income insecurity and on the other to new opportunities. To navigate this changing landscape, the EU must invest in skills development and lifelong learning. By aligning skill sets with the green and digital transitions, the EU can recover from the socio-economic impacts of the pandemic, adapt to emerging opportunities, and build a more sustainable, resilient, and equitable future for its citizens. Therefore, EU authorities have adopted various actions, such as European Skills Agenda (with Pact of Skills), Digital Education Action Plan, Digital skills and jobs coalition, etc. In line with these actions, goals have been set that the EU and its member states should achieve by 2030.

The fulfilment of these goals in skills development varies among European countries. Skills anticipation in Slovakia is under development. Cooperation between different authorities is not always effective, resulting in fragmented labor market intelligence that does not fully meet the needs of various end-users. The Ministry of Education, Science, Research and Sport is coordinating policymaking, especially regarding higher education. In 2017 the National Program for the Development of Education (NDPE) was approved and updated in 2022. It was based on the Program Declaration of the Slovak Republic and the Recovery and Resilience Plan, which aim to support investments and reforms, including "Quality Education," as a response to the economic downturn caused by the Covid-19 pandemic. The NPDE includes measures to anticipate future skills needs and ensure that education meets the demands of the job market.

While some measures are already in place, there is still room to improve the way different data sources are used to forecast skills needs. Most existing skills anticipation initiatives have been developed under Ministry of Labor, Social Affairs and Family, with the Central Office of Labor, Social Affairs and Family, which is the main body responsible for preparing data and information about the labor market situation (skills assessment) and its developments and making it available to relevant institutions. Although anticipation activities exist, the lack of a coordinated approach has not supported the link between the results of skills intelligence and policymaking.Despite the higher employment and earnings of higher education graduates compared to those with lower qualifications, these advantages are lower in Slovakia than in other OECD countries. This disparity is partly attributed to labor market mismatches, particularly over-qualification, stemming from the higher education system's inability to adapt to evolving economic and labor market demands.

While Slovakian higher education graduates perform well in literacy and numeracy, they lag in problem-solving skills in a technologically rich environment. This is a critical concern, as digital technologies are expected to have a significant impact on the Slovakian economy, particularly due to the high share of jobs at risk of automation in the manufacturing sector.To address these challenges, the Slovakian higher education system must equip graduates with the digital skills and transversal competencies (e.g., socio-emotional skills, entrepreneurial thinking) required for the evolving labor market. The ELIX Project, which focuses on developing transferable competencies and fostering collaborations between universities, businesses, and NGOs, plays a crucial role in bridging the gap between higher education and the labor market

By integrating Community Service Learning (CSL) into academic curricula, the ELIX Project provides students with opportunities to apply their knowledge and skills to real-world challenges, enhancing their employability and contributing to social inclusion and sustainable development. Through a comprehensive approach to education, the ELIX Project aims to improve the quality of higher education in Slovakia and enhance the success of graduates in transitioning to the workforce.

Overview of completed tasks

University of Economics in Bratislava actively contributes to the development of localised career pathways by fostering collaboration among key stakeholders and implementing strategic initiatives to enhance career opportunities and civic engagement with the following tasks:

Task 1: Organized and coordinated participants, including labour market actors, HR managers, career coaches and consultants, live long learning center, NGO community stakeholders, public sector and students for the Localized Career Pathways, Think Tank Series.

Task 2: Facilitated focused discussions with stakeholders and students to identify and refine local career pathways. These sessions fostered collaboration with stakeholders and students, promoting a shared understanding of local challenges and opportunities to drive targeted and effective suggestions of interventions.

Task 3: Conducted an in-depth analysis of labour market trends and challenges based on collected quantitative feedback through surveys from stakeholders and students.

Task 4: Based on focussed discussions and in-depth analysis of labour market trends, created a roadmap with actionable steps for enhancing students' career opportunities and collaboration on development of communities.
These efforts resulted in a strategic roadmap for advancing career development and civic engagement at the local level. This roadmap identifies and refines existing career pathways and adapts them to evolving community needs, fostering meaningful and targeted interventions.

Achieved goals and results

In the following, we present specific results achieved through the completed tasks (previously presented). The first part outlines the findings from the think tank focus groups, followed by an in-depth analysis of the survey on labour market trends, competencies and youth employability conducted with students and stakeholders.

Think Tank Series

STUDENTS

Basic information

Number of participants: 24 students from various faculties and years of study
Date of implementation: 21/11/2024
Mode of delivery: Live in faculty's conference room

Results

Students' perspectives from focus groups highlight significant trends shaping the labour market and education. Mental health is a recurring concern, with students emphasizing the growing stress levels in workplaces and the need for work-life balance. Many students prioritize flexibility, remote work, and leisure over traditional career advancement, reflecting a generational shift in values. Digitalization, particularly the rise of AI, is viewed by students as both a challenge and an opportunity—while it replaces traditional jobs, it also creates new roles. They stress the importance of digital literacy, innovative marketing skills, and adaptability to thrive in the evolving job market. Students also recognize globalization as a driver of change, requiring intercultural competence and adaptability to navigate rapidly changing environments. Sustainability is a key theme, with students advocating for careers in renewable energy, eco-friendly products, and sustainable business practices. They point to the effects of migration on low-wage job clusters and the challenges posed by aging populations in sectors like healthcare and education.

Geopolitical instability, such as war in Ukraine, is seen by students as intensifying economic and energy challenge. Students identify key competence gaps, including technical expertise in digital tools and data analysis, alongside soft skills like critical thinking, teamwork, and leadership. They advocate for education systems to integrate more applied projects, workshops, and online learning tools. Mentorship and interdisciplinary approaches are also seen as vital to bridging the gap between theory and practice.These findings from student focus groups emphasize the need for systemic adaptations in education and career preparation to meet the evolving demands of the modern workforce.

Table 9: Thematic analysis of students' statements on social and market trends, skills gaps, and training delivery

Themes	Categories	Codes	Quotes
Key Social Phenomena and their Impacts	Mental health	-Stress and mental health challenges are significant societal concerns -Employers are pressuring individuals, leading to increased workplace stress	*- "The biggest issue today is the rise in stress and mental health concerns, which seem to dominate every conversation about workplace well-being."* *- "I feel like there's constant pressure from employers, making it harder to balance work and personal life effectively."*
	Digitalization and AI	-Technology, especially AI, is replacing jobs but also creating new opportunities. -Companies are prioritizing investment in technology over human labour.	*- "We're seeing jobs vanish due to AI, but at the same time, new opportunities in tech fields are emerging faster than ever."* *- "Businesses are investing in AI and automation, but it often feels like they're overlooking the human element."*
	Globalization and Localization	-Global trends threaten local markets and employment opportunities. -Intercultural competence and adaptability are increasingly required.	*-"Globalization is a double-edged sword; it brings opportunities but also jeopardizes local industries and jobs."* *-"Working internationally now demands cultural sensitivity and the ability to adapt quickly to new environments."*
	Environmental Concerns	-Climate change and sustainability are driving new job opportunities in green sectors. -Extreme weather and energy transformation are shaping market needs.	*-"The shift to sustainability is creating a demand for new roles, particularly in renewable energy and eco-friendly product development."* *-"With extreme weather events becoming the norm, industries are being forced to rethink their energy policies and production strategies."*

	Demographics and Migration	-Aging populations lead to labour shortages in some sectors. -Migration flows affect labour distribution, often creating low-paid job clusters.	*-"An aging workforce is leaving critical gaps in industries like healthcare and education, which are hard to fill quickly."* *-"Migration has shifted the dynamics of the labour market, particularly with many migrants ending up in low-wage jobs."*
	War and Conflict	Geopolitical events, such as wars, impact economic stability and energy costs.	*"The ongoing conflicts have destabilized markets and driven energy prices through the roof, creating a ripple effect on every sector."*
Competence Gaps in the Labour Market	**Technical Skills**	-Proficiency in tools like Excel, accounting, and statistical software. -Emphasis on digital literacy and adaptability.	*-"There's a clear need for employees to master tools like Excel and statistical software; it's no longer optional."* *-"Digital skills are becoming the baseline requirement for almost every job, regardless of the industry."*
	Soft Skills	-Critical thinking and problem-solving in real-world scenarios. -Teamwork and communication for collaborative projects.	*-"Employers are looking for people who can think critically and solve problems without needing constant guidance."* *-"Effective teamwork and communication are crucial, especially in fast-paced, collaborative environments."*
	Leadership and Flexibility	-Managing stressful environments and demonstrating leadership qualities. -Time management and resilience in professional settings.	*-"Leadership isn't just about leading people; it's also about staying calm and decisive in high-pressure situations."* *-"One of the biggest challenges today is mastering time management to handle the increasing demands of work."*
Integration into Education	**Curricular Innovations**	-Incorporating applied projects to enhance learning experiences. -More emphasis on networking with industry experts and practical workshops.	*-"I'd love to see more real-world projects in the curriculum to help bridge the gap between theory and practice."* *-"Workshops and networking events with industry leaders would make a huge difference in preparing students for the job market."*
	Use of Online Tools	-Leveraging e-learning platforms, podcasts, and forums for education. -Increasing accessibility to online databases and collaborative tools.	*- "Online tools like webinars and podcasts are invaluable for making education accessible and up-to-date."* *- "Students need more access to online databases and tools to collaborate effectively on projects."*

Basic information

Number of participants 38 - 2 from Local Government and Policy Makers (Group 1), 10 from Educational Institutions (Group 2), 11 from Local Employers and Industry Representatives (Group 3), 3 from NGOs and Community Organizations (Group 4), 10 from Career Development Consultants and Experts (Group 5) and 2 from Others (Group 6).
Date of implementation: 12/11/2024, 13/11/2024
Mode of delivery: Live in faculty's conference room

Results

Focus group discussions highlighted major shifts in the labour market and education. Participants emphasized the growing demand from young workers for flexibility, remote work, and purpose-driven roles aligned with values like sustainability. Digitalization is reshaping jobs, reducing manual labour while requiring reskilling for fields like AI and data analysis. However, creativity and critical thinking among young workers are declining due to overreliance on technology. Demographic changes, such as aging populations, are driving labour shortages in caregiving and healthcare. Participants identified gaps in students' skills, including communication, leadership, and problem-solving, and called for stronger collaboration between universities and employers to integrate real-world experiences like internships. Emerging roles in digital content creation and sustainability demand both technical and creative skills. Participants stressed the need for resilience, adaptability, and lifelong learning to prepare students for these challenges. Digital tools and AI can enhance education, but success depends on partnerships across academia, industry, and policymakers to equip students for a complex job market.

Table 10: Thematic analysis of students' statements on social and market trends, skills gaps, and training delivery

Themes	Categories	Codes	Quotes
The impact of social trends on the labour market	**Changing Workplace Expectations**	-Increasing demand for flexible work arrangements. -Shift in values toward sustainability and purpose.	*Today's workforce has different expectations than it did even a few years ago. People are no longer content with rigid schedules or being tied to an office. They want remote work options, the ability to adjust their hours, and more control over how they work. Employers who don't embrace flexibility are finding it harder to retain their staff and attract new talent, especially among younger generations."* (Group 3) - *"Employees, especially younger ones, are looking for jobs that align with their personal values. They don't just want to work for a paycheck; they want to feel like their work matters. Companies that prioritize sustainability, social responsibility, or other meaningful causes are far more appealing to this group because they see their careers as a way to make a difference in the world."* (Group 4)
	The Role of Technology in Society	-Digitalisation reducing physical and manual jobs. -Technology changing how people interact and think.	- *"We're seeing a lot of jobs that used to require manual labour or repetitive physical tasks being replaced by machines and AI. For workers in these fields, it's a difficult adjustment because the skills they've relied on for years are no longer in demand. It's forcing people to either reskill or face job insecurity, which is a stressful and uncertain process." (Group 5)* - *"While technology has made communication faster and easier, it's also had some negative effects. People are relying so much on automation and tools that their creativity and critical thinking skills are starting to suffer. The ability to solve complex problems without a device is becoming less common, and that's a concerning trend for the future of innovation."* (Group 2)
	Mental Health Challenges	-Increased absenteeism due to workplace pressures.	-*"Stress is leading to absenteeism, especially among younger employees who feel overwhelmed by workplace pressures.*

		-Lack of resilience in the younger workforce.	*Companies need to take mental health seriously or risk losing talented workers." (Group 5)* *-"The younger workforce often struggles with resilience, finding it hard to cope with fast-paced environments and heavy workloads. This creates challenges for both employers and employees."* (Group 3)
	Demographic change	-Adapting education systems to meet demographic shifts.	*-"Our education systems need to evolve to address demographic changes. We need more programs that train professionals in caregiving, healthcare, and related fields to fill these critical gaps."* (Group 2)
Labour market trends with emerging job roles	**Demand for Technical and Digital Roles**	-Increased need for digitalisation experts. -Growth of content creation and social media roles.	*-"As technologies like AI, virtual reality, and automation continue to grow, there's an urgent need for experts who can manage and develop these tools. Companies are looking for people who not only understand the technical side but can also apply these innovations in creative ways across industries like healthcare, education, and entertainment."* (Group 3) *-"The rise of platforms like YouTube, TikTok, and Instagram has created an entirely new category of jobs. Content creators and influencers are now seen as legitimate career paths. These roles require a mix of creativity, strategy, and audience engagement, which makes them appealing but also highly competitive."* (Group 6)
	Care and Communication Professions	-Shortage of skilled caregivers in healthcare. -High demand for communicators and leaders.	*-"With aging populations in many countries, the demand for caregivers in healthcare is skyrocketing. Unfortunately, the supply of skilled workers isn't keeping up, which puts a strain on existing systems and affects the quality of care patients receive. It's an issue that needs urgent attention."* (Group 1) *-"We often overlook how important it is to have strong communicators and leaders in the workplace. These are the people who motivate teams, manage conflicts, and inspire progress. Without them, even the most skilled teams can struggle to achieve their goals."* (Group 3)
	Adaptability in Emerging Professions	-New professions blur the lines between technical and creative skills. -Workers need to adapt quickly to new job roles.	*-"With the rapid evolution of industries, workers are constantly required to adapt and learn new skills. Flexibility is no longer a bonus—it's a necessity to stay relevant."* (Group 5) *-"Emerging roles often require a mix of technical expertise and creative thinking, creating opportunities for those who can bridge these skill sets."* (Group 3)
	Opportunities in Sustainability-Focused Jobs	-Growth in green energy and sustainable practices. -Sustainability demands collaboration across industries.	*-"Jobs focused on green energy and sustainability are booming. Companies are rethinking their processes, and they need workers who understand eco-friendly innovations."* (Group 4) *-"Sustainability isn't confined to one sector anymore. Collaboration between industries is essential to create meaningful solutions."* (Group 1)
Gaps in students' competences and curriculum integration	**Leadership Development in Education**	-Students lack opportunities to build leadership skills.	*"We need to give students more opportunities to lead, whether through group projects or internships. Leadership is a skill that takes practice, and it's critical for career success."* (Group 2)
	Integration of Digital Tools into Learning	Digital tools are underutilized in education.	*"Students often miss out on learning how to use digital platforms effectively for career growth. Tools like LinkedIn, online portfolios, and virtual internships should be a standard part of education."* (Group 6)
	Self-initiative through problem solving	Self-initiative through practical problem solving	*Self-initiative, which is linked to what you know and can do, and problem solving with practical real-world problems - not running away from things you don't know but facing up to solving real world problems* (Interviewee 8).

	Collaboration Between Academia and Industry	-Closer ties between universities and employers are essential. -Students need real-world experience before graduation.	*"Universities need to work closely with businesses to ensure their programs match market needs. This partnership is vital to prepare students for the workforce."* (Group 2) *"Theoretical knowledge is important, but students also need hands-on experience in their fields. Companies and universities should work together to make this happen."* (Group 3)
Developing a roadmap for youth employability and the involvement of higher education institutions and the world of work	**Expanding Career Guidance Programs**	-Career counseling must start earlier. -Career fairs should focus on practical advice.	*Students need career guidance long before they graduate. Early counseling helps them explore their options and build a clearer path to their goals."* (Group 5) *"Career fairs are great, but they should offer more than brochures. Students need practical tips and real conversations with industry professionals."* (Group 3)
	Strengthening Alumni Networks	-Alumni networks can help bridge education and employment. -Alumni engagement needs better platforms.	*-"Alumni networks are a powerful tool for students. Graduates can share insights, connect them to opportunities, and help them navigate the early stages of their careers."* (Group 2) *-To keep alumni engaged, we need better platforms for them to interact with current students and faculty. This connection benefits everyone."* (Group 6)
	Promoting Lifelong Learning	-Employees need access to ongoing training programs. -Lifelong learning is essential for career adaptability.	*-The world is changing too fast for education to stop after graduation. Employees need opportunities to upskill throughout their careers."* (Group 1) *-Workers who commit to lifelong learning are better equipped to adapt to changes in their fields, whether it's new technology or shifting market demands."* (Group 5)
	Virtual Collaboration Skills	Students lack preparation for remote teamwork.	*"Remote work is here to stay, but students often graduate without experience in virtual collaboration. It's a skill we need to teach now."* (Group 3)
	Strengthening Internship Opportunities	-Internships should provide structured learning. -Balancing internships with academic demands.	*"Internships aren't just about doing tasks—they should be structured to teach students valuable skills and expose them to workplace dynamics."* (Group 3) *-"Students often struggle to balance internships with their studies. Universities need to work with companies to create manageable schedules." (Group 2)*

Summary of the findings of the focus groups at the University of Economics in Bratislava

Focus groups conducted at the University of Economics in Bratislava revealed significant insights into labour market trends and educational needs. Students emphasized the growing impact of mental health challenges and the need for work-life balance, reflecting a shift toward flexibility, remote work, and sustainability-focused careers. They viewed digitalization and AI as both disruptive forces and opportunities, requiring digital literacy, adaptability, and innovative skills to navigate the changing landscape. Environmental concerns and climate change were prominent, with students advocating for careers in green energy, eco-friendly industries, and sustainable business practices. Migration and aging populations were seen as reshaping job markets, creating demand for intercultural competence and adaptability. Stakeholders echoed these sentiments, highlighting the rising demand for flexibility, remote work, and purpose-driven roles, while noting that digitalization has led to a decline in creativity and critical thinking. They also pointed to demographic challenges, such as shortages in caregiving and healthcare, and the need for emerging roles that blend technical and creative skills. Both groups identified gaps in critical thinking, teamwork, leadership, and digital proficiency as key barriers to employability. To address these issues, participants called for integrating applied projects, internships, and interdisciplinary approaches into education, alongside expanded access to online tools and lifelong learning opportunities. Collaboration between universities, employers, and policymakers was deemed essential to align education with market needs and prepare students for the evolving workforce.

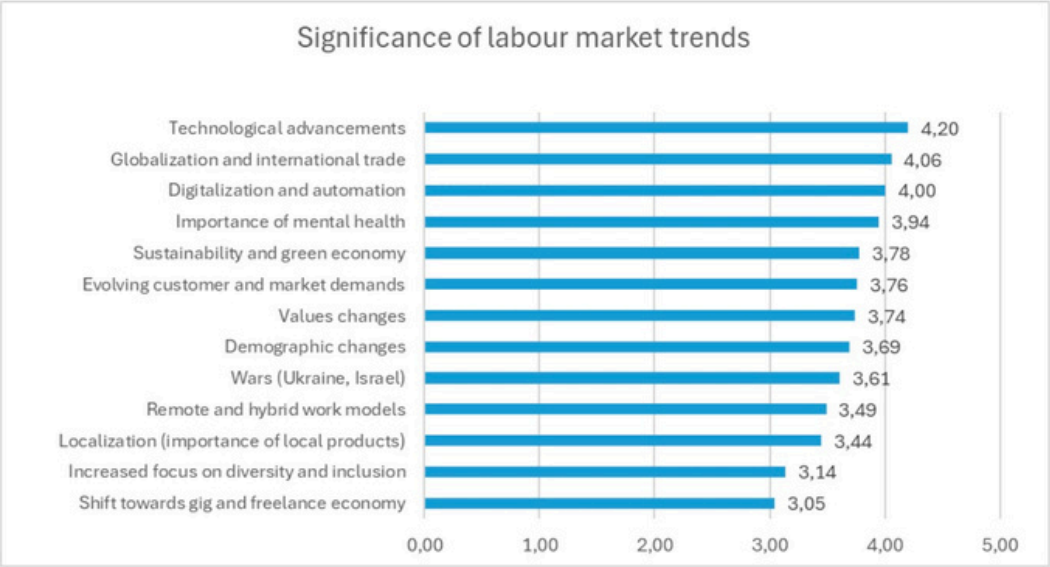
Quantitative analysis

Survey on Labor Market Trends, Competencies, and Youth Employability for Students

Perception of Current Social Phenomena

According to results from survey among Slovak students the most important social phenomena influencing the labour market are technological advancements (with average value 4,2 on scale 1-5 where 1- not significant, 5- very significant), globaliazation and international trade (4,06) and digitization and automatization (4,00).

Figure 38: Significance of labour market trends



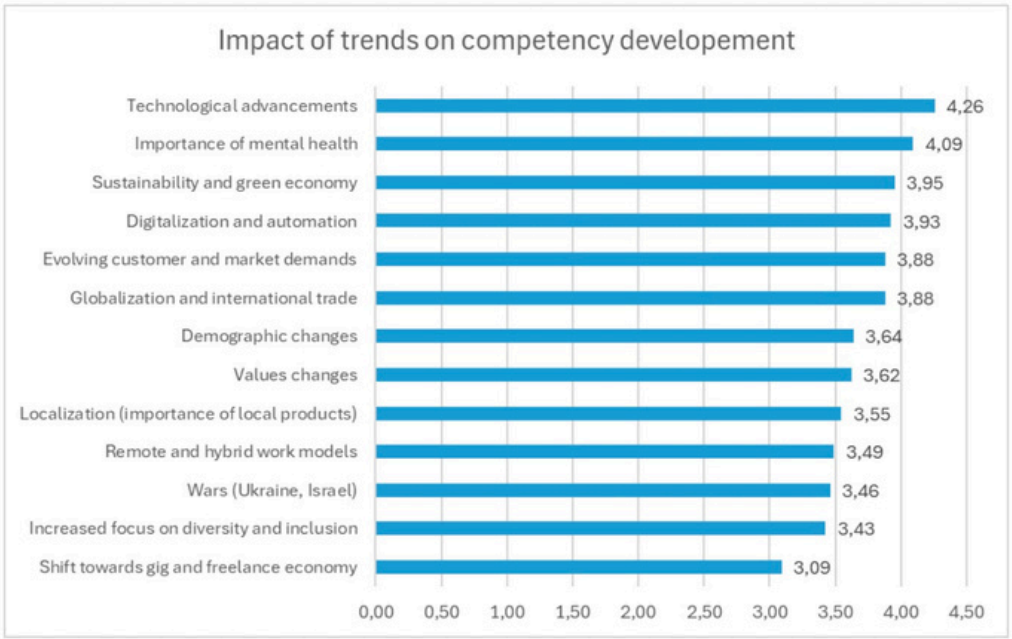
Essential Competencies for Labor Market Integration

When students were asked to evaluate what are essential competencies for individuals to successfully integrate into the labour market as the most important was perceived ability to think critically and solve problems (4,36), resilience (4,22), communication and customer orientation (4,15) and self-awareness (4.15).

Figure 39: Essential Competencies for Labour Market Integration

When measuring to what extent does each of the following trends require to develop new competencies to better adapt to labour market and societal needs, technological advancements (4,26), importance of mental health (4,09) and sustainability and green economy (3,95) were the top three requiring the new competencies development the most.

Figure 40: Impact of trends on competency development



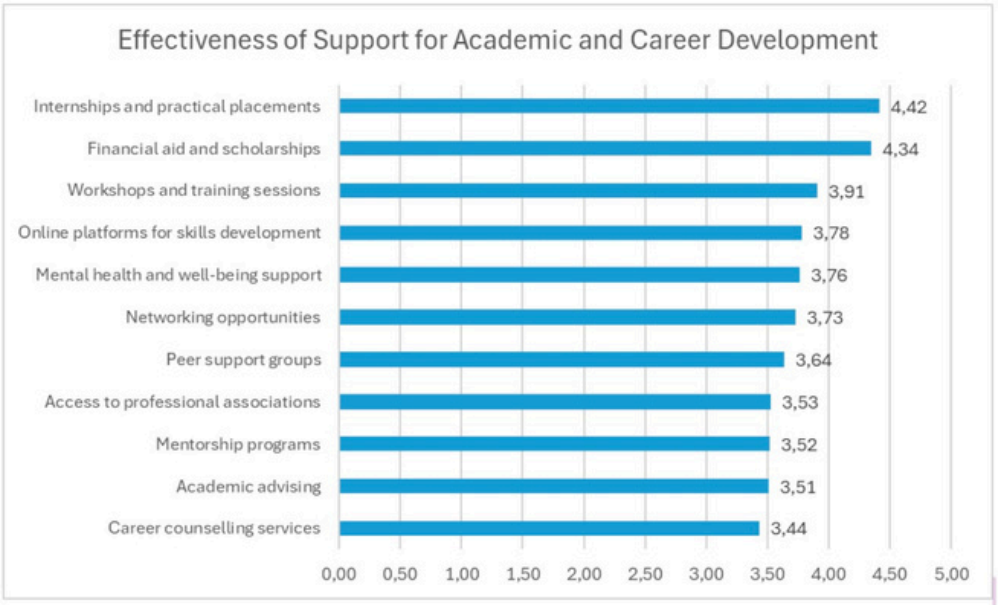
Self-assessment of students on how well prepared they feel for addressing the challenges or gasps in competencies showed that the hottest issues for them are their inadequate soft skills (3,58), lack of critical thinking (3,48) and insufficient digital literacy (3,45).

Figure 41: Preparedness in addressing competency challenges

Support for Academic and Career Development

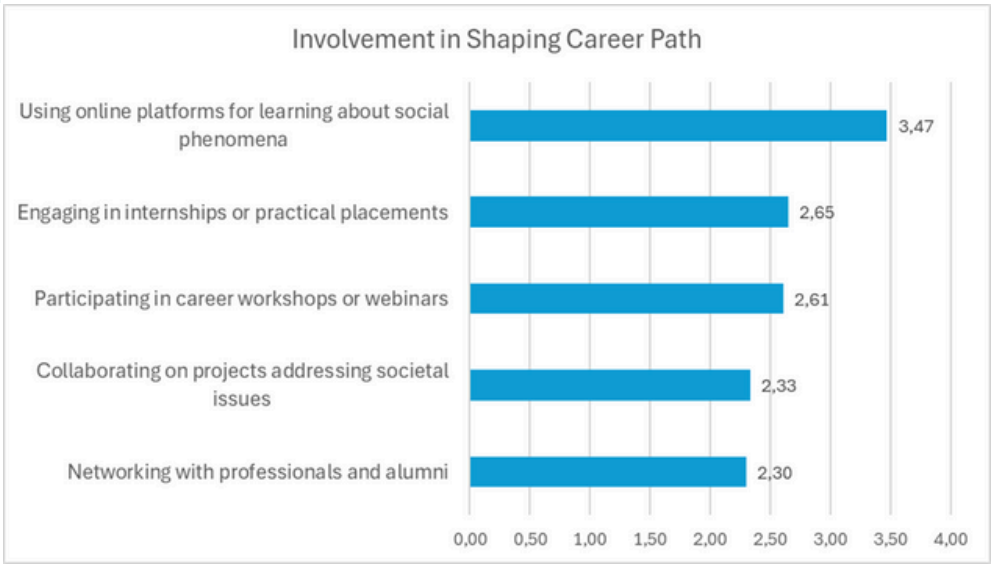
The following set of questions had an aim to uncover how students could be supported better to be prepared for the labour market more. First, we measured the effectiveness of the following forms of support in addressing students' academic and career development needs. As the most important the internships and practical placements (4,42), financial aid and scholarships (4,34) and workshops and training sessions (3,91) were evaluated.

Figure 42: Effectiveness of support for Academic and Career development



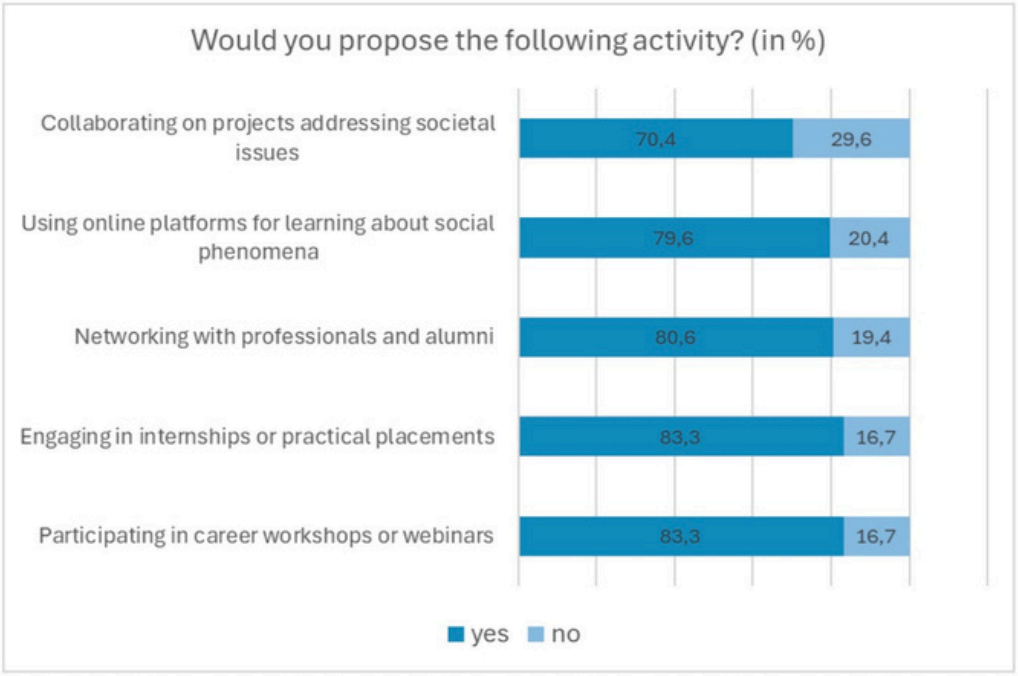
When students evaluating their own involvement in shaping career paths wereasked to propose additional activities that would help them to grow in this area they saw using online platforms for learning about social phenomena (3,47), engaging in internships or practical placements (2,65) and participating in career workshops and webinars (2,61) as the most useful.

Figure 43: Involvement in shaping Career Path



83,3% of surveyed students would propose to engage in internships or practical placements, 80,6% would propose networking with professionals and alumni and 79,6% would propose using online platforms for learning about social phenomena in order to shape one´s career.

Figure 44: Propose of the following activity



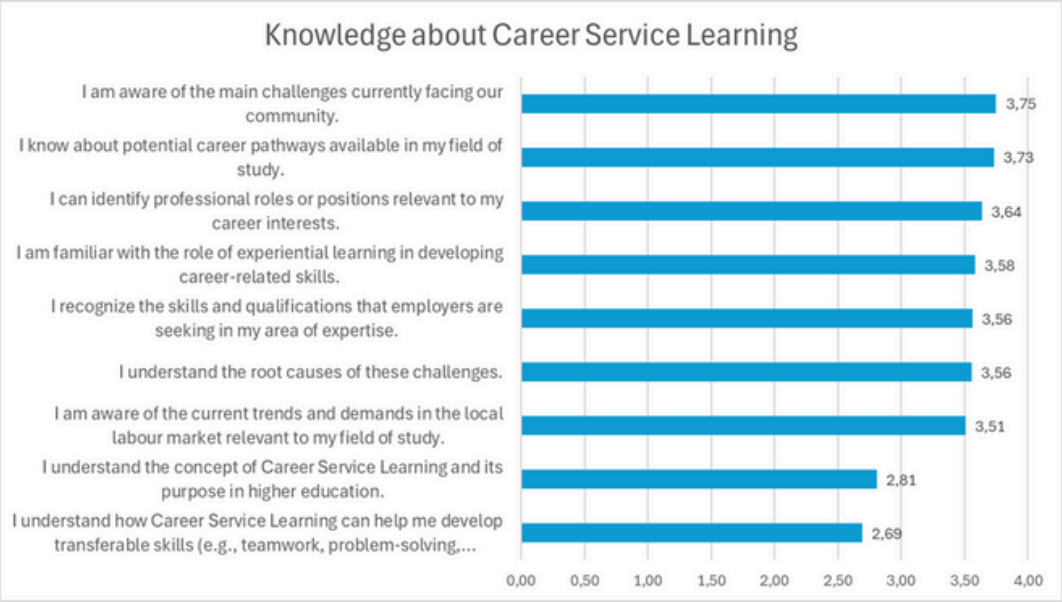
Students were asked to suggest or comment on how universities can better support their students in preparing for the labour market while addressing social needs. The following suggestions were generated based on their comments.

- Introduction of Mandatory Internships: Universities should implement mandatory internships so that students gain practical experience from their first year.
- Simulation of Work Environment: Create simulations of job interviews and real work situations to help students better prepare for the job market.
- Development of Communication Skills: Organize courses and lectures focused on developing communication and teamwork skills, including practical exercises and mentoring.
- Collaboration with Companies: Strengthen collaboration with businesses to allow students to engage in real projects and internships, thereby increasing their employability.
- Career Counselling and Mental Health Support: Improve the availability of career counselling services and mental health support for students.
- Financial Literacy: Include courses focused on financial literacy in the educational process so that students better understand budgeting and personal finance.
- Motivational Scholarships: Offer motivational scholarships for students from less privileged backgrounds to encourage their participation in practical programs.
- Practical Projects: Encourage students to work on projects that address important social issues, thereby increasing their engagement and practical skills.
- Excursions and Real-World Interviews: Organize excursions to employment offices and other institutions where students can practice real interviews and situations in a practical setting.

Knowledge about Career Service Learning

Students were asked about issues connected to CSL to measure their understanding of community issues and labour market. The highest knowledge was about the challenges facing their community (3,75) potential career pathways available in their field of study (3,73) and roles and positions relevant to their career interests (3,64).

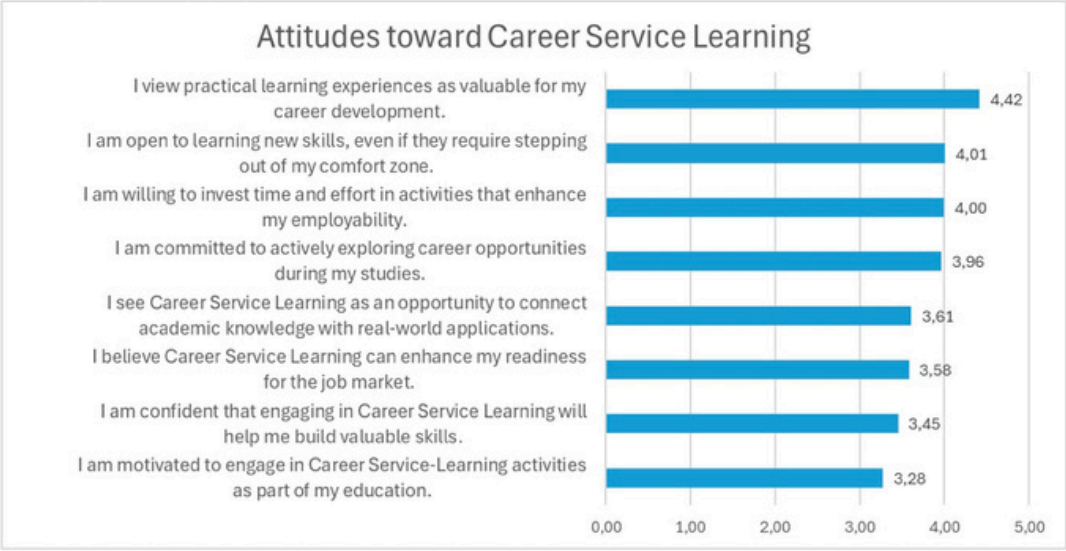
Figure 45: Knowledge about Career Service Learning



Attitudes toward Career Service Learning

We measured attitudes towards CSL and found that students perceive as the most valuable the practical learning experience (4,42) they are open to learn new skills even if that requires to step out of their comfort zone (4,01) and they are willing to invest time and effort in activities that enhance their employability (4,0).

Figure 46: Attitudes towards Career Service Learning



Behavioral Intentions and Actions

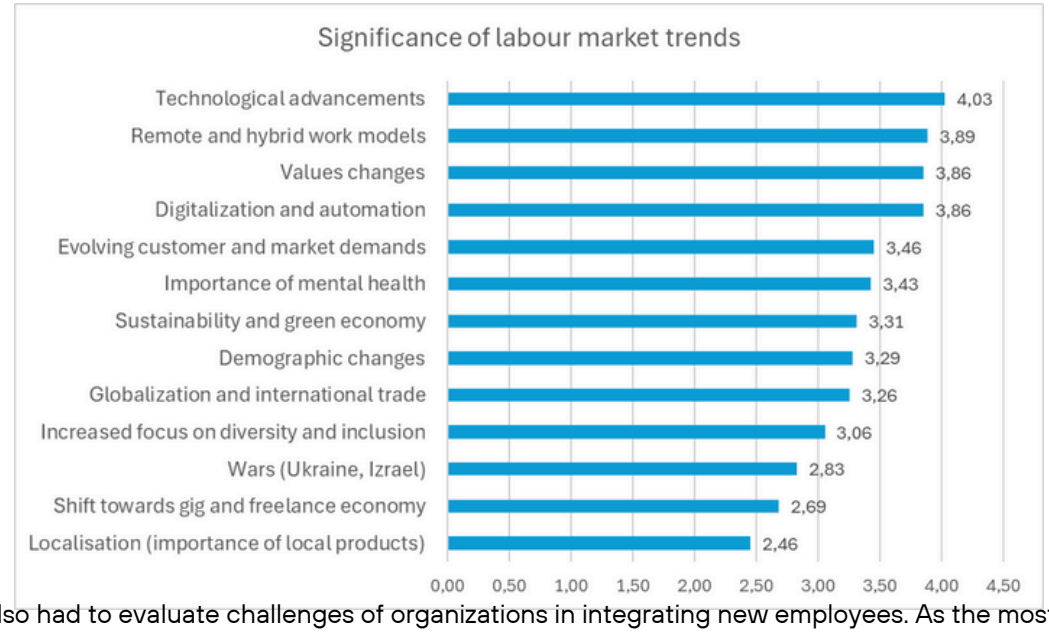
Students were asked to make a self-assessment of competencies in community enterprise development. They clearly see their personal strengths and how they can contribute to community labour market (3,68), work on enhancing their skills and knowledge relevant to community labour market (3,51) and regularly reflect on their experiences to identify areas for improvement (3,48).

Figure 47: Behavioural Intentions and Actions

Stakeholders

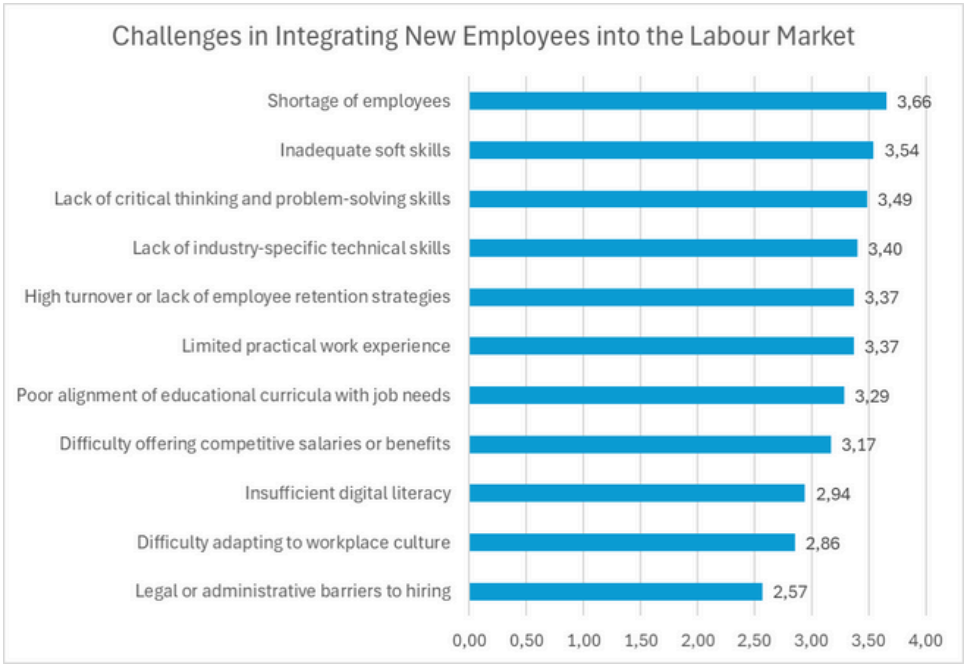
When asking stakeholders about their view on what are the most significant trends in shaping the labour market, they saw technological advancements (4,03), remote and hybrid work models (3,89) and value changes (3,86) as the most important.

Figure 48: Significance of labour market market trends



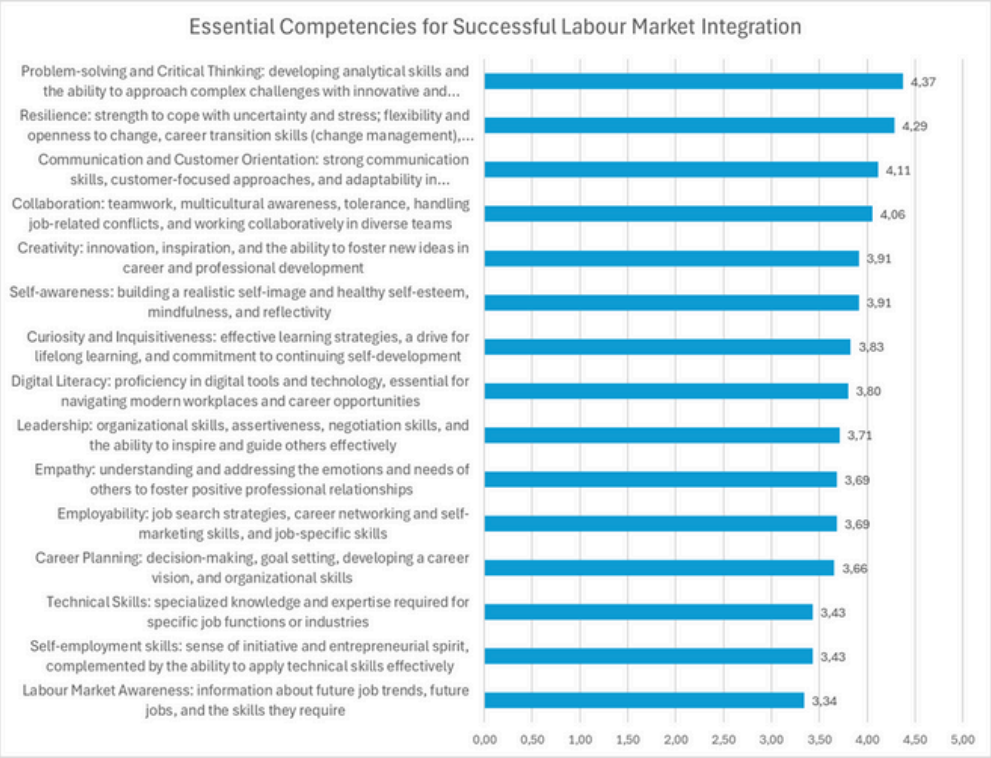
Stakeholders also had to evaluate challenges of organizations in integrating new employees. As the most significant the shortage of employees (3,66) had been seen, followed by inadequate soft skills of new employees (3,54) and lack of critical thinking and problem-solving skills (3,49).

Figure 49: Challenges in Integrating New Employees into the Labour Market



Problem-solving and Critical Thinking: developing analytical skills and the ability to approach complex challenges with innovative and strategic thinking (4,37) was seen as the most essential competence for individuals to successfully integrate into the labour market, followed by resilience: strength to cope with uncertainty and stress; flexibility and openness to change, career transition skills (change management), and work-life integration (4,29) and Communication and Customer Orientation: strong communication skills, customer-focused approaches, and adaptability in interpersonal interactions (4,11).

Figure 50: Essential Competencies for Successful Labour Market Integration

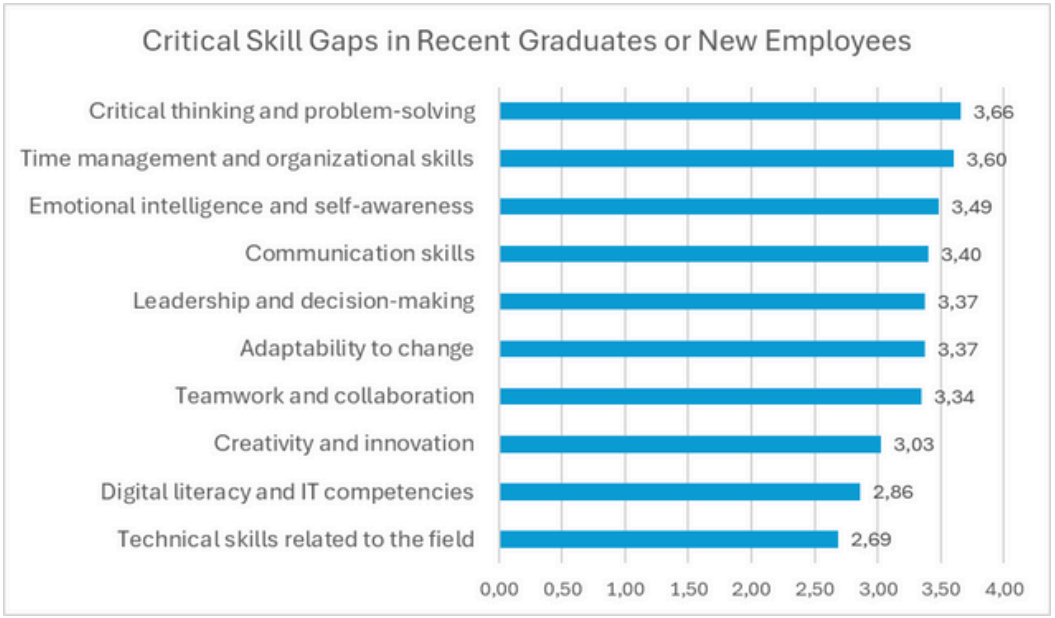


Impact of Trends on Competencies and Skill Gaps

Stakeholders

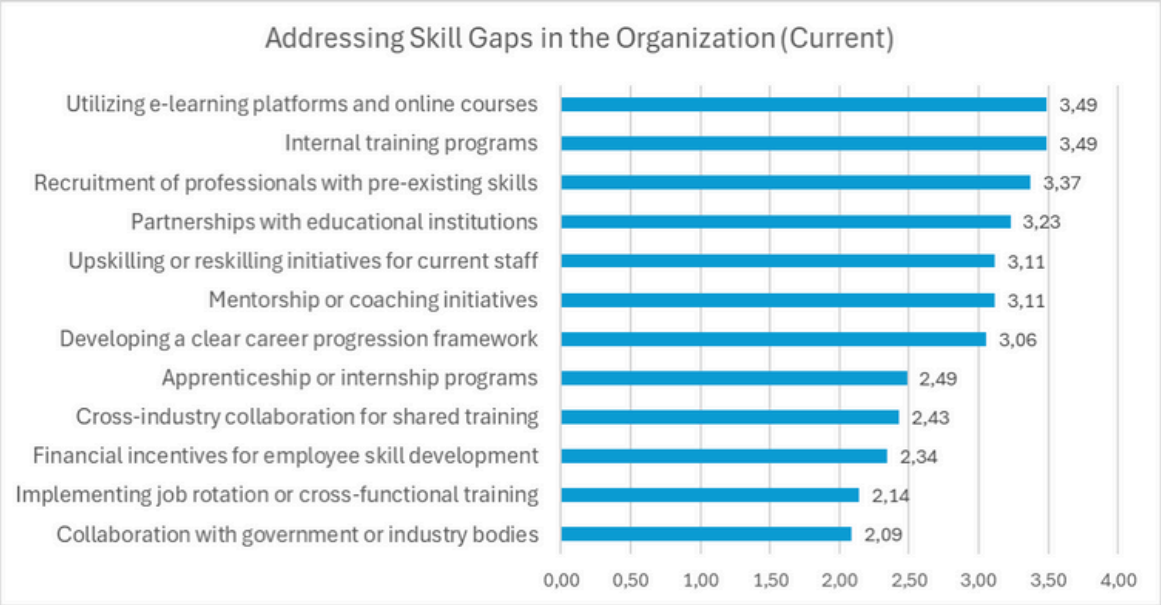
The stakeholders in the survey saw the following skill gaps in recent graduates or new employees as critical. The most perceived skill gap was in critical thinking and problem-solving skill (3,66) time management and organizational skills (3,60) and emotional intelligence and self-awareness (3,49).

Figure 51: Critical Skills Gaps in Recent Graduates or New Employees



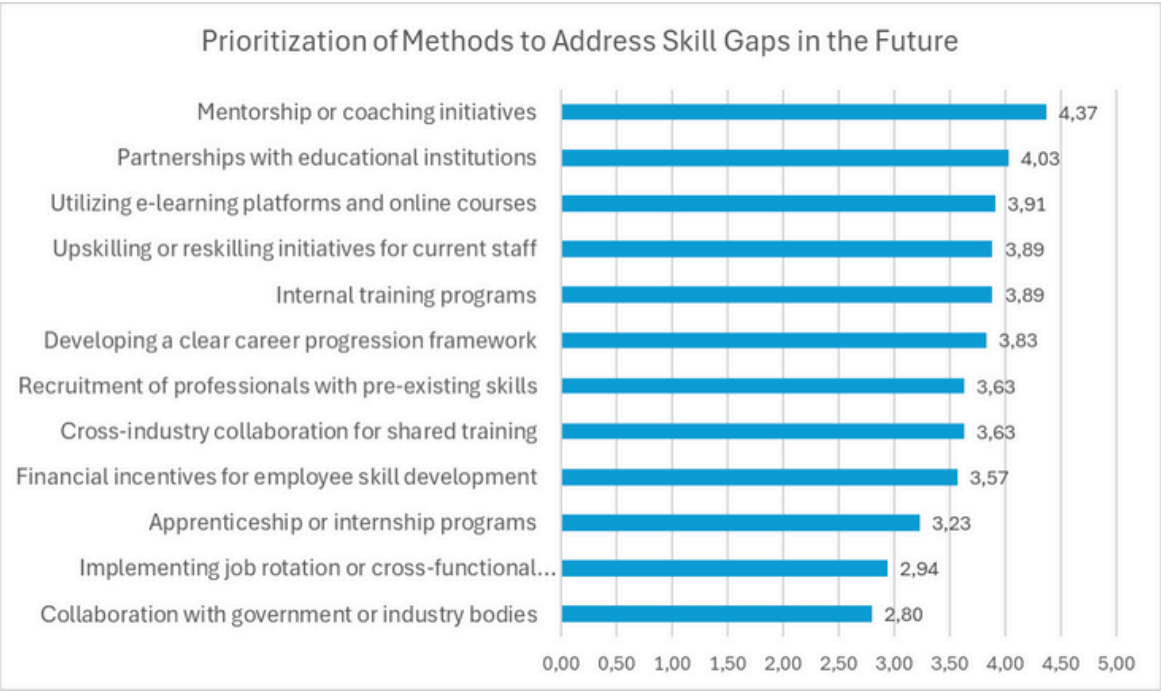
Stakeholders were asked to evaluate the current practice they use in order to address skill gaps within organizations and prioritization of the methods in the future. Among the most used practices were utilising e-learning platforms and online courses (3,49), internal training programmes (3,49) and recruiting of professionals with pre-existing skills (3,37).

Figure 52: Addressing Skill Gaps in the Organization (current)



Among most prioritized methods used to address skill gaps in the future were seen mentorship and coaching initiatives (4,37), partnership with educational institutions (4,03) and using e/learning platforms and online courses (3,91).

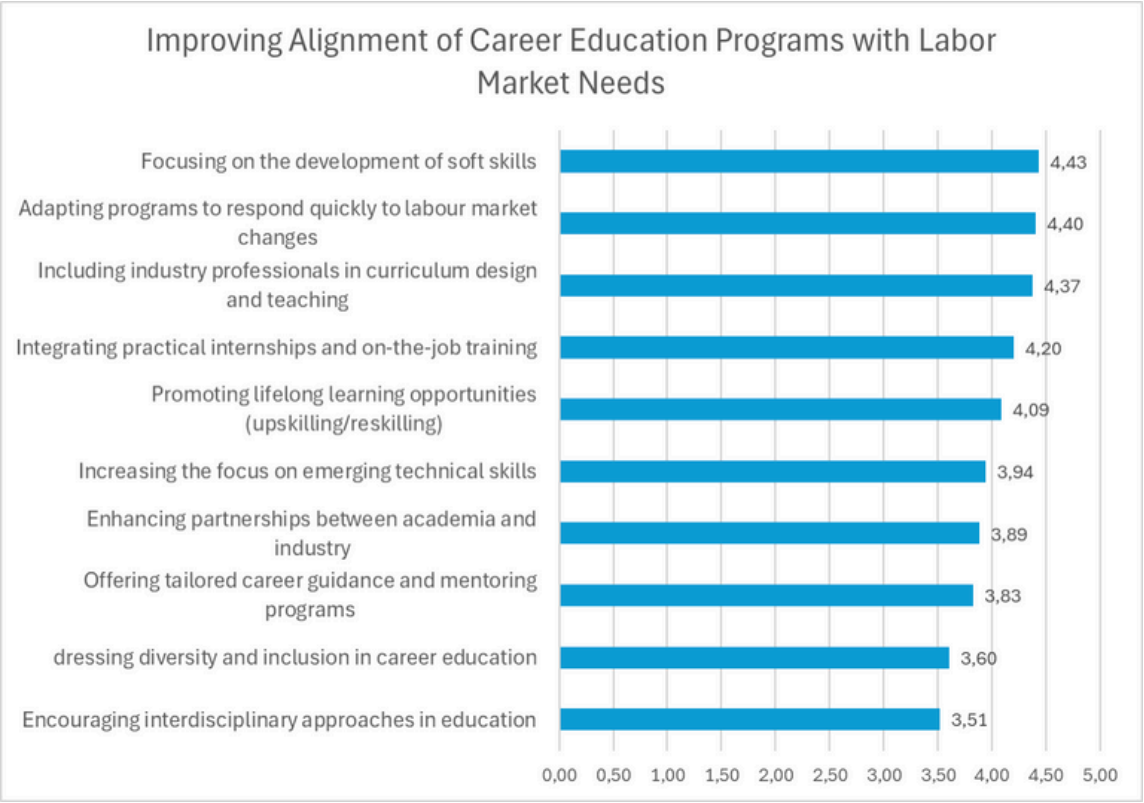
Figure 53: Prioritization of Methods to Address Skill Gaps in the Future



Social Phenomena and Career Education

When the stakeholders were asked to evaluate specific activities that academic institutions should consider to better align career education programs with labour market needs, soft skills development (4,43), programs able to quickly respond to changes of labour market (4,4) and including industry professionals in curriculum design and teaching (4,37) scored highest among the other (see the graph below).

Figure 54: Improving Alignment of Career Education Programs with Labour Market Needs



Stakeholders also brought some specific examples of collaboration between stakeholders and academic institutions. Based on the provided statements, the types of collaboration between universities and practice are as follows:

- Guest Lectures by Industry Experts: Representatives from companies, including CEOs, give lectures at universities, complementing theory with practical experiences, best practices, and case studies.
- Involvement of Students in Practice: Universities collaborate with companies to provide internships, part-time jobs, and practical training directly within firms.
- Organizing Competitions: Companies, in collaboration with universities and student organizations, organize engineering and other competitions that allow students to apply their knowledge in practice.
- Collaboration on Projects: Companies offer projects for students to solve, engaging them in real tasks and planning further collaboration.
- Dual Education: Some companies employ students from their first year and provide them with internal training while integrating them into their teams.
- Workshops and Coaching: Organizations participate in the educational process through workshops, team coaching, and lectures.
- Development of Entrepreneurial Skills: Collaboration on projects focused on developing students' entrepreneurial abilities.
- Collaboration with Student Organizations: Companies work with student associations, such as BEST, on various activities including competitions and projects.
- These forms of collaboration demonstrate diverse ways to connect universities with practice, helping students gain practical skills and experience.

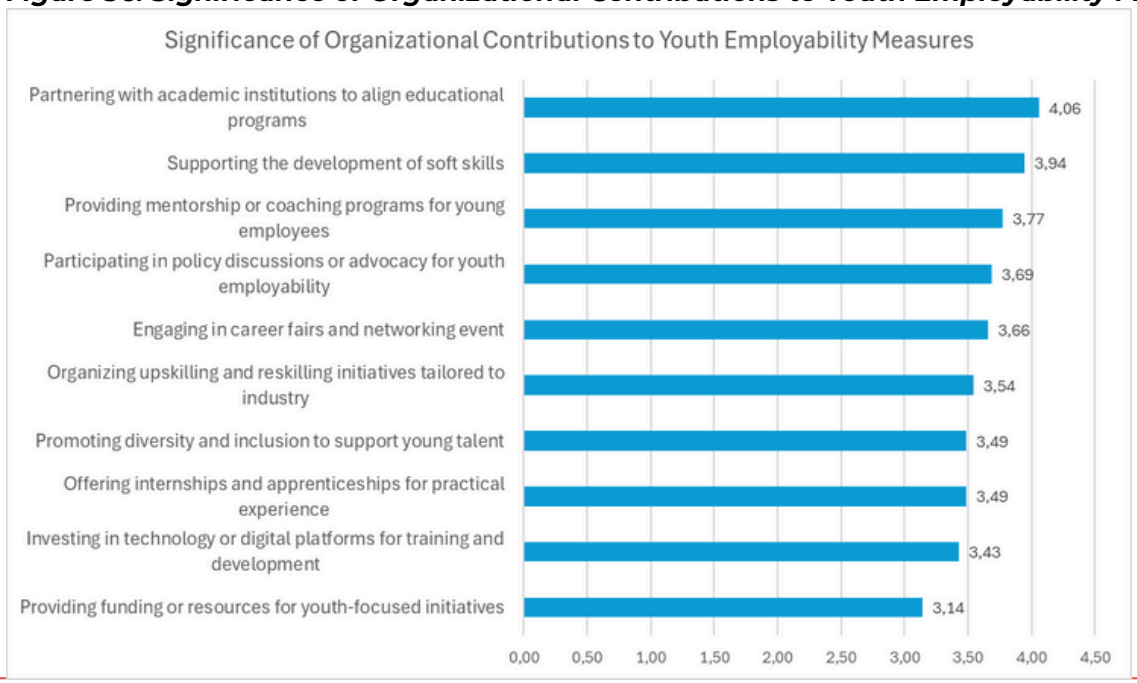
Improving Youth Employability

Partners were asked to rate the importance of specific and actionable measures for effectively implementing a plan to improve youth employability. Among the most important were providing structured internships and practical work experience (4,26), creating industry-aligned curricula in academic institutions (4,23) and establishing mentorship and career guidance initiatives (4,06).

Figure 55: Importance of Measures for Improving Youth Employability

Last question monitored the significance of variety of options that organizations can contribute to the successful implementation of measures to improve youth employability. Among the most significant were partnering with academic institutions and aligning educational programs (4,06), supporting the development of soft skills (3,94) and providing mentorship and coaching programmes (3,77)

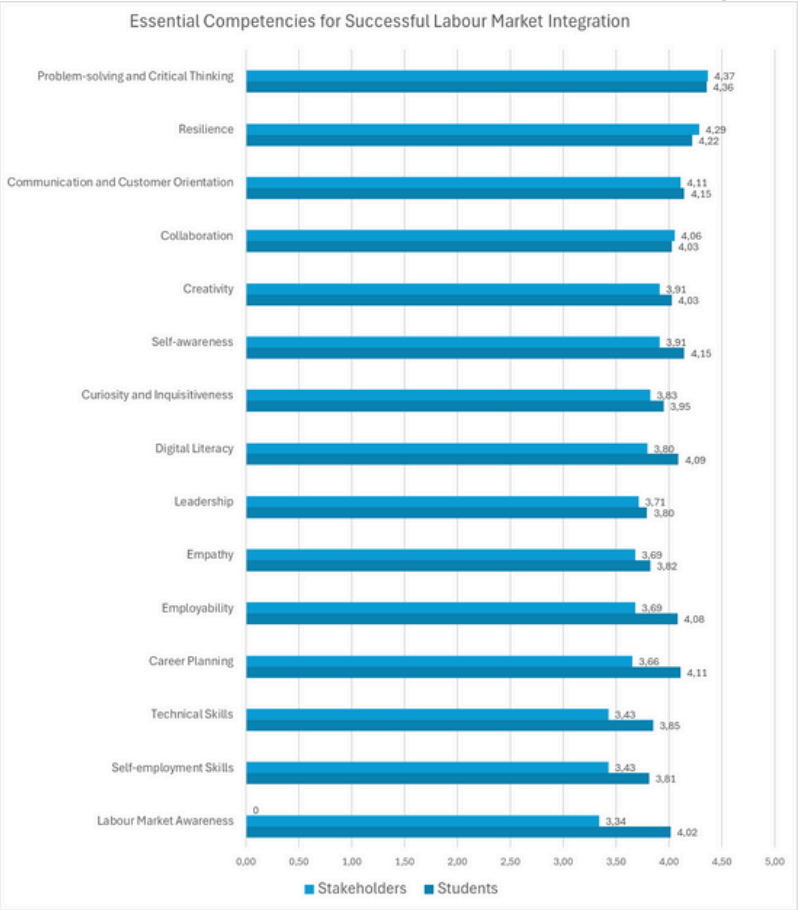
Figure 56: Significance of Organizational Contributions to Youth Employability Measures



Comparative analysis – introduction of main findings and recommendations

Both qualitative analysis and quantitative research show that there is a gap in perception of students and stakeholders of what is important for successful integration to labour market. The following table provides comparative analysis of the findings in this area. The table provides a comparison of how students and stakeholders perceive the importance of various competencies for successful labour market integration.

Figure 57: Essential Competencies for Successful Labour Market Integration



The key insights from the comparison are the following:

1. Most Important Competencies (Highest Ratings among both groups)

- Problem-solving and Critical Thinking is rated as the most essential competency by both groups (Students: 4.36, Stakeholders: 4.37), showing a strong consensus.
- Resilience is also highly valued by both students (4.22) and stakeholders (4.29), indicating the recognition of adaptability and stress management as critical skills.
- Communication and Customer Orientation is another top-rated competency (Students: 4.15, Stakeholders: 4.11), reflecting the need for strong interpersonal skills in the workplace.

2. Areas of Agreement

- Collaboration is one of the few competencies where stakeholders (4.06) rate it slightly higher than students (4.03), indicating its strong perceived importance in teamwork and multicultural settings.
- Creativity and Self-awareness are rated almost equally by both groups (around 4.0), suggesting a shared belief in the importance of these personal development competencies.

3. Competencies with the Biggest Differences

- Labour Market Awareness shows a notable gap (Students: 4.02, Stakeholders: 3.34). Students rate it much higher, possibly because they feel they lack sufficient knowledge about job trends and market expectations.
- Career Planning (Students: 4.11, Stakeholders: 3.66) and Employability Skills (Students: 4.08, Stakeholders: 3.69) also show significant differences, suggesting students place more emphasis on structured career development.
- Technical Skills is rated higher by students (3.85) than stakeholders (3.43), which may indicate that students perceive industry-specific skills as more critical, whereas stakeholders might value broader skills.
- Self-employment Skills (Students: 3.81, Stakeholders: 3.43) follow a similar trend, indicating students may see entrepreneurship as a viable career option more than stakeholders do.

4. Stakeholders' Priorities vs. Students' Perceptions

- Stakeholders seem to emphasize problem-solving, resilience, and collaboration as top priorities for workforce readiness.
- Students, on the other hand, prioritize employability skills, career planning, and labour market awareness, potentially reflecting their concerns about entering the job market.

Both groups agree on the importance of problem-solving, resilience, communication, and collaboration. Where Students place more emphasis on career planning, employability, and technical skills, possibly reflecting their immediate concerns about job readiness. Stakeholders prioritize resilience and adaptability, showing a greater focus on long-term career success.

Key Trends and Differences Between Students and Stakeholders with possible explanation and needed action steps.

1. Disparity in Emphasis on Labour Market Awareness and Career Planning

- Labour Market Awareness: Students (4.02) > Stakeholders (3.34)
- Career Planning: Students (4.11) > Stakeholders (3.66)
- Employability Skills: Students (4.08) > Stakeholders (3.69)

Students consistently rate competencies related to career preparation higher than stakeholders. This suggests they feel uncertain about job market expectations and may be seeking more guidance on how to navigate their careers.
On the other hand, stakeholders—who are already familiar with the job market—might assume these competencies develop naturally over time.

Possible Explanation:

- Students, being at the start of their careers, might worry about their job prospects, making them more conscious of employability skills.
- Stakeholders, who already have industry experience, might view these as secondary to soft skills and adaptability.

Recommendations:

Educational institutions should enhance career guidance by offering workshops, mentorship programs, and real-world exposure (internships, job fairs).

Stakeholders (employers) should communicate market trends more transparently through guest lectures, partnerships with universities, and recruitment events.

2. Stakeholders Prioritize Adaptability Over Formal Career Preparation

- Resilience: Stakeholders (4.29) > Students (4.22)
- Problem-Solving & Critical Thinking: Stakeholders (4.37) ≈ Students (4.36)
- Collaboration: Stakeholders (4.06) > Students (4.03)

Stakeholders rate resilience, adaptability, and collaboration slightly higher than students. This suggests that employers and industry professionals highly value candidates who can handle uncertainty, problem-solve under pressure, and work well in diverse teams.

Possible Explanation: Employers face rapid technological and economic changes, so they prioritize employees who adapt quickly rather than just those with structured career plans.
Students, still in structured academic environments, may not fully grasp the extent of workplace challenges, leading them to prioritize formal career preparation over adaptability.
Recommendations:
Universities should integrate resilience training into the curriculum, teaching students how to navigate career transitions, manage stress, and develop emotional intelligence.
Employers should assess adaptability during hiring, focusing on problem-solving tasks, situational interviews, and case studies instead of just technical qualifications.

3. Underestimation of Self-Employment and Technical Skills by Stakeholders

- Self-employment Skills: Students (3.81) > Stakeholders (3.43)
- Technical Skills: Students (3.85) > Stakeholders (3.43)
- Students rate entrepreneurial skills and technical expertise as more important than stakeholders do. This could indicate that younger generations are more inclined toward self-employment, freelancing, and technical specialization, while stakeholders prioritize broader, transferable skills.

Possible Explanation:

- The gig economy, digital entrepreneurship, and the rise of freelancing platforms might be influencing students to value entrepreneurial and technical skills more.
- Stakeholders might place greater emphasis on adaptability, leadership, and soft skills, considering them more important in the long run than technical expertise alone.

Recommendations:
Educational institutions should incorporate more entrepreneurship training, including business strategy, innovation, and startup management.
Employers should recognize entrepreneurial skills (e.g., initiative, risk-taking) as valuable assets, even for traditional jobs.
Technical skills should be balanced with soft skills, ensuring students are prepared for a dynamic job market.

4. Strong Consensus on Communication, Collaboration, and Creativity

- Communication & Customer Orientation: Students (4.15) ≈ Stakeholders (4.11)
- Creativity: Students (4.03) ≈ Stakeholders (3.91)
- Collaboration: Students (4.03) ≈ Stakeholders (4.06)

Both groups recognize the importance of communication, teamwork, and creative thinking in today's job market. This suggests a shared understanding that modern workplaces require strong interpersonal skills, adaptability, and innovation.

Possible Explanation:
The increasing reliance on remote work, global teams, and cross-functional collaboration makes communication a critical skill.
Organizations seek employees who can think creatively, solve problems dynamically, and work in multidisciplinary teams.
Recommendations:
Soft skills training should be prioritized in both academic and corporate settings.
Creativity should be fostered through interdisciplinary projects, innovation challenges, and problem-solving workshops.
Companies should create collaborative work environments, using team-based performance evaluations and incentives.
Final Recommendations: Bridging the Gap

Based on the findings, here are actionable steps to align education, training, and hiring with labour market needs:

- For Educators & Institutions

Integrate real-world exposure through internships, industry projects, and mentoring programs.
Strengthen soft skills development (resilience, leadership, emotional intelligence) alongside technical education.
Offer entrepreneurship and career planning courses to help students navigate self-employment and job transitions.

- For Employers & Stakeholders

Provide clearer career pathways and expectations to students, helping them understand job market realities.
Prioritize adaptability and resilience in hiring, rather than just academic credentials.
Recognize and support entrepreneurial skills, even in corporate environments.

- For Students & Job Seekers

Focus on problem-solving, adaptability, and resilience, as these are most valued by employers.
Seek hands-on experience (internships, side projects, freelancing) to bridge the gap between education and work.
Develop both technical expertise and interpersonal skills for long-term career success.

Guidelines for action

The following guidelines for action are based on suggestions from stakeholders and students regarding the development of students' social responsibility, practical skills, and career readiness. These suggestions highlight the importance of integrating theoretical knowledge with practical experience, fostering personal and professional growth, and building strong partnerships between educational institutions and businesses. By implementing these guidelines, we can better prepare students for success in their future careers and contribute to a more socially responsible and sustainable society.

I. Cultivating Social Responsibility:

- Recognizing Student Contributions: Formal recognition of student engagement in charitable and community-oriented activities is crucial. This acknowledges their existing environmental awareness, tolerance, and commitment to positive change.
- Promoting Open Dialogue: Facilitating discussions on sustainability and contemporary work-related issues empowers students to develop informed perspectives and a sense of agency.
- Encouraging Experiential Learning: Structured volunteering opportunities provide valuable experiential learning, fostering personal values and social awareness through practical engagement within diverse communities.

II. Developing Essential Skills:

- Integrating Soft Skills Development: Soft skills training should be integrated into every subject, encompassing areas such as communication, presentation skills, teamwork, critical thinking, problem-solving, and time management. Dedicated coaching and training programs can further enhance these crucial skills.
- Fostering Self-Awareness: Curricular components focused on self-knowledge, personal development, and meta-skills are essential. Accreditation of self-awareness programs can provide students with formal recognition of their personal growth. Early self-assessment tools can assist students in identifying their strengths and potential career paths.
- Enhancing Employability Skills: Dedicated instruction on interview preparation and employability skills equips students with the practical tools needed to succeed in the job market. This includes guidance on crafting effective resumes, developing strong interview techniques, and understanding workplace expectations.
- Promoting Critical Thinking and Communication: Explicitly teaching students the importance of effective communication, constructive discussion, and critical thinking skills is paramount. This includes developing the ability to provide and receive feedback constructively.
- Facilitating Goal Setting and Reflection: Guiding students in setting personal and professional goals, establishing expectations, and engaging in reflective practices empowers them to take ownership of their learning and development.
- Bridging Theory and Practice: Creating simulated work environments and incorporating project-based learning provide opportunities for students to apply their knowledge and skills in practical contexts.
- Developing Presentation Skills: Dedicated training in presentation skills enables students to effectively communicate their ideas and showcase their accomplishments.

III. Fostering Practical Experience and Industry Engagement:

- Establishing Strong Industry Partnerships: Building robust connections with companies facilitates student engagement through internships, workshops, and real-world projects.
- Providing Practical Training Opportunities: Offering hands-on practical experiences, such as internships and projects, is essential for bridging the gap between academic learning and professional practice. These experiences should be integrated throughout the curriculum, culminating in dedicated practical placements in the later years of study.
- Shifting Pedagogy towards Coaching: Adopting a coaching approach to teaching, where instructors act as mentors and guides, fosters student autonomy and deeper learning.
- Leveraging Expertise from Practice: Incorporating workshops led by professionals from industry provides students with valuable insights and perspectives. These workshops should complement, not replace, traditional lectures.
- Creating Digital Platforms for Collaboration: Developing digital platforms that facilitate collaboration between students, educators, and industry partners enhances learning and provides opportunities for feedback and assessment.
- Facilitating Internships: Actively promoting and supporting student internships within companies offers invaluable practical experience and networking opportunities.

By embracing these guidelines and fostering collaboration between educational institutions, businesses, and students, we can create a more enriching and impactful learning experience. This will not only equip students with the necessary skills and knowledge for their future careers but also empower them to become responsible and engaged citizens who contribute positively to society.

Next planned activities

The University of Economics in Bratislava has a highly developed collaboration with the professional sphere. This is achieved through lectures, selected seminars, and a dedicated course, "Entrepreneurship in Practice." Students have the opportunity to access valuable real-world information, partnerships, and internships. The areas that require the most support are developing essential skills and cultivating social responsibility.While specific subjects such as Business Coaching, Team Coaching, and sustainability courses are being implemented, we recognize the need to provide students with opportunities to participate in workshops from their first year onwards. These workshops should focus on self-discovery, career guidance, and the development of soft skills. We see further potential in intensifying and linking cooperation between centers that already operate within the university: the career center, the mentoring and coaching center, and the lifelong learning center.

The goal is to create an accredited program under the auspices of the lifelong learning center, accessible to students and the general public interested in developing career skills, including soft skills and employability skills.In the area of developing social responsibility, there is room for improvement and an opportunity to involve NGOs in cooperation. This can be done through expert lectures, workshops, and the "Entrepreneurship in Practice" course, where students would have the opportunity to work on a specific project for selected NGOs, contributing to social responsibility and developing their personal and career skills.At the same time, we see potential in creating an online platform that would connect an overview of opportunities to engage in socially responsible projects with opportunities to develop career skills and information on unpaid and developmental internships.

ROADMAP IN SERBIA

Introduction

Education in Serbia, like in many other countries, faces several systemic challenges, especially in terms of aligning higher education curricula with the rapidly evolving needs of the labor market. There is often a disconnect between what students are learning in universities and the practical skills that employers are seeking in today's dynamic work environment. As a result, graduates frequently struggle to find employment in their fields due to a lack of necessary practical experience, problem-solving abilities, and soft skills such as communication, teamwork, and adaptability.The traditional education model in Serbia tends to focus on theoretical knowledge, often neglecting the development of critical thinking and practical competencies that are essential for success in the modern workplace. Furthermore, the lack of integration between higher education institutions and industry partners means students miss out on opportunities to gain hands-on experience, making it more challenging for them to transition into their careers after graduation.

Digitalization and the fast-paced changes in technology present additional challenges. Although the Serbian education system is increasingly adopting digital tools, there is still a significant gap in digital literacy among students and educators. Without proper integration of digital skills into the curriculum, students' risk being ill-prepared to succeed in a globalized, tech-driven economy.Moreover, a limited focus on civic engagement and social responsibility in traditional teaching methods means students are often not fully equipped to engage with and address the complex social issues facing their communities. This lack of experiential learning opportunities leaves students underprepared for the demands of a globalized, socially conscious workforce.

The ELIX project can play a transformative role in addressing these challenges by bridging the gap between theoretical education and practical experience. ELIX's integration of Community Service Learning (CSL) into curricula enables students to apply what they have learned in real-world settings, allowing them to gain valuable experience while contributing to the community. This model fosters the development of essential skills such as critical thinking, problem-solving, teamwork, and digital literacy. By collaborating with industry partners, ELIX ensures that students are exposed to the practical demands of the job market, helping them develop skills that align with employers' needs.

Additionally, the project's focus on fostering an entrepreneurial mindset and innovation through experiential learning helps students develop the confidence and skills required to succeed in the modern workforce. Through mentorship, innovation challenges, and partnerships with local businesses, ELIX empowers students to think creatively and pursue innovative solutions to real-world problems. This not only improves their employability but also encourages a proactive, solution-oriented approach to social and economic challenges.By embracing these innovative teaching methodologies and focusing on employability, digital skills, and civic engagement, the ELIX project offers a comprehensive solution to the education challenges in Serbia, ultimately preparing students for the complexities of the 21st-century economy. The project can also help elevate the role of Serbian universities in creating a more dynamic, responsive education system that meets the needs of both students and employers.

Overview of completed tasks

Task 1: We successfully organized and coordinated the Localized Career Pathways Think Tank workshops, engaging students from our college and stakeholders from different sectors. These workshops facilitated productive discussions to address local career pathway challenges and explore innovative solutions.
Task 2: During the two-day workshops, we encouraged active participation and focused dialogue among students and stakeholders to identify and refine local career pathways. The workshops aimed to create a shared understanding of the challenges and opportunities in the local job market.
Task 3: We conducted a thorough analysis of current job market trends and challenges, using these insights to inform our discussions and develop innovative solutions for local career pathways.
Task 4: Based on the think tank sessions and survey results, we developed a comprehensive roadmap. This roadmap outlines actionable steps for improving career opportunities and strengthening connections between education, community, and the labour market.

Achieved goals and results

In the following, we present specific results achieved through the completed tasks (previously presented). The first part outlines the findings from the think tank focus groups, followed by an in-depth analysis of the survey on labour market trends, competencies and youth employability conducted with students and stakeholders.

Think Tank Series

STUDENTS

Basic information

Number of participants: 20 students: 7 bachelor students (1st, 2nd, 3rd year) Project Management and 10 bachelor studens (1st, 2nd, 3rd year) IT and 3 master students (1st year) Project Management.
Date of implementation: 16/11/2024
Mode of delivery: Live in the amphitheater of Fakultet za projektni I inovacioni menadžment

Results

After attending the workshop, students discussed shifting career trends, noting the growing appeal of alternative paths like influencing, which may lead to a shortage of skilled labour in fields requiring formal education. They questioned the value of traditional degrees amidst the rise of short-term training programs and platforms like LinkedIn and Coursera, which provide essential skills and mentorship.Students acknowledged the challenges posed by AI, including job displacement and its socio-economic impact, despite its productivity benefits.

They emphasized the importance of leadership qualities like emotional intelligence and decision-making, best gained through experience in lower roles to understand team dynamics.There was consensus that universities should better prepare students for the workforce by fostering adaptability, offering practical opportunities such as job interview simulations and internships, and improving communication and teamwork skills. Students also cautioned against over-reliance on technology, stressing its potential to hinder creativity and interpersonal development, crucial for career success.

Table 11: Thematic analysis of students' statements on social and market trends, skills gaps, and training delivery

Themes	Categories	Codes
The impact of social trends on the market	Changing values	*-Young people are increasingly attracted to alternative careers, such as influencing, which diverts attention from traditional professions.* *-This shift may lead to a shortage of skilled labor in fields that require formal education and specialization.* *-As AI evolves, the labor market faces challenges in adapting.* *-The lack of clarity about how technology will continue to develop creates uncertainty for both employers and workers, complicating the situation.*
	Digitalisation	*-AI brings significant changes, improving processes and productivity but raising concerns about job losses.* *-AI is increasingly replacing humans in various professions, leading to socio-economic issues like unemployment and the migration of highly educated workers in search of better opportunities.* *-People, especially students, are increasingly turning to technology as their first choice for problem-solving, reducing the use of their intellectual capabilities.* *-This can negatively affect the development of creativity, analytical thinking, and independent decision-making skills.* *-Digital platforms facilitate connections but affect the ability to communicate effectively in person.* *-This is particularly noticeable among younger generations, who increasingly avoid face-to-face interactions, potentially complicating professional relationships and processes like job interviews or teamwork.* *-AI enables the automation of many tasks, reducing the number of available jobs in certain industries.* *-Sectors with repetitive tasks are particularly affected, as technology replaces the need for human labor.*
	Environmental requirements	*-Over-reliance on written and virtual communication leads to a decline in skills like spontaneous verbal interaction and real-time problem-solving.* *- This can negatively affect both professional and personal socialization in the long term.*
	Migration flows	*-The job market is competitive, with a focus on higher education, experience, and skills. -Social media and short-term training challenge the value of formal education.* *- There is a trend promoting the idea that short courses and basic skills are sufficient to secure a job, leading to decreased interest in formal education.* *-This shift may have long-term consequences on the quality of the workforce and decision-making in institutions and organizations.*
	Communication and digital competences	*-Clear, Professional, and Empathetic Communication is essential for job acquisition (e.g., interviews) and effective communication with clients, colleagues, and stakeholders.* *-Involves improving speech, active listening, and adapting to different situations.* *-Proficiency in computer use and various software tools is a standard requirement in the job market.* *-Specialization in industry-specific software is emphasized.* *-English remains essential, while languages like German and Portuguese offer additional advantages due to increasing internationalization.* *-Practicing public speaking and handling uncomfortable situations boosts confidence and enhances presentation skills.* *-Important for negotiations, presentations, and business meetings.*

	Flexibility	*-Due to rapid changes in the job market, developing flexibility in learning and adapting to new technologies and business models is essential.* *-Experience in dynamic environments with diverse people fosters flexibility and adaptability, which are crucial for success in the job market.*
	Teamwork	*-Many students lack teamwork skills, often due to the absence of practical activities during their studies.* *Developing these skills is essential, as managers are frequently expected to work in teams.* *-Ative citizenship is indirectly linked to openness to teamwork, idea exchange, and public speaking—key elements for contributing to the community.*
	Leadership	*- Leaders must have emotional intelligence, empathy, decision-making ability for the team's benefit, and motivation skills.* *- Good leadership involves humility and understanding team dynamics, gained best through experience in lower positions.* *- Leadership is a process, not just a role, requiring experience in lower positions to understand team members' daily challenges.* *- Experience in teamwork helps leaders gain deeper insights into work dynamics and interpersonal relationships.*
How to integrate missing content into the higher education curriculum	**Professional work and networking with labour market experts**	*-The university should organize more events where company representatives visit and interact directly with students, giving them insights into real business conditions and helping develop practical skills needed in the job market.* *- Instead of students having to search for internships on their own, the university could guide them toward companies offering internships or organize events like "career days" where employers directly offer internship and job opportunities.* *-This approach would ease students' entry into the job market and provide valuable experience during their studies.*
	Practical workshops and applied project tasks	*-The university should promote regular feedback practices, where professors track student progress and provide constructive guidance based on individual needs and skills.* *-The university should be more transparent about its services and resources, investing in better access to information and opportunities.* *Using spaces for events or company visits can enhance student integration with the job market.* *-The university should be more active in preparing students for employment by organizing job interview simulations and offering advice on overcoming challenges like long selection processes and miscommunication between companies and candidates.* *-Organizing online and offline events, conferences, and panel discussions on topics such as social change, work dynamics, and new technologies can help students make informed career decisions.*
	Online tools	*-Platforms like Coursera, Udemy, and LinkedIn Learning offer courses on social phenomena, labor markets, and essential skills for business and professional success, helping students better prepare for the job market.* *-Platforms like LinkedIn allow students to connect with professionals and companies relevant to their career development, enabling them to follow industry trends and communicate with mentors who can shape their careers.* *-Platforms that connect students with industry mentors provide practical advice, feedback, and guidance on integrating into the professional community while understanding social and market phenomena.* *-Tools like CareerExplorer, MyPlan, and Socratic methodologies through apps help students explore career paths, understand labor market challenges, required competencies, and the social changes shaping industries.*

STAKEHOLDERS

Basic information

Number of participants 35 (16 from companies, 12 from NGOs and 7 education institutions)
Date of implementation: 16/11/2024 and 20/11/2024
Mode of delivery: Live in the amphitheater of Fakultet za projektni I inovacioni menadžment

Results

The analysis of participants' perspectives highlighted the need for modernizing curricula by integrating practical tools, interdisciplinary programs, and opportunities for internships. The importance of developing emotional and social intelligence, critical thinking skills, and soft skills—such as teamwork, personal branding, and initiative in problem-solving—was emphasized through workshops, case studies, and guest lectures from industry professionals. Particular focus was placed on aligning education with digitalization trends, including the use of artificial intelligence and automation tools, as well as the role of sustainable development in business practices.

Participants proposed several strategies for improving education, such as establishing long-term collaborations between universities and companies to provide quality internships and align curricula with industry demands. The significance of incorporating practical tools into teaching and fostering interdisciplinary programs that integrate technical, social, and economic aspects was also underscored. Greater emphasis on developing communication skills, conflict resolution, and digital literacy was suggested to better prepare students for work in a globalized and digitized environment.

Table 12: Thematic analysis of students' statements on social and market trends, skills gaps, and training delivery

Themes	Categories	Codes
The impact of social trends on the labour market	Changes in preferences among younger generations	*-A focus on work-life balance, leading to expectations for greater flexibility and opportunities for learning while on the job.* *-Learning and applying practical knowledge to facilitate easier employment.*
	Digitalisation	*-Remote work and hybrid work models – viewed as necessary to implement as standard practices.* *-AI influences communication and the overall execution of all business processes.* *-Hiring people from abroad – offers more opportunities but also cheaper labour.* *-Integrating modern tools such as AI and automation into education, with an emphasis on understanding concepts rather than merely using the tools.*
	Migration flows	*-The arrival of Russians and Ukrainians has increased competitiveness in the labour market. While they create new job opportunities, a requirement to know Russian and Ukrainian limits local students from securing these positions despite being otherwise qualified, as these languages are not commonly taught.* *-The emigration of local workers to other countries – driven by the prospect of a better standard of living.*
	Entrepreneurial spirit	*-A focus on fostering entrepreneurial spirit and adaptability to prepare students for a rapidly changing market.* *-The application of interdisciplinarity and multidisciplinary.*
	Environmental requirements	*-The impact of climate on the environment, and consequently on business operations.* *-Air pollution significantly affects health, causing more frequent illnesses and sick leaves.*
	Globalisation and localisation	*-English has become a mandatory competency.*
Labour market trends with emerging job roles	Job roles in digitalization	*-Increasing amounts of personal and business data are stored online, necessitating the development of new roles in cybersecurity to ensure adequate data protection.* *-Cloud platforms.* *-Adapting to constant changes brought by digitalization.* *-Digital entrepreneurs and freelancers – as students strive for independence and the ability to work from anywhere in the world.* *-Outsourcing.* *-Blockchain.*
	Developing social and emotional intelligence in young people	*-Young people lack social intelligence; the world is leaning toward individualism, further discouraging the development of social skills.* *-Developing critical thinking in young people.* *-Encouraging networking.* *-Promoting informal education.* *-Bridging the generational gap between older employees and students.* *-Raising awareness of the importance of mental health among young people.*
	Digital media	*-New roles in digital marketing, such as TikTok marketing and branding.* *-Social media profiles that are 100% AI creations.*

	AI experts	*-Artificial intelligence automates tasks that no longer require human intervention, reducing time spent on certain jobs and allowing individuals to focus on more critical tasks.* *-Working on AI ethics.* *-Roles related to advancing AI and training employees on the most efficient ways to utilize it.* *-Teaching professionals from other fields how to apply and adapt AI to their work (e.g., medicine, education, agriculture).* *-AI management.* *-As a result, new academic programs are needed to familiarize students with AI, its functionalities, and the opportunities it offers.*
	Jobs in sustainable development	*-Green management.* *-Environmental management.* *-Environmental policy implementation experts.*
Gaps in students' competences and curriculum integration	**Communication skills**	*-Professional communication.* *-Conflict resolution.* *-Learning foreign languages.* *-Digital communication.* *-Understanding different work cultures.*
	Internships	*-Learning through practical examples in higher education.* *-Internships in companies.* *-Encouraging students to engage in as many different internships as possible.* *-Universities should establish long-term agreements with companies from various fields to provide students with adequate practical experience.* *-Bachelor's, master's, and doctoral theses should add value to the labour market, addressing both students' interests and market needs.* *-Recognizing students' values and attitudes to better connect them with companies.*
	Self-initiative through problem solving	*-Critical thinking and problem-solving in real-world settings.* *-Students' work ethics.* *-Creating an environment where students are encouraged to take initiative.*
	Teamwork and collaboration	*-Promoting collaboration among students through teamwork on joint projects.* *-Sharing knowledge among peers.* *-Learning about group dynamics and functioning.*
	Technical and social skills	*-Digital literacy.* *-Practical tools commonly used in the labour market.* *-Developing social skills through workshops on various topics.* *-Self-awareness and learning about personal branding.* *-Introducing the use of practical tools in university courses.* *-Integrating interdisciplinary programs that combine technical, economic, and social aspects.* *-Advising students on effective learning strategies and adapting to changes.* *-Guest lectures from various organizations on diverse topics covered in higher education.* *-Conducting case studies to allow students to exchange knowledge and experiences.* *-Developing students' soft skills, as these set them apart in the labour market.*
	Entrepreneurial and leadership skills	*-Encouraging entrepreneurial spirit among students during their studies through various initiatives and projects they can implement independently.* *-Acquiring leadership skills through group work on academic projects.* *-Participating in workshops that introduce students to entrepreneurship and leadership through practical examples.*
Developing a roadmap for youth employability and the involvement of higher education institutions and the world of work	**Professional work experience and networking with labour market experts**	*-Connecting with industries to create relevant academic curricula.* *-Mapping the needs of companies.* *-Mapping the needs of students.* *-Facilitating connections between students and companies through guest lectures, workshops, and competitions.* *-Sharing experiences of alumni with current students on how they secured employment.* *-Encouraging and supporting students in accessing international projects.*
	Entrepreneurial skills	*-Promoting entrepreneurship through workshops and start-up competitions.* *-Sharing experiences and best practices of entrepreneurs through guest lectures.* *-Focusing on acquiring entrepreneurial knowledge and skills.*
	improvement of higher education institutions	*-Increasing the visibility of universities.* *-Clearly defining university values and connecting them with students.* *-Providing scholarships and subsidies for students and professors involved in applied research.* *-Universities participating in projects directly linked to industrial trends and implementing those trends.* *-Motivating professors to enhance their teaching.* *-Exchanging knowledge and experiences among professors.* *-Companies shaping curricula or at least providing suggestions for improving existing programs.*

Summary of the findings of the focus groups at the University of EDUCONS – Fakultet za projektni I inovacioni menadžment

In conclusion, the workshop highlighted the need for education systems to adapt to the evolving job market by modernizing curricula and aligning them with industry demands. Participants emphasized the importance of integrating practical tools, interdisciplinary programs, and sustainable development into education while fostering critical thinking, emotional intelligence, and soft skills such as teamwork, personal branding, and conflict resolution.

The discussions underscored the value of experiential learning through internships, long-term university-industry collaborations, and the incorporation of AI and automation into teaching practices. By addressing these areas and emphasizing digital literacy, communication, and adaptability, educational institutions can better equip students for the challenges of a globalized and digitized workforce.Ultimately, these measures aim to bridge the gap between academic preparation and professional requirements, ensuring students are not only career-ready but also capable of thriving in a rapidly changing labor market.

Quantitative analysis

Survey on Labor Market Trends, Competencies, and Youth Employability for Students

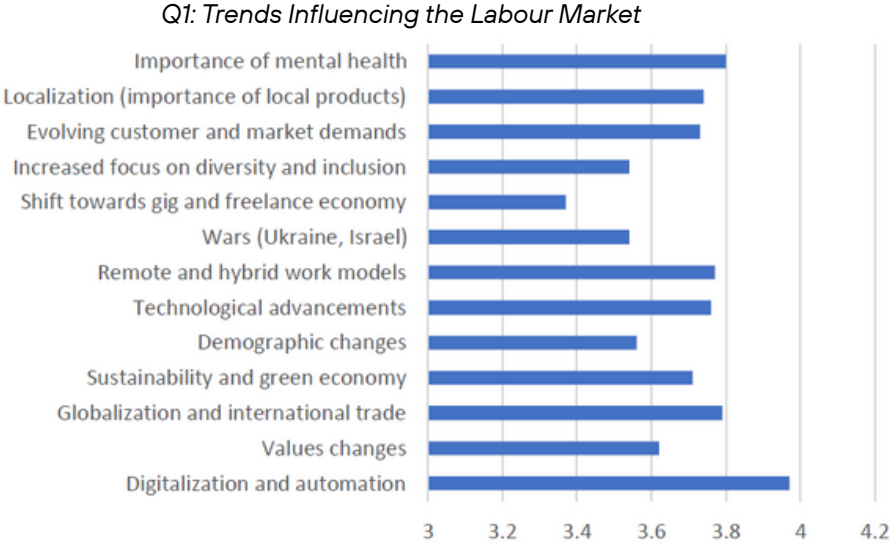
Perception of Current Social Phenomena

Q1: Trends Influencing the Labour Market

The following trends indicate their significant impact:

- Digitalization and automation (3.97): Recognized as a dominant force reshaping industries and societal operations.
- Importance of mental health (3.80): Highlights the growing awareness and prioritization of mental well-being.
- Globalization and international trade (3.79): Reflects the ongoing importance of international collaboration and market integration.
- Remote and hybrid work models (3.77): Points to the shifting dynamics of the workplace.
- Technological advancements (3.76): Highlights the crucial role of innovation in driving progress.
- Localization (importance of local products) (3.74): Reflects an increased interest in locally sourced goods.
- Evolving customer and market demands (3.73): Shows the importance of adapting to changing consumer preferences.
- Sustainability and green economy (3.71): Indicates the growing emphasis on environmental responsibility in societal and economic systems.

Figure 58: Trends Influencing the Labour Market



Essential Competencies for Labor Market Integration

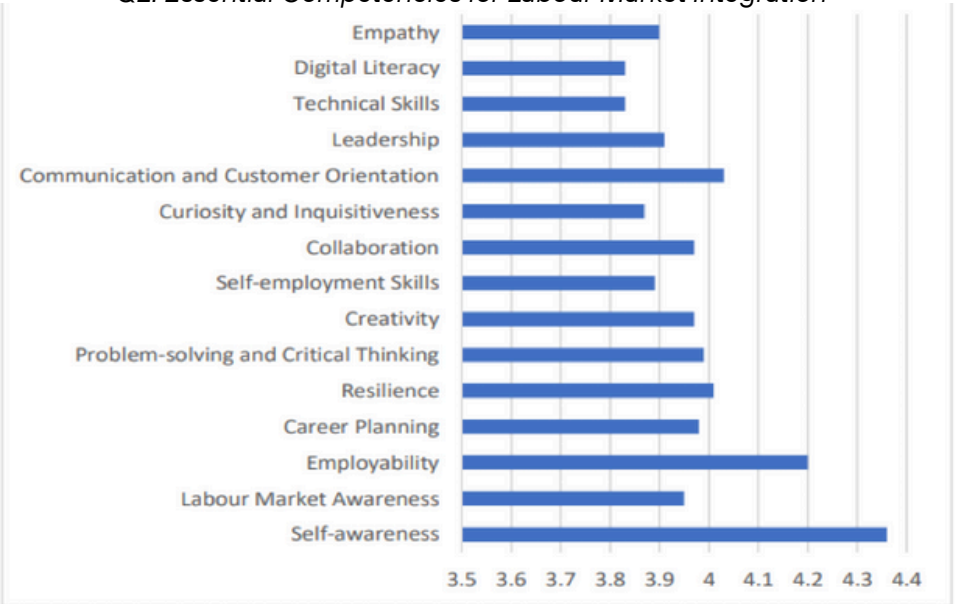
Q2: Essential Competencies for Labour Market Integration

The skills showcasing their relevance for preparing students for the workforce:

- Self-awareness (4.36): Essential for personal development and effective decision-making.
- Employability (4.20): Highlights the need to equip students with job readiness skills.
- Leadership (4.03): Underlines the need for individuals who can guide and inspire teams.
- Communication and customer orientation (4.03): Crucial for engaging with clients and stakeholders.
- Resilience (4.01): Demonstrates the importance of adaptability in overcoming challenges.
- Problem-solving and critical thinking (3.99): Key for tackling real-world problems effectively.
- Career planning (3.98): Stresses the value of strategic preparation for professional growth.
- Collaboration (3.97): Emphasizes teamwork as a core workplace competency.

Figure 59: Essential Competencies for Labour Market Integration

Q2: Essential Competencies for Labour Market Integration



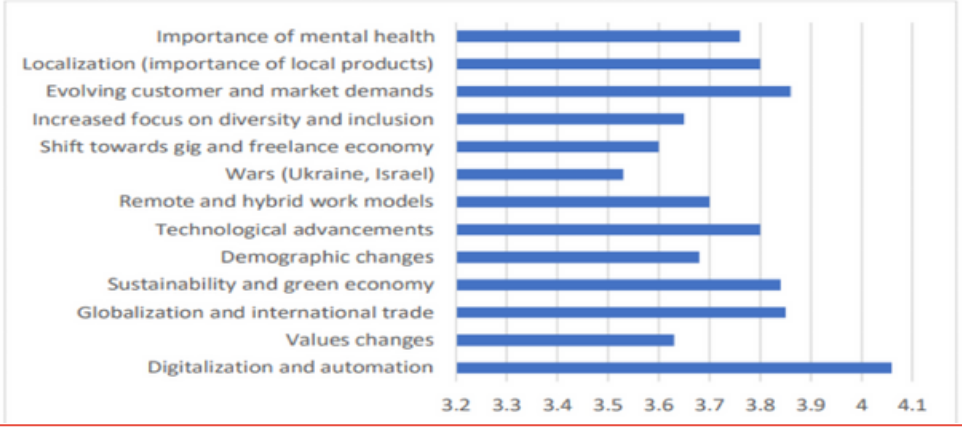
Q3: Development of New Competencies for Adapting to Labour Market and Societal Needs

The most prominent challenges identified include:

- Digitalization and automation (4.06): Recognized as a transformative force.
- Evolving customer and market demands (3.86): Indicates a need for responsive education systems.
- Globalization and international trade (3.85): Highlights the global interconnectedness of industries.
- Sustainability and green economy (3.84): Reflects the importance of eco-conscious practices.
- Technological advancements (3.80): Stresses the urgency of staying updated with new innovations.
- Localization (3.80): Points to the value of incorporating regional products and services.

Figure 60: Development of New Competencies for Adapting to Labour Market and Societal Needs

Q3: Development of New Competencies for Adapting to Labour Market and Societal Needs



Q4. Preparedness in Addressing Challenges or Competency Gaps
Challenges exceeding include:

- Shortage of employees (3.99): Indicates a need for better alignment between workforce supply and demand.
- Limited practical work experience (3.81): Suggests that internships and practical placements are critical.
- Inadequate soft skills (3.80): Highlights the necessity for improving interpersonal abilities.
- Lack of critical thinking and problem-solving skills (3.77): Underscores the importance of developing analytical capabilities.

Figure 61: Preparedness in Addressing Challenges or Competency Gaps

Q4. Preparedness in Addressing Challenges or Competency Gaps

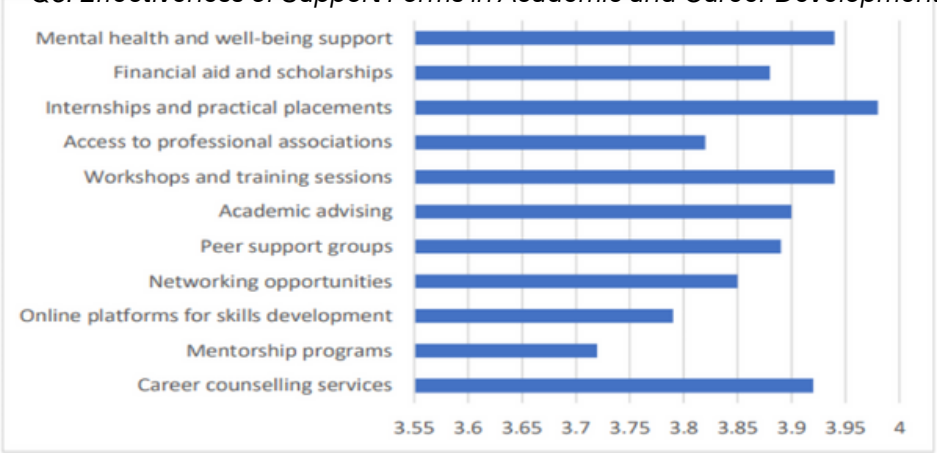
Support for Academic and Career Development

Q5: Effectiveness of Support Forms in Academic and Career Development
The highest-rated support services include:

- Internships and practical placements (3.98): A vital bridge between academic learning and professional application.
- Workshops and training sessions (3.94): Offer hands-on opportunities to enhance skills.
- Career counseling services (3.92): Essential for guiding students in their career paths.
- Mental health and well-being support (3.94): Demonstrates the importance of emotional support for student success.
- Peer support groups (3.89): Emphasizes the value of collaborative and shared learning experiences.

Figure 62: Preparedness in Addressing Challenges or Competency Gaps

Q5: Effectiveness of Support Forms in Academic and Career Development



Q6: Involvement in Shaping Career Path
Key opportunities include:

- Using online platforms for learning about social phenomena (3.99): Highlights the importance of leveraging digital tools for education.
- Participating in career workshops or webinars (3.90): Indicates strong interest in structured learning opportunities.

Figure 63: Involvement in Shaping Career Path

Q6: Involvement in Shaping Career Path

Q7: Suggestions for Universities to Better Support Students in Labour Market Preparation:

- Internships and events where students can connect with companies.
- More practical experience—real-world application, not just theory.
- Throughout their education, students should participate in internships and be introduced to various professions.
- Successful individuals from different fields could give lectures, and students could visit developed corporations.
- Public speaking, teamwork, and projects.
- Internships and workshops are a great help in preparing students for the job market.
- Working in companies that FON collaborates with, as part of internships, would make it easier for students to adapt to their future jobs after graduation.
- Replace older professors with younger ones in fields where innovation has advanced significantly.
- Providing concrete problems that students can solve in groups or individually, which would serve as practice.
- Enable students to combine different disciplines to develop skills applicable in various contexts.
- For example, engineering students could learn about ethics and sustainability, while social sciences could incorporate technological skills.
- Greater focus on practical work.
- Organizing extracurricular activities and sections.

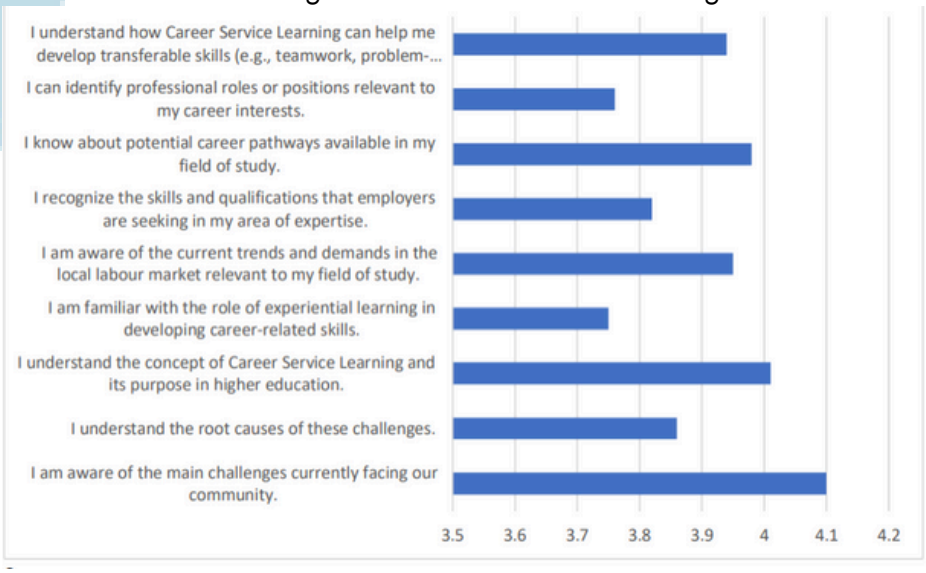
Knowledge about Career Service Learning

Q8: Knowledge about Career Service Learning
Key insights:

- Awareness of main challenges facing the community (4.10): Reflects the importance of understanding societal needs.
- Understanding transferable skills through career service learning (3.94): Emphasizes skills like teamwork, leadership, and problem-solving.
- Understanding the root causes of challenges (4.01): Indicates a deeper need for analytical thinking.

Figure 64: Knowledge about Career Service Learning

Q8: Knowledge about Career Service Learning



Attitudes toward Career Service Learning

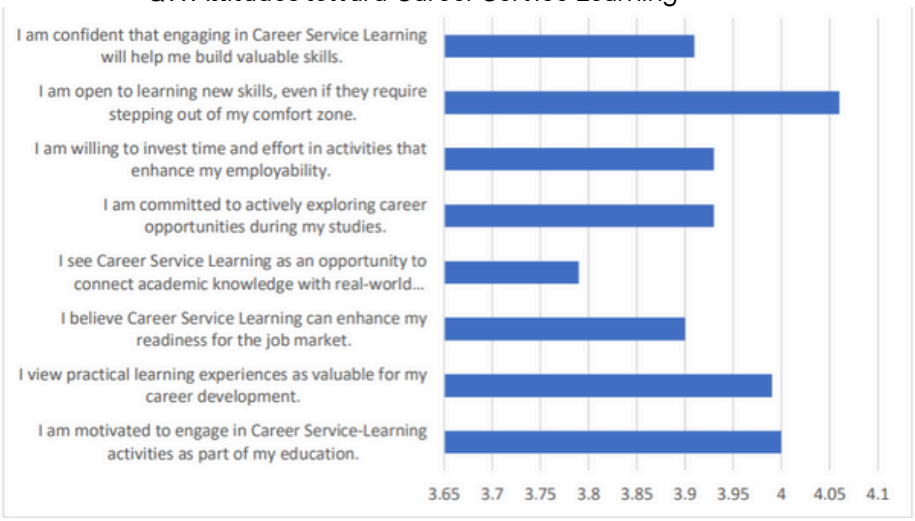
Q9: Attitudes toward Career Service Learning

Motivations include:

- Willingness to learn new skills outside the comfort zone (4.06): Reflects openness to growth.
- Commitment to actively exploring career opportunities (3.93): Highlights proactive career exploration.
- Belief in the value of practical learning experiences (3.90): Demonstrates the relevance of hands-on experience.

Figure 65: Knowledge about Career Service Learning

Q9: Attitudes toward Career Service Learning



Behavioral Intentions and Actions

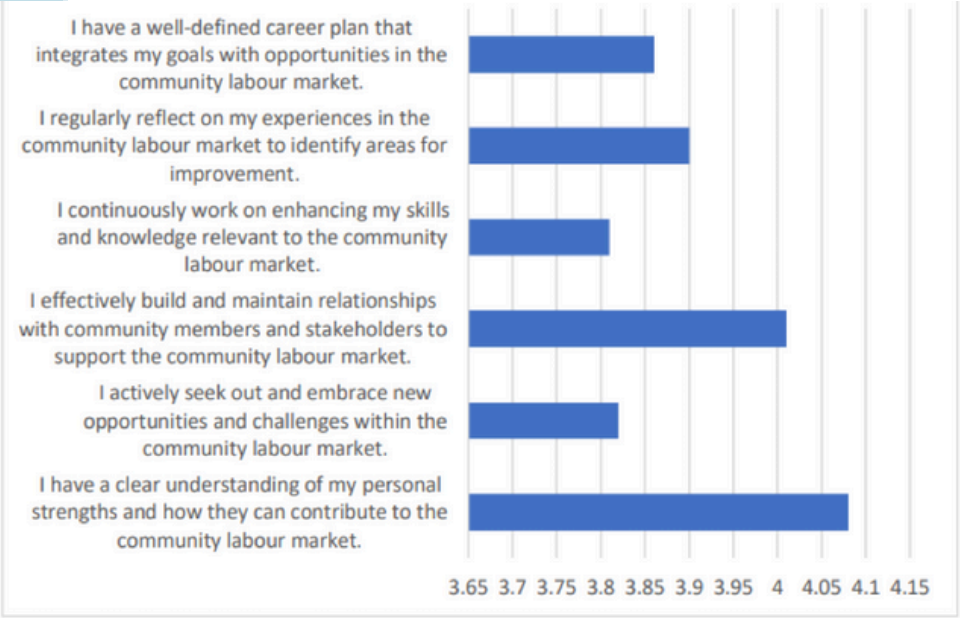
Q10: Self-Assessment of Competencies in Community Enterprise Development

The most notable factors include:

- Clear understanding of personal strengths (4.08): Indicates the value of self-awareness for community impact.
- Continuous skill enhancement relevant to the community labour market (3.90): Reflects the importance of ongoing development.
- Reflection on community experiences for improvement (3.90): Highlights the need for evaluation and growth.

Figure 66: Self-Assessment of Competencies in Community Enterprise Development

Q10: Self-Assessment of Competencies in Community Enterprise Development



Survey on Labor Market Trends, Competencies, and Youth Employability for Stakeholders

Labor Market Trends and Challenges

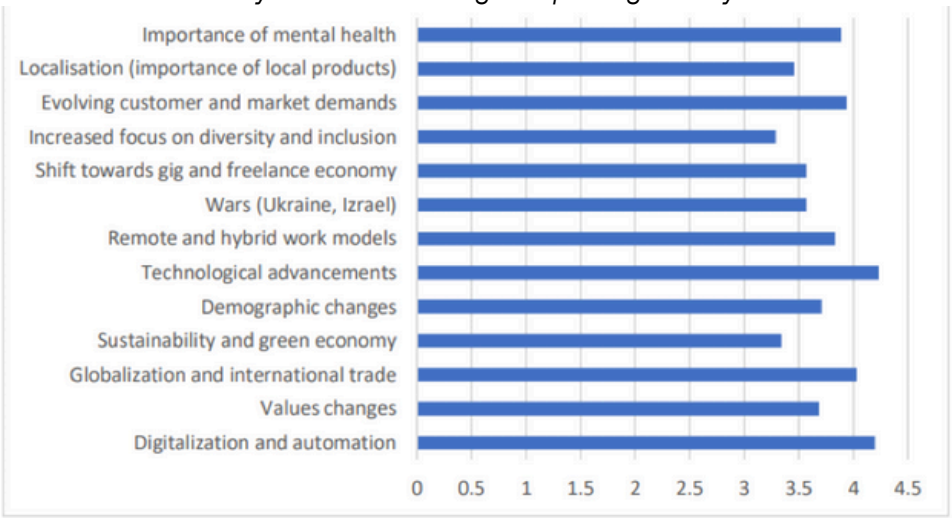
Q1: Key Trends and Changes Impacting Society

The following trends indicate their significant impact:

- Digitalization and automation (4.20): A transformative force reshaping industries and societal operations.
- Technological advancements (4.23): Highlights the essential role of innovation in driving progress and competitiveness.
- Globalization and international trade (4.03): Reflects the continued significance of international collaboration and market integration.
- Evolving customer and market demands (3.94): Demonstrates the importance of adapting to rapidly changing consumer preferences.
- Importance of mental health (3.89): Highlights the growing recognition of mental well-being in both personal and professional contexts.

Figure 67: Key Trends and Changes Impacting Society

Q1: Key Trends and Changes Impacting Society



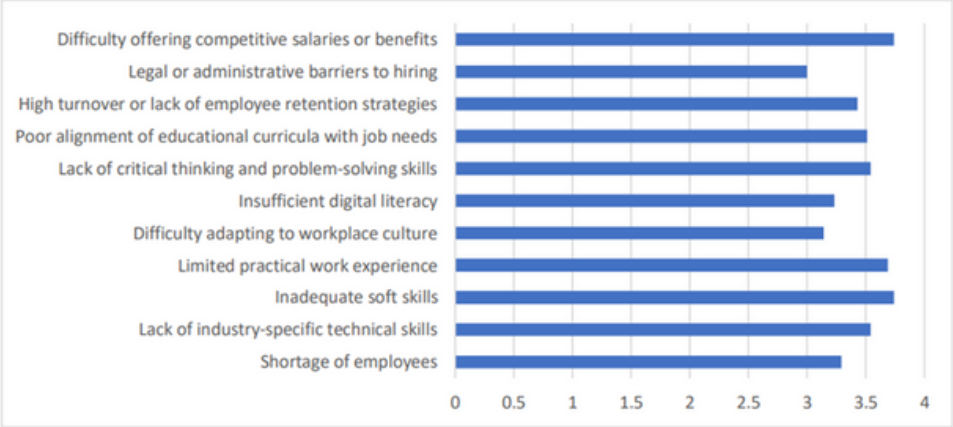
Q2: Barriers to Workforce Readiness

The challenges that require attention include:

- Inadequate soft skills (3.74): Highlights the need for improving interpersonal abilities and emotional intelligence.
- Difficulty offering competitive salaries or benefits (3.74): Indicates economic constraints affecting workforce retention and recruitment.

Figure 68: Barriers to Workforce Readiness

Q2: Barriers to Workforce Readiness



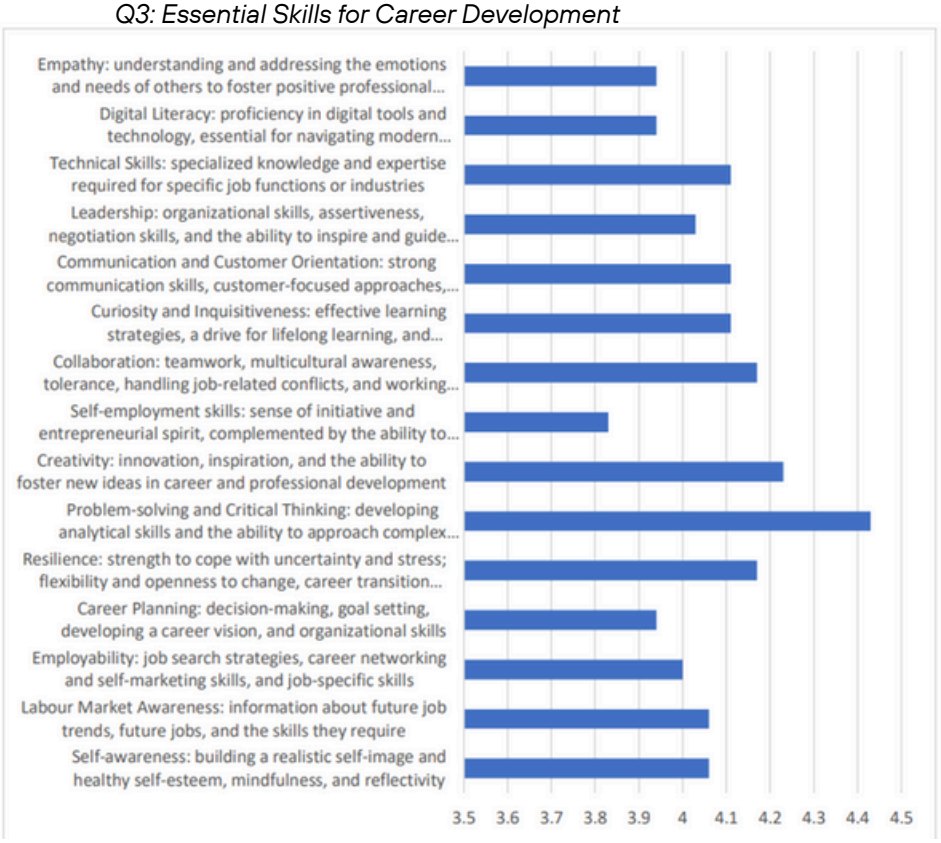
Q3: Essential Skills for Career Development

Skills that highlight their importance for career readiness:

- Resilience (4.17): Essential for managing uncertainty and adapting to challenges in dynamic environments.
- Problem-solving and critical thinking (4.43): Reflects the growing demand for analytical and innovative approaches to challenges.
- Collaboration (4.17): Emphasizes the importance of teamwork and cultural awareness in professional settings.
- Digital literacy (4.11): Demonstrates the necessity of technology proficiency in modern workplaces.
- Communication and customer orientation (4.11): Highlights strong interpersonal and client-focused skills.
- Leadership (4.11): Underlines the importance of inspiring and guiding teams effectively.

Figure 69: Essential Skills for Career Development

Q3: Essential Skills for Career Development



Impact of Trends on Competencies and Skill Gaps

Q4: Support Services for Workforce Development
Support initiatives include:

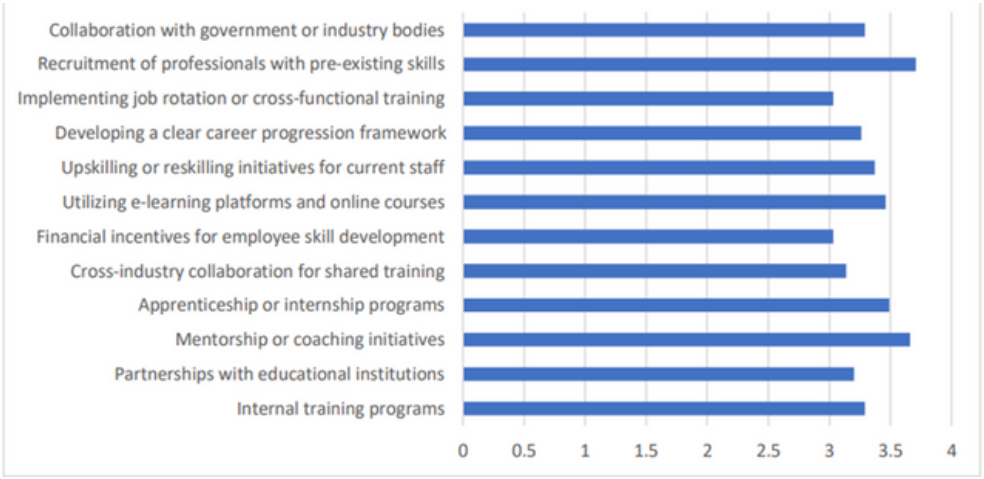
- Recruitment of professionals with pre-existing skills (3.71): Highlights the need for organizations to prioritize hiring experienced talent.

Figure 70: Support Services for Workforce Development
Q4: Support Services for Workforce Development

Q5: Opportunities for Practical Learning
Key learning opportunities include:

- Apprenticeships or internship programs (4.06): Essential for bridging the gap between education and real-world applications.
- Upskilling or reskilling initiatives (4.06): Reflects the need for continuous learning to meet evolving job demands.
- Utilizing e-learning platforms and online courses (4.11): Highlights the increasing role of digital learning tools in skill development.

Figure 71: Opportunities for Practical Learning
Q5: Opportunities for Practical Learning



Social Phenomena and Career Education

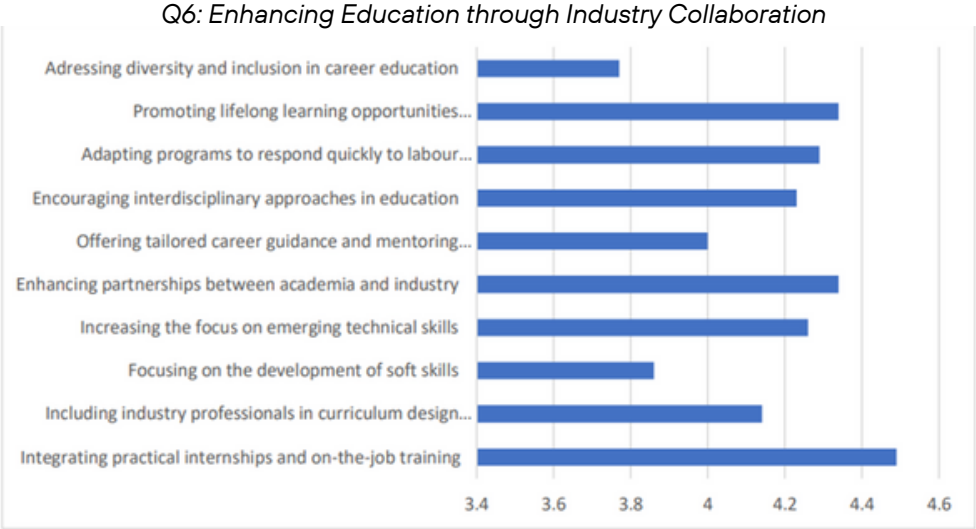
Q6: Enhancing Education through Industry Collaboration

The survey identifies impactful strategies:

- Integrating practical internships and on-the-job training (4.49): The most effective approach to experiential learning.
- Including industry professionals in curriculum design (4.34): Ensures academic programs are aligned with industry needs.
- Focusing on emerging technical skills (4.26): Highlights the importance of preparing students for cutting-edge technologies.
- Promoting lifelong learning opportunities (4.34): Reflects the need for ongoing skill development through upskilling and reskilling.

Figure 72: Enhancing Education through Industry Collaboration

Q6: Enhancing Education through Industry Collaboration



Specific examples of collaboration between stakeholders and academic institutions:

- Creative 4al centre collaborate with the researchers from the faculty in order to offer specialized trainings for the students and pupils
- different types of conferences
- Effective communication of my organization and academic institutions is necessary, therefore, it is an integral part of day-to-day functioning of my organization. iT is a consequence of the
- EIC Women Leadership program was great for me.
- Mentoring students
- My university collaborated with many firms; therefore, many employers came to give us a speech, go through a presentation etc.
- Trainings, professional development, seminars, internships in renowned companies
- Seminars in colleges which my employee held
- Test
- there are many examples of cooperation such as student internships but also solving case studies for certain business problems for companies
- Yes. We use some results of academic institutions in our practices

Improving Youth Employability

Q7: Strategies to Improve Workforce Readiness

Key recommendations include:

- Providing structured internships and practical work experiences (4.46): Bridges the gap between academic learning and professional application.
- Enhancing partnerships between academia and industry (4.37): Facilitates alignment of curricula with market demands.
- Creating industry-aligned curricula in academic institutions (4.20): Ensures that students graduate with relevant, job-ready skills.
- Supporting continuous upskilling and reskilling programs for youth (4.26): Addresses the need for lifelong learning and adaptability.

Figure 73: Strategies to Improve Workforce Readiness

Q7: Strategies to Improve Workforce Readiness

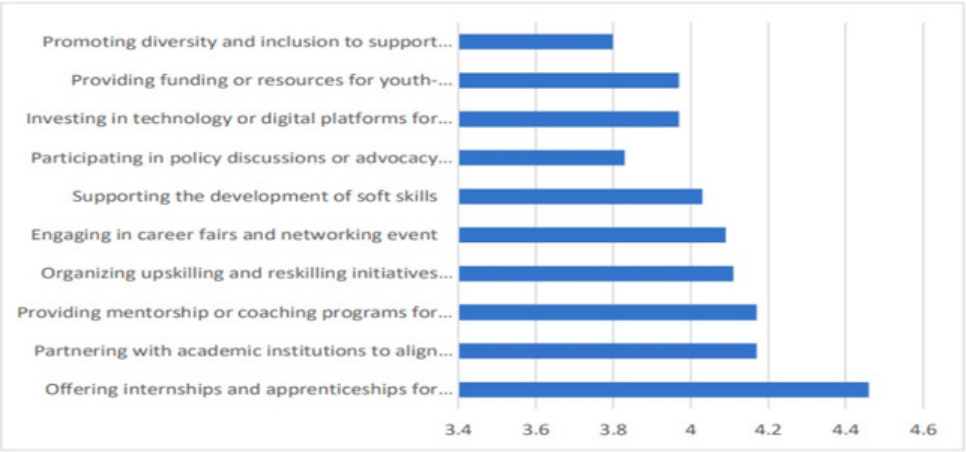
Q8: Supporting Youth Career Development

Highlighted approaches include:

- Offering internships and apprenticeships (4.46): Critical for providing real-world exposure and practical experience.
- Partnering with academic institutions to align educational programs (4.17): Strengthens the connection between education and workforce needs.
- Organizing upskilling and reskilling initiatives (4.11): Helps young professionals remain competitive in evolving industries.

Figure 74: Strategies to Improve Workforce Readiness

Q8: Supporting Youth Career Development



Q8: Supporting Youth Career Development
Highlighted approaches include:

- Offering internships and apprenticeships (4.46): Critical for providing real-world exposure and practical experience.
- Partnering with academic institutions to align educational programs (4.17): Strengthens the connection between education and workforce needs.
- Organizing upskilling and reskilling initiatives (4.11): Helps young professionals remain competitive in evolving industries.

Comparative analysis – introduction of main findings and recommendations

Local Challenges and Opportunities

The region faces a range of challenges stemming from rapid technological advancements, globalization, and changes in the labour market. The key challenge is adapting the education system to meet the needs of modern industries, requiring greater integration of digital tools, innovative methodologies, and practical knowledge. The high youth unemployment rate highlights the need for more effective professional training programs and the development of skills that align with the demands of the local labour market.

However, there are also significant opportunities for growth and development. Regional companies are showing an increasing demand for a skilled workforce, creating opportunities for educational institutions to enhance collaboration with the business sector. The implementation of digital technologies and platforms enables more efficient training and better access to educational resources. Additionally, young people in the region demonstrate a high level of interest in acquiring practical skills, further motivating the development of new programs aimed at increasing employability.

Competency Gaps

There is a noticeable gap between the skills taught in educational institutions and those required in the modern labour market. Key gaps identified in the research include a lack of digital literacy, underdeveloped communication and interpersonal skills, and limited readiness for innovation and entrepreneurship. Many students possess theoretical knowledge but lack practical application, reducing their competitiveness in the job market.

Furthermore, there is a recognized need to strengthen critical thinking and problem-solving abilities, which are essential competencies for working in dynamic and technologically advanced sectors. Additionally, there is a shortage of competencies in emotional intelligence and resilience, which are crucial for effectively managing stress and teamwork in modern work environments. These gaps highlight the need for a more comprehensive approach to education, combining theoretical knowledge, practical experience, and the development of soft skills.

Key competencies	Stakeholders	Students
Self-awareness	4.06	4.36
Career planning	3.94	3.98
Problem-solving and critical thinking	4.43	3.99
Collaboration	3.34	3.97
Leadership	3.37	4.03
Digital literacy	3.37	3.83
Communication and customer orientation	4.11	4.03
Mental health awareness	3.89	3.94
Practical work experience	4.46	3.81

Guidelines for action

- Collaboration with Local NGOs and Industry To establish long-term partnerships with local businesses, municipalities, and non-profits to enable students to contribute to projects that have social impact while gaining practical experience.
- Enhancing Leadership and Teamwork Skills to introduce extracurricular programs, debate clubs, and case study competitions that encourage critical thinking, leadership, and teamwork.
- Student-Led Initiatives To support student-led initiatives that encourage civic participation and problem-solving at the local level, such as hackathons, innovation challenges, or volunteer mentorship programs.
- Internship & Apprenticeship Programs To strengthen collaboration with local businesses to create structured internship programs, allowing students to gain work experience in relevant industries.
- Soft Skills Development To offer dedicated workshops on critical competencies such as problem-solving, adaptability, emotional intelligence, and effective communication to bridge the skills gap.
- Strengthening University-Industry Collaboration To foster partnerships with local SMEs, startups, and multinational companies to facilitate guest lectures, industry visits, and project-based learning.

Next planned activities

- The next steps in improving career opportunities for students at the University Educons will focus on creating a comprehensive support system that bridges the gap between academic learning and professional success. One of the key initiatives will be the expanding internship programs which is critical step in strengthening career prospects. Formalized partnerships with companies in project management, IT, and consulting industries will ensure students gain practical experience through structured, credit-bearing internships. Additionally, career fairs will be organized, giving companies a platform to present job opportunities and engage with students directly.

- To enhance industry exposure, an industry-led lecture series will be introduced, bringing in business leaders, project managers, and successful entrepreneurs to share insights on market trends and professional growth. This initiative will provide students with firsthand knowledge of industry demands and expectations, preparing them for real-world challenges.

- Project-based learning will also be further integrated into the curriculum, with students engaging in real-world problem-solving through collaboration with local businesses and organizations. Capstone projects will be developed to encourage teamwork and practical application of knowledge, helping students gain a deeper understanding of project management in real business environments.

- In addition to hands-on learning, certification and training programs will be introduced to equip students with recognized credentials in project management methodologies such as IPMA and Agile. Bootcamps focused on digital tools and technologies relevant to project management will also be organized to enhance students' technical skills.

- Strengthening alumni engagement will play a vital role in career development, with an alumni network being established to provide mentorship and guidance for current students. Networking events will be hosted, creating opportunities for graduates to share experiences and offer career advice, further solidifying connections between academia and industry.

- Finally, fostering entrepreneurship will be a significant focus through the introduction of a student entrepreneurship program. This initiative will support students in developing entrepreneurial skills by offering access to startup incubator programs within the Faculty. Recognizing the importance of structured support for young innovators, the Faculty has applied for the creation of an Innovation Incubator through the program of the Ministry of Science, Innovation, and Technological Development. This incubator will serve as a dedicated space for students to develop their business ideas, access mentorship, and collaborate with industry experts. Additionally, students with innovative concepts will be provided with seed funding and guidance, helping them transform their ideas into viable business ventures and positioning them as future leaders in the entrepreneurial ecosystem.

ROADMAP IN GREECE

Introduction

Like in many other nations, Greece's education system faces a number of structural issues, most notably the need to adapt higher education courses to the quickly shifting demands of the labor market. The knowledge that university students learn and the real-world abilities that companies look for in today's fast-paced workplace frequently diverge significantly. Because they lack practical experience, problem-solving skills, and critical soft skills like communication, cooperation, and flexibility, many graduates find it difficult to find work in their professions.Greece's traditional educational model emphasizes theoretical learning, frequently at the expense of developing practical skills and critical thinking, which are essential for success in today's job market. Additionally, because higher education institutions and industry stakeholders don't work together as much, students have fewer opportunities to gain real-world experience, which makes it harder for them to transition into the workforce after graduation.

Additional difficulties are brought on by the digital transformation's quick speed. Despite the growing use of digital tools in Greek higher education, there is still a significant digital literacy gap that affects both students and teachers. Graduates run the danger of not being adequately equipped for an increasingly digitalized and internationally connected economy if digital capabilities are not successfully incorporated into curricula.Furthermore, civic participation and social responsibility are frequently underemphasized in traditional teaching approaches, depriving students of the knowledge and expertise needed to actively solve social issues in their communities. Students are not adequately equipped to meet the demands of a global, socially conscious workforce as a result of the dearth of practical learning opportunities.

By bridging the gap between academic knowledge and real-world experience, the ELIX project provides a creative solution to these problems. Through the incorporation of Community Service Learning (CSL) into academic programs, ELIX enables students to apply their knowledge in practical settings, obtaining invaluable experience and contributing significantly to society. By fostering vital abilities like problem-solving, collaboration, and digital literacy, this method makes sure that students are more prepared to face the demands of the job market.Through experiential learning, the project also promotes creativity and an entrepreneurial mindset. ELIX encourages students to think creatively and come up with original solutions to pressing issues by including them in mentorship programs, innovation challenges, and partnerships with nearby companies. In addition to improving their employability, this fosters a proactive, problem-solving mentality that advances their career and personal development.

Through its focus on employability, digital skills, and civic engagement, the ELIX project provides a comprehensive response to the educational challenges in Greece, helping to prepare students for the complexities of the 21st-century economy. Moreover, by introducing modern teaching methodologies and strengthening ties between academia and industry, the project contributes to creating a more dynamic and responsive higher education system that effectively meets the needs of both students and employers.

Overview of completed tasks

Task 1: We successfully organized and facilitated the Localized Career Pathways Think Tank sessions, bringing together students from our college and stakeholders from various sectors. These workshops fostered meaningful discussions to tackle local career pathway challenges and explore innovative solutions.

Task 2: Over the two-day workshops, we promoted active engagement and focused discussions among students and stakeholders to assess and refine local career pathways. The sessions aimed to build a collective understanding of both the challenges and opportunities within the local job market.

Task 3: We carried out an in-depth analysis of current job market trends and obstacles, using these insights to guide our discussions and generate innovative strategies for enhancing local career pathways.

Task 4: Drawing from the think tank sessions and survey findings, we developed a detailed roadmap. This plan outlines concrete steps to enhance career opportunities and strengthen collaboration between education, the community, and the labor market.

Achieved goals and results

The following section highlights the key outcomes derived from the completed tasks. It begins with an overview of the findings from the think tank focus groups, followed by a detailed analysis of the survey conducted with students and stakeholders on labor market trends, essential competencies, and youth employability.

Think Tank Series

STUDENTS

Basic Information

Number of Participants: 20 students
Date of Implementation: 11-12/12/2024
Mode of Delivery: Live in Greece

Summary of the findings

Discussions showed the need for universities to reconsider their educational approaches in an attempt to better fit the changing labour market demands. Students stressed that it was important to develop both technical and soft skills, since these are the only elements that can help someone have success in today's challenging and dynamic work environment however, they also warned that traditional academic programs fail to provide them with such skills in the rapidly changing workplace.Key recommendations included making the curriculum more practical. Students wanted internships, co-op programs, and project-based learning to be added to better link theory to practice. Such initiatives would go a long way in enhancing the technical capabilities of students, besides other important skills like problem-solving, leadership, and adaptability.Other important suggestions made by students include increased collaboration between universities and industries.

Students suggested that the university should collaborate with industries to provide mentorship opportunities, job fairs, and networking events to help students be more updated about the current situation in the industry, which can give them better opportunities when entering the workforce.Besides, learners acknowledged how digital tools and online platforms might revolutionize the way they learn. Students suggested embedding virtual simulations, e-learning platforms, and digital resources to enhance their technical competencies and make them better prepared for a global, technology-driven economy. It could also give students a chance to learn about such emerging fields as artificial intelligence, digital marketing, and sustainability.By accepting these recommendations, universities would be in a better position to prepare students for challenges and opportunities in the current job market. Such a change would ensure that the graduates are knowledgeable and adequately equipped with the right kind of skills to flourish in the ever-evolving work atmosphere.

Table 13: Thematic statements

Themes	Categories	Codes	Quotes
Changing Values	**Remote work**	Hybrid model	*"I would like to find a job that can offer me remote work, it would be very convenient for me personally."*
Digitalization	**AI intelligence**	Technology	*"Artificial intelligence and digital tools are something that helps us a lot in our university work, but I still think that our use is not correct, and I think there should be some training on how to use them more effectively."*
Environmental Demands	**Sustainability**	Green jobs	*"I am very passionate about sustainability, but I feel that no one is interested in it and I don't know if I can make a career out of it. I am very worried about the current situation in this field"*
Mental Health	**Mental health**	Mental Health roles	*"Regarding the field of mental health, I would like to state that there is a rapid increase but unfortunately our studies do not guide us properly to be able to cope with something like this. "*
Soft Skills	**Communication and leadership**	Soft skills	*"We do not have enough courses that emphasize communication and leadership which are quite important for our later development in the working environment. "*

STAKEHOLDERS

Basic Information

Number of participants: 18 stakeholders (including representatives from NGOs, private employments, directors, entrepreneurs, career coaches)
Date of implementation: 11-12/11/2024
Mode of delivery: Live in Greece

Summary of the Findings

Discussions highlighted how imperative it was that education and professional development systems at large became adapted to respond to continuous change in modern labor market demands. According to stakeholders, traditional methods of education are not efficient for the proper training of students for the challenges posed by the work environment today. This is a dynamic, open system of education that would prepare students and professionals with the appropriate sets of skills necessary for a very competitive, dynamically changing job environment.

Key recommendations from the discussions included a stronger emphasis on embedding practical work experiences into academic curricula. Such internships, cooperative education programs, and project-based learning were identified as key tools that bridge the gap between theoretical knowledge and its application in real-world scenarios. Stakeholders stressed that such experiences not only enhance technical proficiency but also cultivate essential soft skills like problem-solving, teamwork, and adaptability, which are critical for success in professional environments.

Another cornerstone of the proposed strategy is the collaboration between academia and industry. In stronger partnerships, universities and businesses will be able to develop synergistic opportunities for students to learn from industry practitioners, access mentorship programs, and participate in events such as job fairs, workshops, and hackathons. The collaboration will keep the institutions current with market trends and thus enable them to design programs that meet employers' expectations.

Table 14: Thematic statements

Themes	Categories	Codes	Quotes
Changing Values	**Work-life balance**	-Flexibility	*" Young people demand remote work, flexible hours and more free time. They generally choose less work for more money."*
Digitalization	**AI-driven**	-Technology	*" Artificial intelligence is reshaping jobs, creating new roles in data science and virtual reality, while at times limiting and reducing some jobs."*
Environmental Demands	**Sustainability**	-Green jobs	*"The shift towards environmentally friendly practices is driving demand for sustainability experts and better awareness of these issues for everyone."*
Mental Health	**Aging population**	-Healthcare roles	*" In Greece we face a major problem regarding skilled health workers while we are in a country with a high birth rate and large percentages of elderly people."*
Communication Skills	**Leadership**	-Soft skills	*" Strong communication and keeping everything properly informed is key to motivating teams and connecting with stakeholders."*

Quantitative analysis

Survey on Labor Market Trends, Competencies, and Youth Employability for Students

Perception of Current Social Phenomena

First of all, we asked the students how the social phenomena influencing the labour market. The Evolving customer and market demands was in the highest average value 3,70 and in the second place the Localization (importance of local products) with 3,68. With the scale 1- not significant and 5- very signifact and the penultimate place was the Demographic changes and at the last place Wars (Ukraine and Israel).

Figure 75: Significance of Labour Market

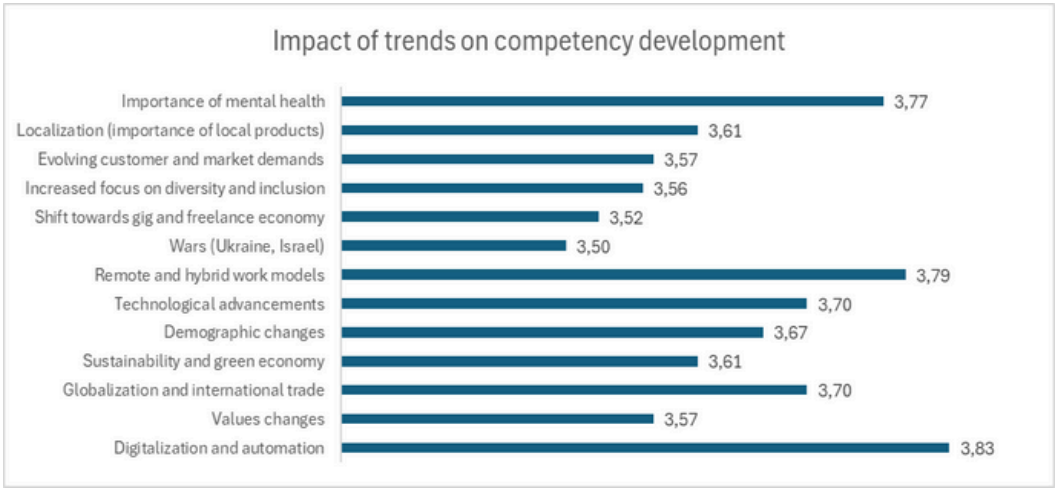
Essential Competencies for Labor Market Integration

We proceed in the next question when we asked them to evaluate what essential competencies for Indvidual are to have a successfully integrate in the labour market and the highest rate was Self-awareness with 3,84 and Labour Market Awareness with 3,80 and at the last places where the Self-employment Skills with 3,67 and Curiosity and Inquisitiveness with 3,64.

Figure 76: Essential Competencies for Labour Market Integration

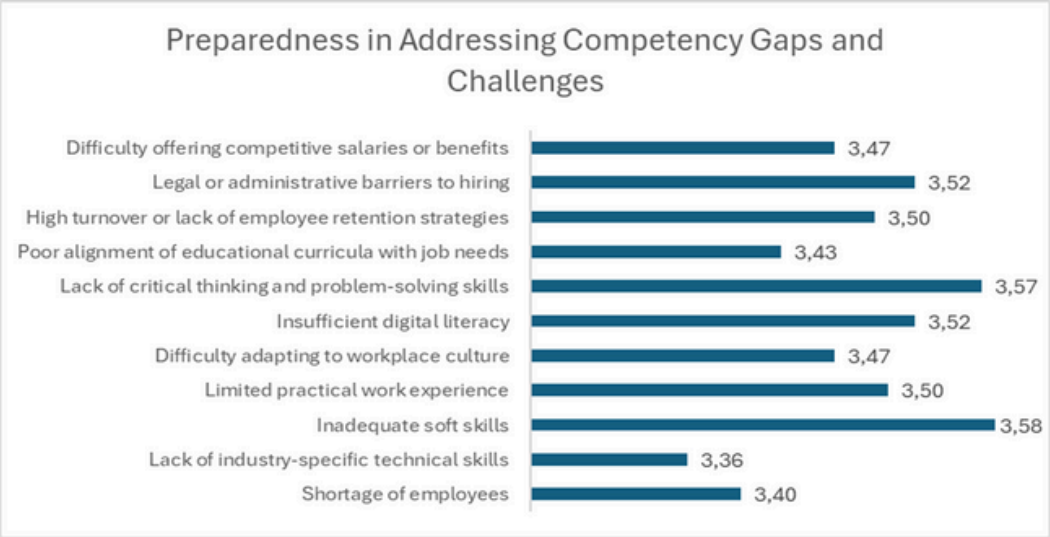
At the next question, what extent does each of the following trends require to develop new competencies to better adapt to labour market and societal needs the most of the students answered Digitalization and automation on 3,83 and Remote and hybrid work models on 3,79 and at the last places where Shift towards gig and freelance economy on 3,52 and again the Wars(Ukraine, Israel) on 3,50.

Figure 77: Impact of trends on competency developments



At Self-Perceived Readiness to Address Competency Gaps and Challenges question, they responded that Inadequate soft skills 3,58 and Lack of critical thinking and problem-solving skills on 3,57 were on top and Lack of industry-specific technical skills with 3,36 at the end.

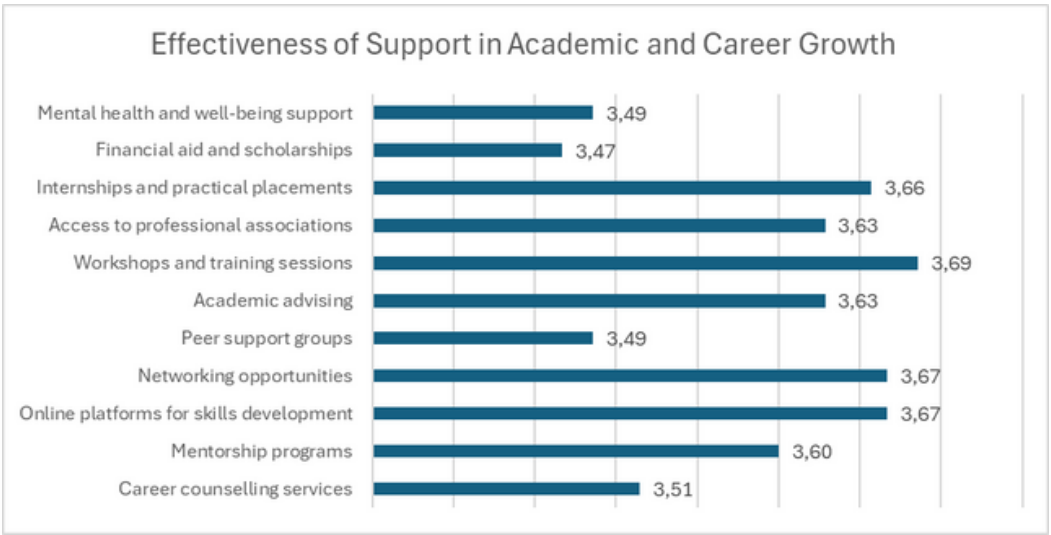
Figure 78: Preparedness in Addressing Competency Gaps and Challenges



Support for Academic and Career Development

The first question of the next following serie of questions was the effectiveness of the following forms of support in addressing students' academic and career development needs and at the first place was the Workshops and training sessions (3,68) and at the second place were the Online platforms for skills development and the Networking opportunities (3,67) and at the last place was the Financial aid and scholarships (3,47).

Figure 79: Effectiveness of Support in Academic and Career Growth



At the next question the students had to answer how their own Self-assessment of being involved in shaping career paths, proposal of additional activities on the first place was Using online platforms for learning about social phenomena (3,64) and at the last place was Engaging in internships or practical placements (3,48). And also, we asked them to evaluate if they proposed this activity and yes to all activities was far away to no, hyper to yes.

Figure 80: Involvement in shaping Career Path

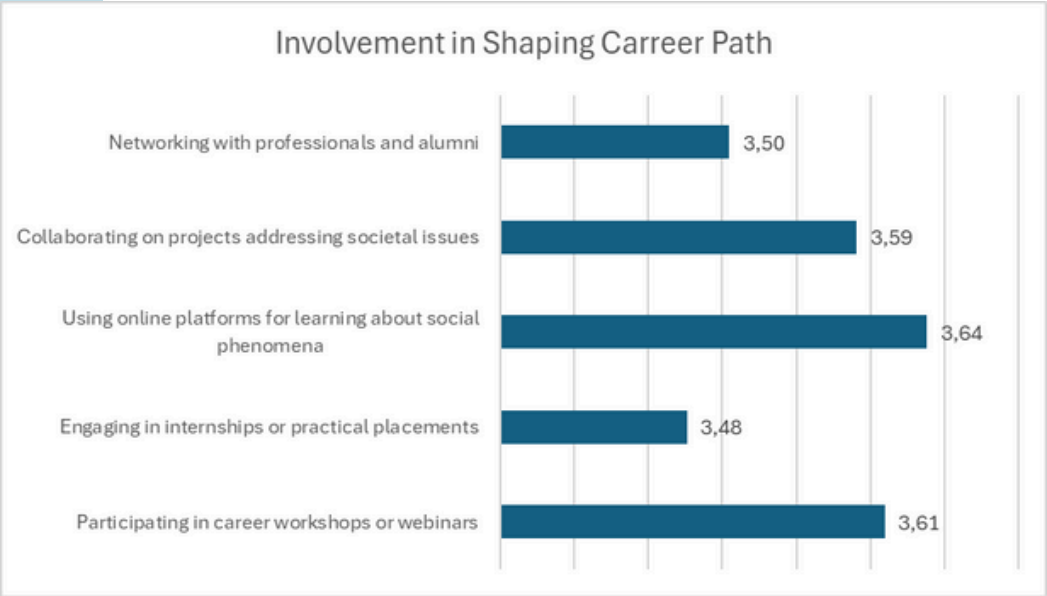
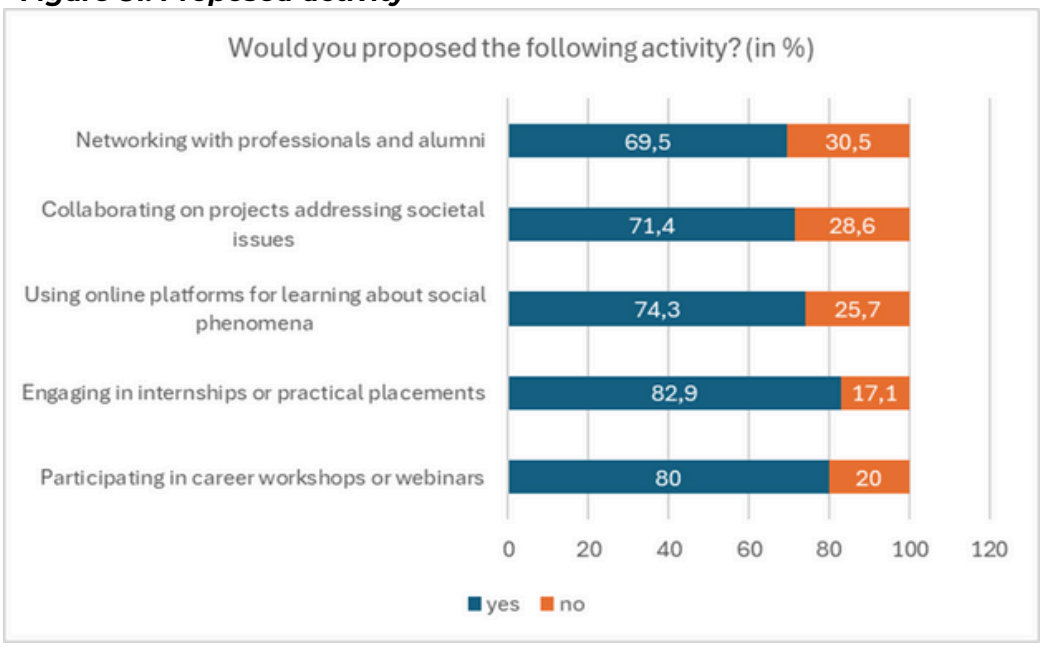


Figure 81: Proposed activity



At the next question that it was to wrote some comments and suggestions, the students suggested that the universities in Greece need career coaches, to have mentorships and also to have full inform for the relevant things based on the labour market needs to be ready for the future. The most of them, preferred to not write anything because they are very disappointed about education in Greece and also, they were negative for many things on the educational program.

Knowledge about Career Service Learning

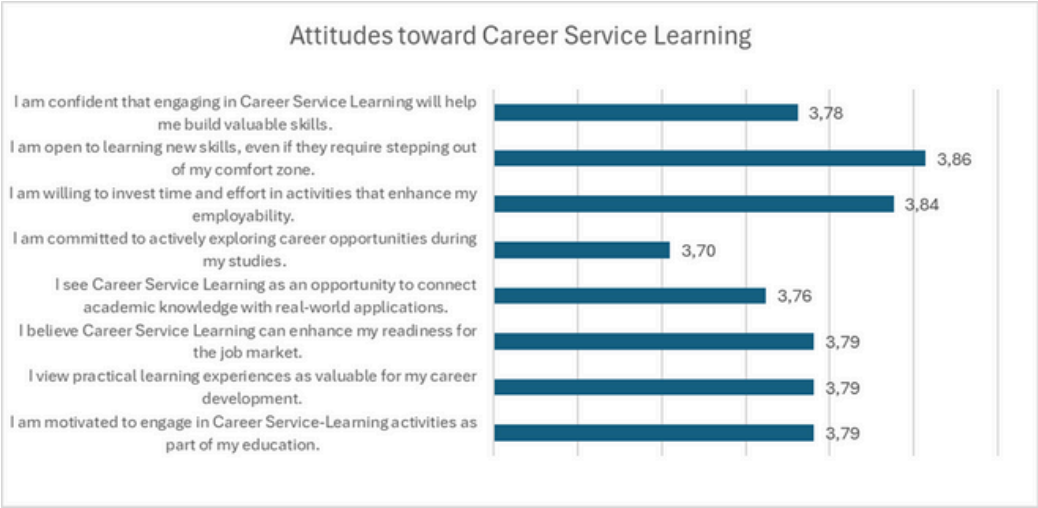
At the following question, we asked students to evaluate how it is their understanding of community issues and labour market. At the top with 3,67 the answer "I can identify professional roles or positions relevant to my career interests." And at the end, with 3,48 the answer "I understand the root causes of these challenges."

Figure 82: Knowledge about Career Service Learning

Attitudes toward Career Service Learning

And at the next question we counted the attitudes toward CSL and how the students understand them with the first answer "I am open to learning new skills, even if they require stepping out of my comfort zone." on 3,86 and the last "I am committed to actively exploring career opportunities during my studies" on 3,70.

Figure 83: Attitudes toward Career Service Learning



Behavioral Intentions and Actions

At the last question, we asked the students to make a self-assessment of their skills in community enterprise development. They understand their strengths with the highest rate " I continuously work on enhancing my skills and knowledge relevant to the community labour market." with rate 3,81 and the last one with the lowest rate " I have a well-defined career plan that integrates my goals with opportunities in the community labour market." with rate 3,63. This shows us that most of the students are not ready to know what they will do in the future or to know from the beginning of their studies what their following career will be.

Figure 84: Behavioural Intentions and Actions

Labor Market Trends and Challenges

At the first question, we asked the stakeholders which are the most significant trends in shaping the labour market, with the highest answer the Digitalization and automation on 4,06 and the lowest Wars (Ukraine, Izrael) on 3,28.

Figure 85: Significance of Labour Market

At the following question they had to answer and to evaluate the challenges that organizations show integration of new employees. The highest answer was Shortage of employees with 3,75 and the last one the Difficulty adapting to workplace culture with 3,44.

Figure 86: Challenges in Integrating New Employees into Labour Market

At the next question, Self-awareness: building a realistic self-image and healthy self-esteem, mindfulness, and reflectivity was at 3,94 with the highest reach and at the lowest participation the Resilience: strength to cope with uncertainty and stress; flexibility and openness to change, career transition skills (change management), and work-life integration with 3,44.

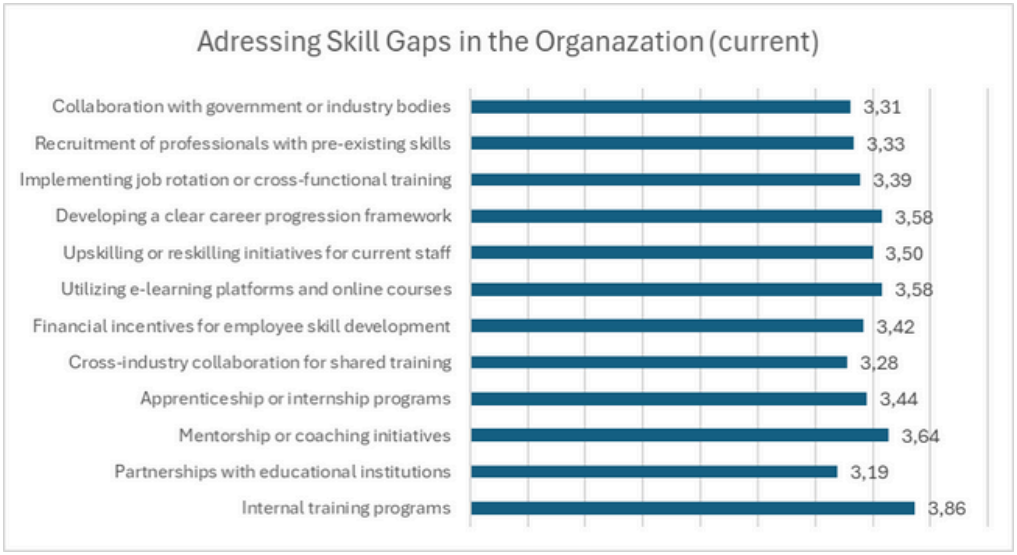
Figure 87: Essential Competencies for Successful Labour Market

Impact of Trends on Competencies and Skill Gaps

Stakeholders

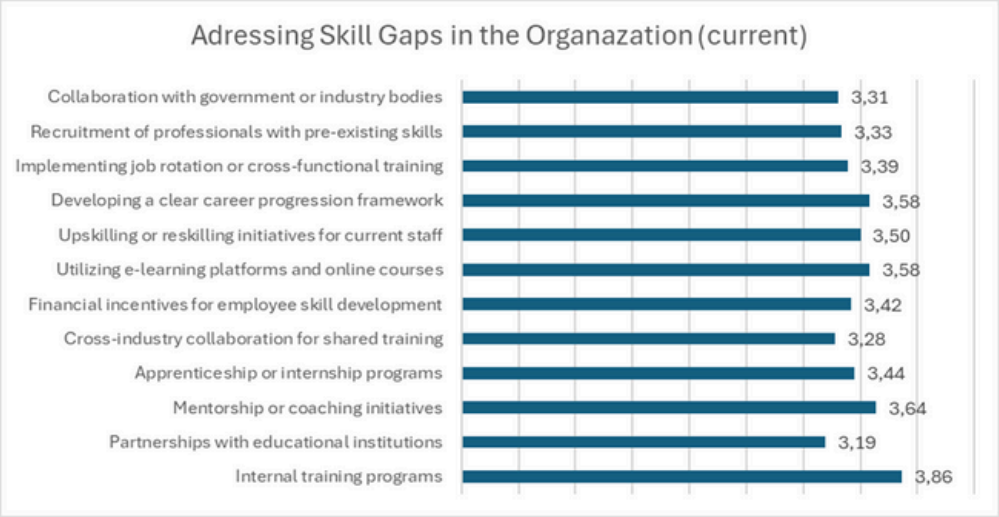
At the next stage we asked the stakeholders to answer the critical skill gaps in recent graduates of new employees. The answers that we got where at highest level the Emotional intelligence and self-awareness (3,86) and technical skills related to the field (3,83) and the lowest level the Adaptability to change and the Teamwork and collaboration on 3,53 both.

Figure 88: Critical Skill Gaps in recent graduates of new employees



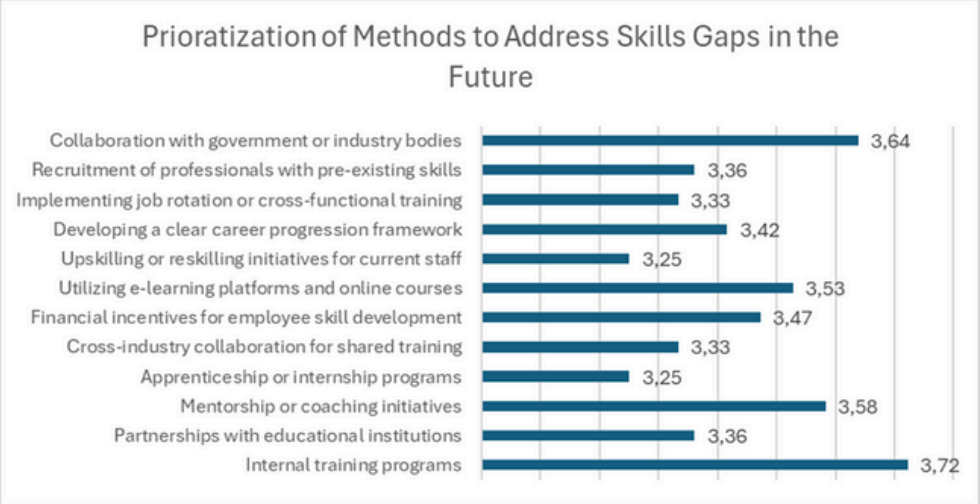
In continuation we asked them to evaluate how does their organization currently address skill gaps, and they answer as the highest answer the Internal training programs with 3,86 and at the lowest answer Partnerships with educational institutions with 3,19.

Figure 89: Addressing Skill Gaps in the Organization (current)



At the last question of this stage, stakeholders at the question "To what extent should these methods be prioritized in the future?" we received with the most responses again the Internal training programs (3,72) and the lowest the apprenticeship or internship programs and the Upskilling or reskilling initiatives for current staff (3,25).

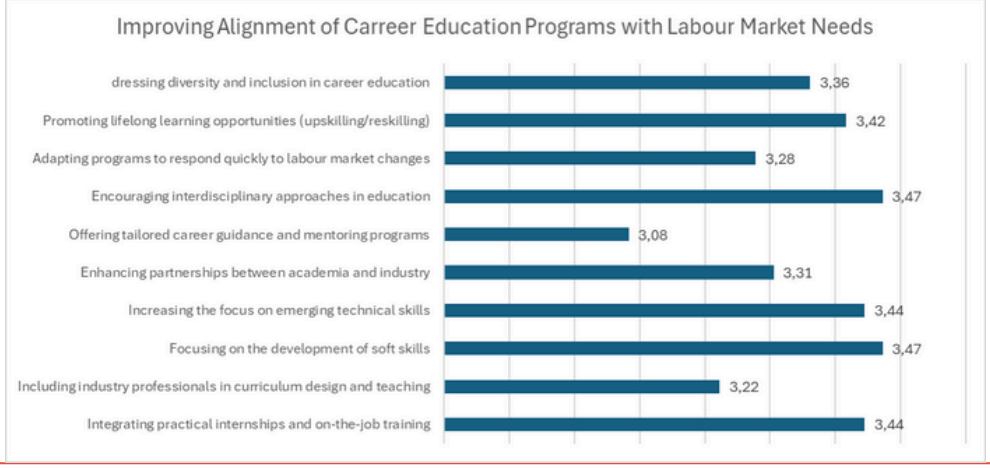
Figure 90: Prioritization of Methods to address skills gaps in the future



Social Phenomena and Career Education

At the next part, we asked them to evaluate the role of academic institutions to better align career education programs with labour market needs and we took back the Focusing on the development of soft skills and the Encouraging interdisciplinary approaches in education on 3,47 and at the last place Offering tailored career guidance and mentoring programs on 3,08.

Figure 91: Improving Alignment of Career education programs with labour market needs

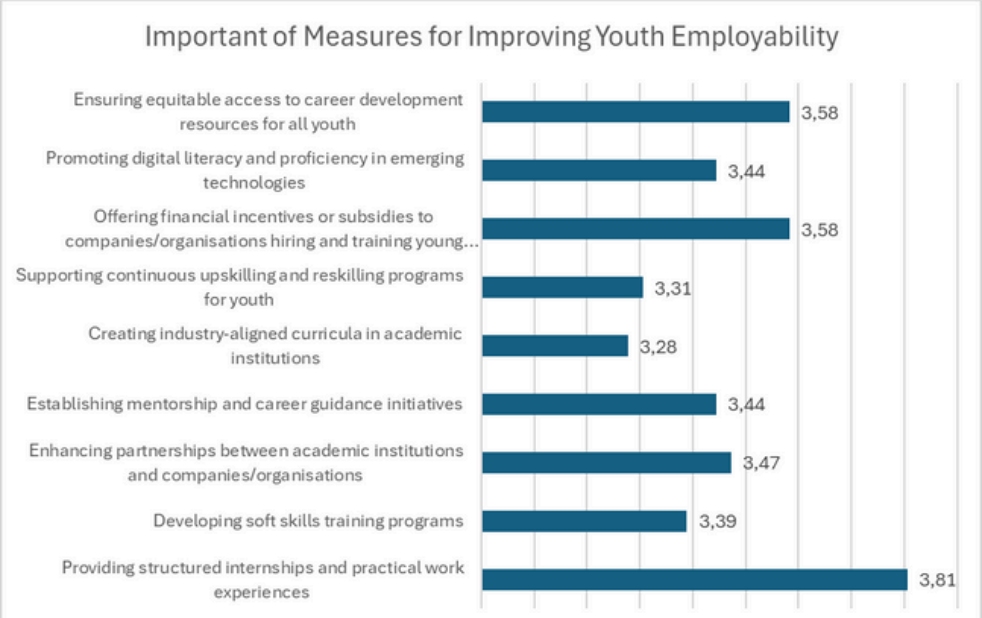


Some answer to the next question about "Specific examples of collaboration between stakeholders and academic institutions" were:
-Mental health training sessions and coaching for life balance
-Researching projects and mentorship projects
-Society practice-based week (e.g planting with students)
-Community semester consultation sessions

Improving Youth Employability

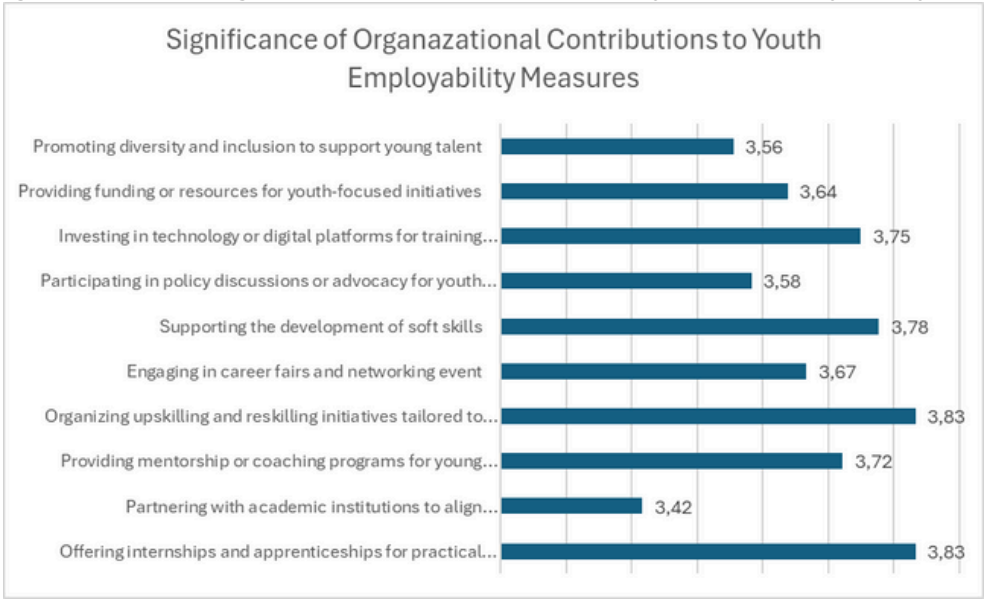
At the following question, we asked them to rate importance of specific and actionable measures for effectively implementing a plan to improve youth employability, the most important according to the answers was the Providing structured internships and practical work experiences (3,81) and not so important the Creating industry-aligned curricula in academic institutions (3,28).

Figure 92: Important of measures for improving youth employability



At the last question of this survey "How significant are the following ways your organisation can contribute to the successful implementation of measures to improve youth employability?" The most significant answers were "Organizing upskilling and reskilling initiatives tailored to industry" and "Offering internships and apprenticeships for practical experience" (3,83 both) and not significant was "Partnering with academic institutions to align educational programs" (3,42).

Figure 93: Significance of organizational contributions to youth employability measures



Comparative analysis – introduction of main findings and recommendations

Introduce:

Local challenges and opportunities

Workforce Shortages and Retention Issues: One of the most pressing challenges facing the labor market today is the shortage of employees, which was rated at 3.75. This issue reflects the difficulties organizations face in attracting and retaining skilled talent. A combination of demographic shifts, evolving job expectations, and a lack of qualified professionals in key sectors has contributed to this labor shortage. As companies struggle to fill vacancies, productivity and economic growth may be adversely affected, highlighting the urgent need for workforce development strategies, targeted recruitment efforts, and employee retention initiatives.

Adaptation to Workplace Culture: While not as highly ranked as other challenges, with a rating of 3.44, the difficulty in adapting to workplace culture remains a concern. Many new employees, especially recent graduates, often face challenges in adjusting to the dynamics, values, and expectations of a professional setting. Factors such as generational differences, communication barriers, and a lack of structured onboarding programs can make workplace integration difficult. Organizations must invest in mentorship programs, clear communication strategies, and inclusive work environments to help employees transition smoothly and contribute effectively.

Digitalization and Automation: Rated as the most significant labor market trend at 4.06, digitalization and automation are transforming the workforce landscape. As industries continue to integrate advanced technologies, employees must develop digital literacy and technological skills to remain competitive. Automation has reshaped job roles, reducing demand for routine tasks while increasing the need for specialized expertise in data analysis, programming, and artificial intelligence. To address this shift, both educational institutions and employers must prioritize digital upskilling initiatives, ensuring workers are equipped to thrive in an increasingly tech-driven economy.

Wars and Geopolitical Uncertainty: Although rated lower at 3.28, the impact of geopolitical conflicts, such as those in Ukraine and Israel, remains a factor influencing economic stability and labor market shifts. Wars and political instability can disrupt supply chains, cause economic downturns, and lead to workforce displacement, affecting both local and global employment markets. Additionally, uncertainty in geopolitical landscapes can influence investment decisions, job security, and migration patterns, further complicating labor market dynamics. Addressing these challenges requires proactive economic policies, contingency planning, and international cooperation to mitigate disruptions and foster workforce resilience.

Competency gaps

Emotional Intelligence and Self-Awareness: Rated the highest at 3.86, the gap in emotional intelligence and self-awareness highlights a growing need for better social and emotional training in both educational settings and workplace environments. Employees who lack these competencies may struggle with interpersonal relationships, conflict resolution, and effective communication—factors crucial to maintaining a productive and harmonious work environment. Organizations should integrate structured programs that foster emotional intelligence, self-awareness, and empathy, ensuring that employees are equipped to navigate complex social interactions and leadership responsibilities.

Technical Skills Related to Specific Fields: Following closely at 3.83, technical skills related to specific fields remain a critical component of workforce readiness. As industries evolve and technological advancements continue to redefine job roles, there is an increasing demand for highly specialized expertise in areas such as engineering, IT, healthcare, and manufacturing. Employers and educational institutions must collaborate to bridge this skill gap by aligning academic curricula with industry needs, offering hands-on training, and providing continuous professional development opportunities to keep employees proficient in their respective fields.

Adaptability and Teamwork: Although scoring the lowest at 3.53, adaptability and teamwork remain essential competencies in today's fast-paced and interconnected work environments. The ability to quickly adjust to changes, collaborate across diverse teams, and embrace new challenges is becoming increasingly valuable. Many workplaces require employees who can think critically, work efficiently in team settings, and contribute to a culture of innovation. To address this gap, companies should foster team-building initiatives, implement cross-functional projects, and encourage a mindset of continuous learning, enabling employees to thrive in dynamic professional landscapes.

Key competencies	Stakeholders	Students
Digitalization and automation	4,06	3,60
Values changes	3,39	3,57
Globalization and international trade	3,97	3,56
Sustainability and green economy	3,67	3,59
Demographic changes	3,39	3,50
Technological advancements	3,67	3,64
Remote and hybrid work models	3,75	3,65
Wars (Ukraine, Israel)	3,28	3,48
Shift towards gig and freelance economy	3,44	3,61
Increased focus on diversity and inclusion	3,78	3,55
Evolving customer and market demands	3,50	3,70
Localization (importance of local products)	3,69	3,68
Importance of mental health	3,75	3,64

Guidelines for action

Active Citizenship and Workforce Readiness

In an era shaped by digitalization and automation, fostering active citizenship among youth is essential for navigating the evolving labor market. Enhancing self-awareness, emotional intelligence, and adaptability is critical in addressing skill gaps and preparing young individuals for career transitions. Providing mindfulness training, resilience-building initiatives, and mentorship programs can equip youth with the necessary competencies to engage proactively in their professional and civic lives.

Career Development and Employability Strategies

The survey highlights a pressing need to bridge the gap between labor market demands and youth competencies. Emotional intelligence and technical skills are identified as the most critical skill gaps, emphasizing the need for tailored career development initiatives. Organizations should prioritize internal training programs to upskill employees and ensure they remain competitive in the workforce. Additionally, structured internships and practical work experiences should be expanded to provide hands-on learning opportunities that enhance employability.

Strengthening Local Cooperation and Partnerships

Collaboration between stakeholders, including businesses, academic institutions, and community organizations, is crucial for aligning educational programs with labor market needs. Current efforts, such as mental health training, mentorship projects, and community-based activities, have demonstrated positive outcomes. However, greater emphasis should be placed on forming partnerships that facilitate practical learning experiences, such as apprenticeships and industry-driven educational curricula. Strengthening these partnerships can lead to more effective workforce integration and long-term economic development.

Next planned activities

- Expanding Digital Skills Training

With digitalization and automation shaping the labor market, the focus will be on practical, short-term training programs rather than large-scale initiatives. Employers and training centers will collaborate to offer affordable and accessible digital skills workshops, targeting unemployed youth and recent graduates. These will include basic coding, data analysis, and the use of digital tools relevant to different industries.

- Tackling Employee Shortages with Targeted Recruitment and Training

Since businesses struggle to find skilled workers, more direct partnerships between companies and educational institutions will be encouraged. This will involve guest lectures, company visits, and small-scale mentorship programs where professionals share real-world insights with students. Employers will also be incentivized to invest in on-the-job training, reducing the need for immediate high-skill hires.

- Developing Emotional Intelligence and Workplace Readiness

Rather than broad personal development programs, practical steps such as soft skills workshops, peer mentoring, and stress management training will be integrated into existing career services. These will focus on building emotional intelligence, teamwork, and adaptability, with real case studies and role-playing exercises to simulate workplace challenges.

- Strengthening Internships and Apprenticeships

To make internships more meaningful, businesses will be encouraged to offer structured placements with clear learning objectives. A push will be made to formalize these experiences, ensuring that they are not just unpaid labor but provide actual skills development. Efforts will also focus on creating more paid internship opportunities, possibly through public-private partnerships or EU-funded programs.

- Encouraging Upskilling Through Industry-Specific Training

Companies will be motivated to provide upskilling opportunities for current employees rather than relying on new hires. Short, industry-focused training programs will be promoted, covering key technical skills and adaptability training. Where possible, financial incentives or subsidies for upskilling programs will be explored to encourage broader participation.

- Creating Small-Scale Career Guidance and Mentorship Initiatives

Instead of large, resource-heavy programs, small and targeted career guidance initiatives will be prioritized. These include networking events, career fairs with industry representatives, and one-on-one mentoring programs run by professionals within specific fields. Universities and training centers will be encouraged to integrate these initiatives into existing curricula.

DISPARITIES IN SURVEY RESPONSES ACROSS COUNTRIES: STUDENT PERSPECTIVES

The survey results in Table 15 highlight interesting differences in how people from Slovenia, Austria, Slovakia, Greece, and Serbia perceive key labour market trends. The most important trends, according to respondents, are technological advancements ($\bar{x}$ = 3.94) and digitalization ($\bar{x}$ = 3.91), both receiving high overall ratings. However, the level of importance given to these trends varies between countries, especially for technological advancements, where the differences are statistically significant (p = 0.000). This suggests that some countries may be experiencing or prioritizing these changes more than others.

Another trend with notable differences across countries is globalization and international trade ($\bar{x}$ = 3.79), which is seen as more significant in some regions than others. Similarly, opinions on the shift toward a gig and freelance economy ($\bar{x}$ = 3.36) vary widely (p = 0.000), indicating that flexible work models are more relevant or developed in certain countries. On the other hand, topics such as sustainability ($\bar{x}$ = 3.71), evolving customer demands ($\bar{x}$ = 3.74), and demographic changes ($\bar{x}$ = 3.60) received similar ratings across all five countries, meaning they are generally viewed as equally important regardless of location.

Some trends were rated lower in importance but still showed significant differences between countries. For example, the impact of wars (Ukraine, Israel) ($\bar{x}$ = 3.43, p = 0.028) and the increasing focus on diversity and inclusion ($\bar{x}$ = 33.40, p = 0.047) were not seen as top priorities overall, yet perceptions of their significance varied depending on the country. This suggests that external events and social issues influence labour markets differently based on regional circumstances.

These results highlight that while technology and digitalization are widely recognized as key forces shaping the future of work, other trends—such as globalization, gig work, and social issues—are perceived differently across countries. These differences may reflect varying economic conditions, policies, and cultural attitudes towards work and employment.

Table 15: Statistical Differences in the Significance of Labour Market Trends

Trend	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Technological advancements	3.99	4.16	4.20	3.64	3.76	**3.94**	*0.000****
Digitalization and automation	3.99	4.07	4.00	3.6	3.97	**3.91**	*0.014**
Importance of mental health	4.01	3.81	3.94	3.64	3.80	**3.84**	*0.162*
Globalization and international trade	3.64	3.96	4.06	3.56	3.79	**3.79**	*0.002***
Evolving customer and market demands	3.72	3.79	3.76	3.70	3.73	**3.74**	*0.977*
Sustainability and green economy	3.58	3.97	3.78	3.59	3.71	**3.71**	*0.159*
Remote and hybrid work models	3.91	3.66	3.49	3.65	3.77	**3.69**	*0.056*
Values changes	3.75	3.66	3.74	3.57	3.62	**3.67**	*0.654*
Demographic changes	3.58	3.69	3.69	3.50	3.56	**3.60**	*0.661*
Localization (importance of local products)	3.43	3.62	3.44	3.68	3.74	**3.58**	*0.160*
Wars (Ukraine, Israel)	3.13	3.37	3.61	3.48	3.54	**3.43**	*0.028**
Increased focus on diversity and inclusion	3.38	3.37	3.14	3.55	3.54	**3.40**	*0.047**
Shift towards gig and freelance economy	3.59	3.12	3.05	3.61	3.37	**3.36**	*0.000****

Results (Table 16) highlight key competencies that individuals need to successfully integrate into the labour market, with notable differences across countries. The most highly rated competencies overall are self-awareness ($\bar{x}$ = 4.13), problem-solving and critical thinking ($\bar{x}$ = 4.07) and resilience ($\bar{x}$ = 4.02), suggesting that these qualities are widely recognized as essential for career success. However, perceptions of their importance vary significantly between countries, particularly for problem-solving and critical thinking and resilience, indicating that different regions place different levels of emphasis on these skills.

Other competencies that received high overall ratings include employability, communication, and customer orientation ($\bar{x}$ = 3.98), both of which show statistically significant differences between countries. This suggests that while these skills are valued, some countries may prioritize them more than others. Digital literacy ($\bar{x}$ = 3.94) also stands out as an important skill, reflecting the increasing role of technology in the labour market.Some competencies, while still important, show less variation across countries. Creativity, collaboration ($\bar{x}$ = 3.94), and labour market awareness ($\bar{x}$ = 3.93) are rated similarly across all five countries, indicating a shared understanding of their relevance. However, career planning ($\bar{x}$ = 3.92) and curiosity and inquisitiveness ($\bar{x}$ = 3.82) show statistically significant differences, suggesting that some regions may place a stronger emphasis on these aspects than others.

The data show that soft skills, such as critical thinking, resilience, and self-awareness, are considered the most essential for successful labour market integration, though their perceived importance varies across regions. Meanwhile, technical skills and leadership are rated as less crucial, pointing to a broader shift in the job market where adaptability and interpersonal abilities play a more prominent role than purely technical expertise.

Table 16: Statistical Differences in Competencies Needed for Labour Market Integration

Competencies	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Self-awareness	4.10	4.26	4.15	3.84	4.36	**4.13**	*0.004***
Problem-solving and Critical Thinking	4.08	4.25	4.36	3.70	3.99	**4.07**	*0.000****
Resilience	3.95	4.32	4.22	3.68	4.01	**4.02**	*0.000****
Employability	3.84	4.06	4.08	3.73	4.20	**3.98**	*0.004***
Communication and Customer Orientation	3.80	4.22	4.15	3.79	4.03	**3.98**	*0.004***
Digital Literacy	4.10	4.04	4.09	3.69	3.83	**3.94**	*0.011**
Creativity	3.89	4.10	4.03	3.75	3.97	**3.94**	*0.144*
Collaboration	3.92	4.13	4.03	3.72	3.97	**3.94**	*0.071*
Labour Market Awareness	3.84	4.07	4.02	3.80	3.95	**3.93**	*0.219*
Career Planning	3.84	3.96	4.11	3.70	3.98	**3.92**	*0.028**
Empathy	3.96	3.94	3.82	3.74	3.90	**3.87**	*0.586*
Technical Skills	3.86	4.04	3.85	3.75	3.83	**3.85**	*0.456*
Leadership	3.83	3.96	3.80	3.70	3.91	**3.83**	*0.425*
Curiosity and Inquisitiveness	3.69	4.01	3.95	3.64	3.87	**3.82**	*0.046**
Self-employment Skills	3.63	3.96	3.81	3.6	3.89	**3.78**	*0.111*

Obtained data (Table 17) reveal key insights into how various labour market trends influence the need for individuals to develop new competencies. The highest-rated trend in this regard is technological advancements ($\bar{x}$ = 3.95), with significant differences across countries (p = 0.001), indicating that some regions feel more urgent to adapt to technological changes than others. Similarly, the importance of mental health ($\bar{x}$ = 3.88) shows statistically significant differences between countries (p = 0.010), suggesting that awareness and the need for mental health-related competencies vary across regions.

While digitalization and automation ($\bar{x}$ = 3.94) are widely recognized as requiring new skills, there are no statistically significant differences between countries, indicating a shared understanding of its impact. Other trends, such as evolving customer and market demands ($\bar{x}$ = 3.78), sustainability and the green economy (3.77), and globalization ($\bar{x}$ = 3.76), receive moderate ratings but do not show significant differences across the surveyed countries, implying a uniform perception of their importance.

Some trends are seen as less critical for competency development, with notable regional differences. The shift toward a gig and freelance economy ($\bar{x}$ = 3.43) shows strong variation across countries, indicating that in some regions, gig work is becoming a more prominent career path, while in others, it remains less relevant. Likewise, the impact of wars ($\bar{x}$ = 3.40) on skill development is rated lower overall, suggesting that while geopolitical conflicts may affect the labour market, they are not perceived as requiring significant adaptation in new competencies.

The analysis underscores that technological advancements, digitalization, and mental health awareness are the most pressing factors driving the need for new skills. However, perceptions of these needs differ between countries, particularly regarding technology and gig work, reflecting regional variations in economic structures and labour market demands.

Table 17: Statistical Differences in the Need for New Competencies Due to Labour Market and Trends

New Competencies	SI	AU	SK	GR	RS	x̄	p-value
Technological advancements	4.03	3.97	4.26	3.70	3.80	**3.95**	*0.001****
Digitalization and automation	4.09	3.72	3.93	3.83	4.06	**3.94**	*0.108*
Importance of mental health	4.08	3.62	4.09	3.77	3.76	**3.88**	*0.010***
Evolving customer and market demands	3.77	3.85	3.88	3.57	3.86	**3.78**	*0.127*
Sustainability and Green Economy	3.76	3.62	3.95	3.61	3.84	**3.77**	*0.134*
Globalization and international trade	3.67	3.66	3.88	3.70	3.85	**3.76**	*0.337*
Remote and hybrid work models	3.85	3.56	3.49	3.79	3.70	**3.68**	*0.070*
Localization (importance of local products)	3.72	3.59	3.55	3.61	3.80	**3.65**	*0.385*
Values changes	3.87	3.46	3.62	3.57	3.63	**3.64**	*0.099*
Demographic changes	3.58	3.56	3.64	3.67	3.68	**3.63**	*0.896*
Increased focus on diversity and inclusion	3.66	3.26	3.43	3.56	3.65	**3.53**	*0.093*
Shift towards gig and freelance economy	3.62	3.29	3.09	3.60	3.43	**3.43**	*0.001****
Wars (Ukraine, Israel)	3.29	3.13	3.46	3.50	3.53	**3.40**	*0.112*

Findings (Table 18) indicate that students across all five countries feel similarly prepared in addressing challenges related to soft skills ($\bar{x}$ = 3.65), critical thinking and problem-solving ($\bar{x}$ = 3.59), and digital literacy ($\bar{x}$ = 3.5), as there are no significant differences between countries. This suggests that respondents generally perceive themselves as moderately capable in these areas, highlighting a shared confidence level in tackling these competencies.

However, significant differences emerge when looking at other challenges. Students in Serbia consistently rate themselves the highest, indicating they feel better prepared in these areas compared to other countries. On the other hand, students in Slovakia rate themselves the lowest, suggesting they perceive greater gaps in their readiness for the labour market.

Table 18: Statistical Differences in Perceived Preparedness for Addressing Competency Gaps

Perceived Preparedness	SI	AU	SK	GR	RS	x̄	p-value
Inadequate soft skills	3.63	3.69	3.58	3.58	3.80	**3.65**	*0.499*
Lack of critical thinking and problem-solving skills	3.47	3.68	3.48	3.57	3.77	**3.59**	*0.247*
Insufficient digital literacy	3.62	3.41	3.45	3.52	3.69	**3.55**	*0.393*
Limited practical work experience	3.44	3.53	3.08	3.50	3.81	**3.47**	*0.000****
Difficulty adapting to workplace culture	3.44	3.53	3.08	3.50	3.81	**3.47**	*0.050**
Shortage of employees	3.46	3.31	3.05	3.40	3.99	**3.44**	*0.000****
Poor alignment of educational curricula with job needs	3.34	3.43	3.17	3.43	3.70	**3.41**	*0.004***
Lack of industry-specific technical skills	3.43	3.49	3.05	3.36	3.66	**3.39**	*0.000****
Difficulty offering competitive salaries or benefits	3.41	3.29	3.11	3.47	3.54	**3.37**	*0.014**
High turnover or lack of employee retention strategies	3.24	3.25	3.11	3.50	3.60	**3.35**	*0.001****
Legal or administrative barriers to hiring	3.17	3.19	2.92	3.52	3.67	**3.30**	*0.000****

Insights from the data reveal notable differences in how students across five countries perceive the effectiveness of various forms of support for their academic and career development (Table 19). The most highly rated forms of support overall are internships and practical placements ($\bar{x}$ = 4.02) and financial aid and scholarships ($\bar{x}$ = 3.90), both of which show statistically significant differences between countries (p = 0.000) This suggests that while these forms of support are generally seen as valuable, their effectiveness may vary based on how well they are implemented in different regions. Similarly, workshops and training sessions ($\bar{x}$ = 3.78) are considered effective, though with some variation across countries (p = 0.013).

Students in Slovakia consistently rate internships and financial aid as the most effective, with the highest scores in these categories (4.42 and 4.34, respectively). This suggests that these forms of support are either more accessible or better structured in Slovakia than in other countries. On the other hand, Greek students consistently rate these supports the lowest, particularly for financial aid (3.47) and internships (3.66), indicating that students there may find them less beneficial or harder to access.Other forms of support, such as mental health and well-being services ($\bar{x}$ = 3.71) and academic advising ($\bar{x}$ = 3.59), also show significant differences between countries. Serbian students rate these supports the highest, suggesting they may have better access to or a greater appreciation for these resources. Meanwhile, career counselling services ($\bar{x}$ = 3.52) are among the lowest rated supports overall, with significant differences across countries, indicating that many students may not find them particularly useful or effective in their current form.

The comparative analysis shows that internships, financial aid, and training workshops are the most effective support mechanisms for students' academic and career development. However, their perceived effectiveness varies significantly across countries. Slovak students rate these supports the highest, while Greek students rate them the lowest, highlighting potential differences in availability and quality. Meanwhile, career counselling and academic advising receive lower overall ratings, suggesting a need to improve how these services are delivered.

Table 19: Statistical Differences in the Perceived Effectiveness of Support for Academic and Career Development

Support	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Internships and practical placements	3.80	4.35	4.42	3.66	3.98	**4.02**	*0.000****
Financial aid and scholarships	3.74	4.13	4.34	3.47	3.88	**3.90**	*0.000****
Workshops and training sessions	3.52	3.90	3.91	3.69	3.94	**3.78**	*0.013**
Networking opportunities	3.44	3.82	3.73	3.67	3.85	**3.70**	*0.053*
Mental health and well-being support	3.44	4.04	3.76	3.49	3.94	**3.71**	*0.001****
Online platforms for skills development	3.40	3.63	3.78	3.67	3.79	**3.66**	*0.061*
Access to professional associations	3.49	3.81	3.53	3.63	3.82	**3.64**	*0.094*
Academic advising	3.33	3.60	3.51	3.63	3.90	**3.59**	*0.004***
Mentorship programs	3.40	3.72	3.52	3.60	3.72	**3.58**	*0.141*
Peer support groups	3.35	3.43	3.64	3.49	3.89	**3.57**	*0.003***
Career counselling services	3.20	3.56	3.44	3.51	3.92	**3.52**	*0.000****

The survey results highlight significant differences in how students across five countries perceive their involvement in shaping their career paths (Table 20). Overall, the most highly rated activity is using online platforms to learn about social phenomena ($\bar{x}$ = 3.62), with statistically significant differences between countries. Serbian students rate their involvement in this area the highest (3.99), while Slovenian students give it the lowest (3.21). This suggests that students in Serbia may be more actively using digital resources to explore career-related topics than their peers in other countries.

Engaging in internships and practical placements ($\bar{x}$ = 3.37) is another key aspect of career involvement. However, Slovak students rate themselves significantly lower (2.65) than students in Austria (4.01), where internships appear to play a much larger role. Similarly, participation in career workshops and webinars ($\bar{x}$ = 3.28) varies widely, with Slovak students again reporting the lowest involvement (2.61), while Serbian students (3.90) rate their participation the highest.

Networking with professionals and alumni ($\bar{x}$ = 3.23) and collaborating on projects addressing societal issues ($\bar{x}$ = 3.20) are the lowest-rated areas of involvement. Slovak students feel the least engaged in both categories, with ratings of 2.30 and 2.33, respectively. In contrast, Austrian and Serbian students report much higher levels of engagement, suggesting that opportunities for professional networking and social project collaboration are more accessible or encouraged in these countries.

The findings suggest that students in Serbia and Austria feel the most involved in shaping their career paths. At the same time, those in Slovakia report the lowest levels of engagement across all activities. Online learning and internships are the most common ways students develop their careers, but networking and societal project involvement remain lower overall, indicating potential areas for improvement in career support initiatives.

Table 20: Statistical Differences in Perceived Involvement in Shaping Career Paths

Involvement	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Using online platforms for learning about social phenomena	3.21	3.85	3.47	3.64	3.99	**3.62**	*0.000****
Engaging in internships or practical placements	3.35	4.01	2.65	3.48	3.63	**3.37**	*0.000****
Participating in career workshops or webinars	2.88	3.49	2.61	3.61	3.90	**3.28**	*0.000****
Networking with professionals and alumni	3.07	3.81	2.30	3.50	3.71	**3.23**	*0.000****
Collaborating on projects addressing societal issues	2.89	3.75	2.33	3.59	3.65	**3.20**	*0.000****

Regional differences are also evident in students' understanding of community issues and the labour market (Table 21). The highest-rated area of knowledge overall is awareness of community challenges ($\bar{x}$ = 3.77), with significant differences between countries. Serbian students report the highest awareness (4.10). In contrast, Slovenian and Greek students feel the least informed (3.56), suggesting that students in Serbia may have more exposure to community-related issues or educational initiatives addressing them.

Similarly, knowledge of career pathways ($\bar{x}$ = 3.71) and awareness of local labour market trends ($\bar{x}$ = 3.64) show notable variation, with Serbian students again reporting the highest levels of understanding. This indicates that students in Serbia may have better access to career guidance resources or a stronger connection to the job market. In contrast, students in Greece and Slovenia report lower awareness in these areas, potentially highlighting gaps in career education.

A particularly striking difference appears in understanding career service learning ($\bar{x}$ = 3.53) and its connection to transferable skills ($\bar{x}$ = 3.51). Slovak students rate themselves the lowest in both categories (2.81 and 2.69), while Serbian students feel the most knowledgeable (4.01 and 3.94). This suggests that career service learning is either less emphasized or less accessible in Slovakia, whereas Serbian students may have more structured opportunities to engage in practical, career-related experiences.

The data show that Serbian students feel the most informed about community issues and career-related knowledge, while Slovak students report the lowest levels of understanding, particularly in areas related to career service learning and transferable skills. The differences across countries highlight potential disparities in educational programs and access to career development resources.

Table 21: Statistical Differences in Knowledge about Career Service Learning

Knowledge	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Awareness of Community Challenges	3.56	3.94	3.75	3.56	4.10	**3.77**	*0.000****
Knowledge of Career Pathways	3.56	3.76	3.73	3.54	3.98	**3.71**	*0.008***
Identifying Relevant Professional Roles	3.48	3.91	3.64	3.67	3.76	**3.68**	*0.066*
Recognition of Employer-Desired Skills	3.58	3.82	3.56	3.64	3.82	**3.67**	*0.189*
Awareness of Local Labour Market Trends	3.53	3.68	3.51	3.58	3.95	**3.64**	*0.009***
Familiarity with Experiential Learning	3.54	3.60	3.58	3.64	3.75	**3.62**	*0.616*
Understanding Root Causes of Challenges	3.38	3.74	3.56	3.48	3.86	**3.59**	*0.002***
Understanding Career Service Learning	3.77	3.49	2.81	3.62	4.01	**3.53**	*0.000****
Career Service Learning and Transferable Skills	3.77	3.54	2.69	3.65	3.94	**3.51**	*0.000****

Analysis revealed notable differences in students' attitudes toward Career Service Learning across Slovenia, Austria, Slovakia, Greece, and Serbia (Table 22). The highest-rated statement overall is the value of practical learning experiences ($\bar{x}$ = 4.14), with statistically significant differences between countries. Slovak students rate this the highest (4.42), indicating a strong appreciation for direct learning. In contrast, Greek students give it the lowest rating (3.79), suggesting a potential gap in access to or recognition of practical learning opportunities.Another key difference is seen in career service learning for job readiness ($\bar{x}$ = 3.83), where Slovak students again report the lowest agreement (3.58), while Slovenian students rate it the highest (4.08). This suggests that Slovak students may not view Career Service Learning as strongly contributing to their job preparation compared to students in other countries. Similarly, confidence in Career Service Learning (3.75) shows variation, with Slovak students rating themselves the lowest (3.45), while Serbian and Slovenian students express greater confidence in its effectiveness.

Another significant difference appears in motivation for Career Service Learning ($\bar{x}$ = 3.69), where Serbian students rate their motivation the highest (4.00), while Slovak students report the lowest levels (3.28). This suggests that students in Serbia may have a stronger drive to engage in career-related learning activities, whereas students in Slovakia may be less motivated due to limited opportunities or perceived relevance.The evidence suggests that Slovak students value practical learning greatly but feel less motivated and confident in Career Service Learning's impact on their career readiness. In contrast, Serbian and Slovenian students show greater motivation and confidence in its benefits. These differences highlight potential disparities in how Career Service Learning is structured and promoted across different countries.

Table 22: Statistical Differences in Attitudes toward Career Service Learning

Attitudes	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Value of Practical Learning Experiences	4.22	4.31	4.42	3.79	3.99	**4.14**	*0.000****
Openness to Learning New Skills	3.79	4.15	4.01	3.86	4.06	**3.96**	*0.082*
Willingness to Invest in Employability Activities	3.92	4.09	4.00	3.84	3.93	**3.95**	*0.523*
Career Service Learning for Job Readiness	4.08	3.82	3.58	3.79	3.90	**3.83**	*0.013**
Career Service Learning as Knowledge Application	3.93	3.90	3.61	3.76	3.79	**3.79**	*0.186*
Actively Exploring Career Opportunities	3.56	3.65	3.96	3.70	3.93	**3.77**	*0.018**
Confidence in Career Service Learning	3.90	3.71	3.45	3.78	3.91	**3.75**	*0.007***
Motivation for Career Service-Learning	3.66	3.78	3.28	3.79	4.00	**3.69**	*0.000****

Results in Table 23 highlight significant differences in students' behavioural intentions and actions related to community enterprise development across countries. The highest-rated statement is understanding personal strengths for community contribution ($\bar{x}$ = 3.82), with statistically significant differences between countries. Serbian and Austrian students rate themselves the highest in this area (4.08 and 4.04, respectively), suggesting greater self-awareness of their potential impact on community development. Meanwhile, Slovak and Greek students report the lowest confidence levels (3.68 and 3.64), indicating a weaker perception of their personal role in contributing to community initiatives.

Another key difference appears in enhancing skills for the community labour market ($\bar{x}$ = 3.67), where Austrian students feel the most capable (3.96), while Slovenian and Slovak students rate themselves the lowest (3.37 and 3.51, respectively). Similarly, reflecting on experiences in the community labour market ($\bar{x}$ = 3.64) is highest among Serbian students (3.90) but lower among Slovak and Slovenian students (3.48 and 3.37), suggesting that some students engage more in self-assessment and learning from their experiences than others.

When it comes to actively seeking opportunities in the community labour market ($\bar{x}$ = 3.47) and building relationships within it ($\bar{x}$ = 3.41), Serbian students report the highest engagement (3.82 and 4.01, respectively). In contrast, Slovak students rate themselves the lowest (3.11 and 2.81). This suggests that Serbian students are more proactive in integrating into the community workforce, whereas Slovak students feel less engaged or have fewer opportunities.
A particularly notable gap is seen in having a well-defined career plan for community opportunities ($\bar{x}$ = 3.38), where Serbian students rate themselves the highest (3.86) and Slovak students the lowest (2.80). This suggests that students in Serbia may receive better guidance or have clearer career goals related to community development. In contrast, those in Slovakia may require more structured support in career planning.

Regional comparison highlights that Serbian and Austrian students are most prepared to contribute to community enterprise development. In contrast, Slovak students report the lowest levels of engagement and confidence across all categories. These differences highlight potential disparities in career planning resources, community engagement opportunities, and educational support available in different countries.

Table 23: Statistical Differences in Behavioural Intentions and Actions

Attitudes	SI	AU	SK	GR	RS	x̄	p-value
Understanding Personal Strengths for Community Contribution	3.77	4.04	3.68	3.64	4.08	**3.82**	*0.002***
Enhancing Skills for Community Labour Market	3.37	3.96	3.51	3.81	3.81	**3.67**	*0.000****
Reflecting on Experiences in Community Labour Market	3.37	3.72	3.48	3.74	3.90	**3.64**	*0.002***
Seeking Opportunities in Community Labour Market	3.11	3.66	3.11	3.70	3.82	**3.47**	*0.000****
Building Relationships in Community Labour Market	3.11	3.44	2.81	3.70	4.01	**3.41**	*0.000****
Well-Defined Career Plan for Community Opportunities	3.27	3.40	2.80	3.63	3.86	**3.38**	*0.000****

DISPARITIES IN SURVEY RESPONSES ACROSS COUNTRIES: STAKEHOLDERS PERSPECTIVES

The survey results reveal key insights into how stakeholders across countries perceive the significance of various labour market trends in shaping their sectors and workforce needs (Table 10). Digitalization and automation ($\bar{x}$ = 4.10) and technological advancements ($\bar{x}$ = 4.09) are rated among the most influential trends, with relatively high scores across all countries. However, differences between countries are not statistically significant, indicating a shared understanding of their importance in workforce transformation.

In contrast, value changes ($\bar{x}$ = 3.81), globalization and international trade ($\bar{x}$ = 3.72), and demographic changes ($\bar{x}$ = 3.70) show significant differences across countries. Slovenian stakeholders rate value changes and demographic shifts the highest (4.50 and 4.44, respectively), suggesting that shifts in societal norms and workforce demographics play a more critical role in Slovenia than in other countries. Meanwhile, Austrian and Slovak stakeholders rate globalization significantly lower than their Slovenian, Greek, and Serbian counterparts, indicating potential regional differences in international market integration.

The importance of mental health ($\bar{x}$ = 3.71) also varies across countries, with Slovenian stakeholders placing a higher emphasis (4.09) compared to Austrian and Slovak respondents, who give lower ratings. This suggests that mental health awareness and its role in workforce development may be more recognized in some regions than others.

Sustainability-related trends, such as the green economy ($\bar{x}$ = 3.26), received mixed responses, with Austrian stakeholders rating them the highest (4.19) and Slovak and Serbian stakeholders rating them lower. Similarly, evolving customer and market demands ($\bar{x}$ = 3.60) show significant variation, with Austrian respondents perceiving them as the least influential (3.13).

The shift toward the gig and freelance economy ($\bar{x}$ = 3.26) and localization ($\bar{x}$ = 3.25) are among the lowest-rated trends, with Austrian and Slovak stakeholders rating them particularly low. This suggests that freelance work and the emphasis on local products are seen as less relevant in these countries compared to others, particularly Slovenia and Greece.

Finally, the impact of wars also shows statistically significant variation. Serbian stakeholders rate its influence the highest (3.57), while Austrian respondents rate it the lowest (2.74), indicating that geopolitical factors may be perceived differently depending on regional economic and political conditions.

While technological advancements and digitalization are universally recognized as key drivers of workforce transformation, value changes, demographic shifts, and globalization show notable regional differences. Slovenian stakeholders emphasize societal shifts and workforce demographics the most, while Austrian and Slovak respondents perceive globalization, the gig economy, and localization as less significant in their sectors. These differences highlight the varying priorities and challenges different regions face in adapting to evolving labour market trends.

Table 24: Statistical Differences in the Significance of Labour Market Trends

Trend	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Digitalization and automation	4.24	4.16	3.86	4.06	4.20	**4.10**	*0.410*
Technological advancements	4.26	4.29	4.03	3.67	4.23	**4.09**	*0.058*
Remote and hybrid work models	4.09	3.71	3.89	3.75	3.83	**3.85**	*0.579*
Values changes	4.50	3.61	3.86	3.39	3.69	**3.81**	*0.000****
Globalization and international trade	3.97	3.32	3.26	3.97	4.03	**3.72**	*0.000****
Importance of mental health	4.09	3.39	3.43	3.75	3.89	**3.71**	*0.050**
Demographic changes	4.44	3.68	3.29	3.39	3.71	**3.70**	*0.000****
Sustainability and Green Economy	3.79	4.19	3.31	3.67	3.34	**3.65**	*0.008***
Evolving customer and market demands	3.94	3.13	3.46	3.50	3.94	**3.60**	*0.005***
Increased focus on diversity and inclusion	3.32	3.39	3.06	3.78	3.29	**3.37**	*0.109*
Shift towards gig and freelance economy	3.74	2.81	2.69	3.44	3.57	**3.26**	*0.000****
Localization (importance of local products)	3.85	2.74	2.46	3.69	3.46	**3.25**	*0.000****
Wars (Ukraine, Izrael)	3.15	2.74	2.83	3.28	3.57	**3.12**	*0.009***

Analysis revealed significant differences in the challenges organizations face when integrating new employees into the labour market (Table 24). The most pressing issue overall is the shortage of employees ($\bar{x}$ = 3.84), with Slovenian stakeholders rating this challenge the highest (4.41), followed by Austria (4.13). In contrast, Serbian stakeholders rate it the lowest (3.29), suggesting that workforce shortages are a more severe in some countries than others.Another major challenge is the difficulty of offering competitive salaries and benefits ($\bar{x}$ = 3.63). Slovenian stakeholders again rate this issue the highest (4.38), while Austrian and Slovak stakeholders rate it significantly lower (3.16 and 3.17, respectively). This suggests that salary competitiveness is a greater concern in Slovenia than in Austria and Slovakia, where other labour market factors may be more influential.

High turnover and lack of employee retention strategies ($\bar{x}$ = 3.52) also show statistically significant differences, with Slovenian stakeholders reporting the highest concerns (4.03). This highlights the ongoing difficulty in retaining employees, particularly in Slovenia, compared to Austria (3.26) and Slovakia (3.37).Regarding practical experience and education alignment with job needs, notable differences emerge. Limited practical work experience ($\bar{x}$ = 3.50) is seen as a major challenge, especially in Slovenia (3.97), while Austrian stakeholders rate it much lower (2.71), reflecting better work-based learning programs in Austria. Similarly, poor alignment of educational curricula with job market needs ($\bar{x}$ = 3.43) is perceived as a greater issue in Slovenia (3.79) than in Austria (2.97), indicating that Austrian educational programs may better prepare students for the workforce.

Legal and administrative barriers to hiring ($\bar{x}$ = 3.03) show significant variation. Greek stakeholders rate this as a major obstacle (3.67), while Austrian and Slovak stakeholders report the lowest concern (2.58 and 2.57, respectively). This suggests that regulatory challenges may be more burdensome in Greece compared to other countries.
Other challenges, such as insufficient digital literacy ($\bar{x}$ = 3.23) and lack of soft skills ($\bar{x}$ = 3.76), do not vary significantly between countries, indicating a shared perception of their impact on workforce integration.

Overall, the findings suggest that Slovenian stakeholders perceive workforce shortages, salary competitiveness, and employee retention as the biggest challenges, whereas Austrian and Slovak stakeholders report fewer concerns in these areas. Additionally, practical work experience and education-job alignment are seen as more problematic in Slovenia than in Austria, where such gaps may be better addressed. Meanwhile, Greek stakeholders report the highest concerns about legal and administrative hiring barriers, highlighting regional differences in regulatory burdens. These insights underscore the need for country-specific strategies to address workforce integration challenges.

Table 25: Statistical Differences in Organisational Challenges in Workforce Integration

Challenges	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Shortage of employees	4.41	4.13	3.66	3.75	3.29	**3.84**	*0.000****
Inadequate soft skills	4.15	3.68	3.54	3.69	3.74	**3.76**	*0.131*
Lack of critical thinking and problem-solving skills	3.91	3.68	3.49	3.72	3.54	**3.67**	*0.457*
Lack of industry-specific technical skills	3.97	3.81	3.40	3.50	3.54	**3.64**	*0.104*
Difficulty offering competitive salaries or benefits	4.38	3.16	3.17	3.64	3.74	**3.63**	*0.000****
High turnover or lack of employee retention strategies	4.03	3.26	3.37	3.50	3.43	**3.52**	*0.032**
Limited practical work experience	3.97	2.71	3.37	3.69	3.69	**3.50**	*0.000****
Poor alignment of educational curricula with job needs	3.79	2.97	3.29	3.56	3.51	**3.43**	*0.016**
Insufficient digital literacy	3.29	3.19	2.94	3.50	3.23	**3.23**	*0.297*
Difficulty adapting to workplace culture	3.53	2.97	2.86	3.44	3.14	**3.19**	*0.022**
Legal or administrative barriers to hiring	3.26	2.58	2.57	3.67	3.00	**3.03**	*0.000****

The survey results highlight key differences in stakeholders' perceptions of the most essential competencies for successful labour market integration (Table 25). The highest-rated competency overall is problem-solving and critical thinking (4.30), with Austrian stakeholders rating it the highest ($\bar{x}$ = 4.52), while Greek respondents give it the lowest rating (3.81). This indicates that problem-solving skills are more crucial in Austria and Slovenia than in Greece, where they may not be as emphasized in professional development. Similarly, communication and customer orientation ($\bar{x}$ = 3.97) show significant differences, with Slovenian stakeholders placing a much higher emphasis (4.35) than Greek respondents (3.47), suggesting a stronger focus on interpersonal and customer-related competencies in some regions.

Resilience ($\bar{x}$ = 4.16) is another highly rated competency, with Slovenian stakeholders rating it the highest (4.68) and Greek stakeholders giving it the lowest rating (3.4). This suggests that resilience is considered a critical factor in Slovenia but is perceived as less essential in Greece, possibly due to differing labour market conditions or cultural attitudes toward adaptability.

Collaboration ($\bar{x}$ = 4.05) also shows notable regional variation, with Slovenian stakeholders rating it significantly higher (4.50) than Greek stakeholders (3.50). This suggests that teamwork and cooperative skills are considered more essential in Slovenia than in Greece. Additionally, leadership skills ($\bar{x}$ = 3.75) and technical skills ($\bar{x}$ = 3.74) vary significantly, with Slovenian and Serbian stakeholders rating them highly, while Austrian and Slovak respondents place less importance on them.

While digital literacy ($\bar{x}$ = 3.90) and creativity ($\bar{x}$ = 3.98) are rated important, they do not show statistically significant differences between countries, suggesting a shared understanding of their relevance in the labour market. Similarly, self-awareness ($\bar{x}$ = 4.06) and career planning ($\bar{x}$ = 3.81) receive similar scores across all regions, indicating that stakeholders across different countries perceive these competencies as equally essential.

On the other hand, labour market awareness ($\bar{x}$ = 3.68) is rated significantly lower by Austrian (3.45) and Slovak (3.34) stakeholders, while Serbian respondents rate it the highest (4.06). This suggests that stakeholders in Serbia place more importance on understanding labour market dynamics than those in Austria and Slovakia.

The data collectively points to resilience, problem-solving, and communication skills being among the most important competencies for labour market integration. However, their perceived importance varies across countries. Slovenian and Austrian stakeholders strongly emphasise resilience, critical thinking, and collaboration, while Greek stakeholders rate these competencies significantly lower. Similarly, leadership and technical skills are seen as more essential in Slovenia and Serbia than in Austria and Slovakia. These differences suggest that regional variations in economic conditions, educational systems, and workplace expectations influence how different competencies are valued in the labour market.

Table 26: Statistical Differences in Essential Competencies for Labour Market Integration

Competences	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Problem-solving and Critical Thinking	4.41	4.52	4.37	3.81	4.43	**4.30**	*0.001****
Resilience	4.68	4.29	4.29	3.44	4.19	**4.16**	*0.000****
Self-awareness	4.26	4.13	3.91	3.94	4.06	**4.06**	*0.539*
Collaboration	4.50	4.06	4.06	3.50	4.17	**4.05**	*0.000****
Creativity	4.06	4.03	3.91	3.69	4.23	**3.98**	*0.098*
Communication and Customer Orientation	4.35	3.81	4.11	3.47	4.11	**3.97**	*0.001****
Curiosity and Inquisitiveness	4.15	3.87	3.83	3.67	4.11	**3.92**	*0.136*
Digital Literacy	4.15	3.97	3.80	3.67	3.94	**3.90**	*0.196*
Empathy	4.41	3.65	3.69	3.69	3.94	**3.88**	*0.003***
Career Planning	4.03	3.65	3.66	3.778	3.94	**3.81**	*0.264*
Employability	4.09	3.68	3.69	3.56	4.00	**3.80**	*0.055*
Leadership	4.09	3.23	3.71	3.64	4.03	**3.75**	*0.001****
Technical Skills	4.15	3.45	3.43	3.56	4.11	**3.74**	*0.001****
Labour Market Awareness	3.97	3.45	3.34	3.56	4.06	**3.68**	*0.004***
Self-employment skills	3.65	3.81	3.43	3.67	3.83	**3.67**	*0.365*

A closer look at the data shows significant differences in the critical skill gaps observed in recent graduates or new employees (Table 26). Among the most pressing concerns is critical thinking and problem-solving ($\bar{x}$ = 3.85), with Slovenian stakeholders rating this gap the highest (4.41), suggesting that graduates in Slovenia may particularly struggle with independent thinking and analytical reasoning. In contrast, Austrian (3.81) and Slovak (3.66) stakeholders rate this gap significantly lower, indicating a relatively stronger emphasis on these skills in their education systems. Time management and organizational skills ($\bar{x}$ = 3.67) also show significant differences, with Slovenian stakeholders again reporting the highest concerns (4.15), while Austrian respondents rate this gap the lowest (3.32). This suggests that Slovenian graduates may struggle more with work organization and prioritization than their Austrian counterparts.

Another notable area of concern is communication skills ($\bar{x}$ = 3.65), where Slovenian stakeholders again report the highest deficiency (4.24), followed by Greek stakeholders (3.78). Austrian, Slovak and Serbian respondents give much lower ratings, suggesting that graduates in these countries may have better-developed communication abilities upon entering the workforce.

Creativity and innovation ($\bar{x}$ = 3.40) is another significant skill gap, with Austrian stakeholders rating it the lowest (2.87). In contrast, Slovenian (3.79) and Greek (3.58) respondents rate it much higher, suggesting that Austrian graduates may struggle more with innovative thinking than their peers in other countries. Similarly, technical skills related to the field ($\bar{x}$ = 3.37) are seen as a major gap, particularly in Slovakia (2.69), whereas Greek stakeholders report fewer concerns (3.83), suggesting that Slovak graduates may require more specialized training in their respective industries.

When it comes to digital literacy and IT competencies ($\bar{x}$ = 3.27), Greek respondents rate this gap the highest (3.69), while Slovak stakeholders report the lowest concerns (2.86). This suggests that graduates in Greece may need more support in developing digital skills, whereas Slovakia has a stronger focus on IT education.

From these results, it can be concluded that Slovenian stakeholders report the highest concerns across multiple skill gaps, particularly in critical thinking, time management, and communication, suggesting that graduates in Slovenia may struggle more with these essential competencies upon entering the workforce. Austrian respondents report the lowest concerns in areas such as creativity and time management, indicating that their graduates may be better prepared in these aspects. Meanwhile, Slovak stakeholders highlight deficiencies in technical skills, while Greek respondents express concerns about digital literacy. These differences suggest that workforce preparation varies significantly across countries, with some regions needing greater focus on soft skills, while others require improvements in technical and digital competencies.

Table 27: Statistical Differences in Critical Skill Gaps in Recent Graduates

Critical skill gaps	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Critical thinking and problem-solving	4.41	3.81	3.66	3.69	3.71	**3.85**	*0.009***
Time management and organizational skills	4.15	3.32	3.60	3.58	3.66	**3.67**	*0.015**
Emotional intelligence and self-awareness	4.09	3.32	3.49	3.86	3.51	**3.66**	*0.018**
Communication skills	4.24	3.48	3.40	3.78	3.37	**3.65**	*0.004***
Adaptability to change	3.94	3.19	3.37	3.53	3.63	**3.54**	*0.051*
Teamwork and collaboration	3.88	3.06	3.34	3.53	3.34	**3.44**	*0.027**
Leadership and decision-making	3.74	3.00	3.37	3.64	3.37	**3.43**	*0.044**
Creativity and innovation	3.79	2.87	3.03	3.58	3.66	**3.40**	*0.000****
Technical skills related to the field	3.71	3.16	2.69	3.83	3.43	**3.37**	*0.000****
Digital literacy and IT competencies	3.21	3.16	2.86	3.69	3.43	**3.27**	*0.023**

Comparing the responses across regions revealed key differences in how organizations address skill gaps (Table 27). Among the most used strategies, e-learning platforms, and online courses ($\bar{x}$ = 3.52) and internal training programs ($\bar{x}$ = 3.49) are widely implemented across all countries, with no statistically significant differences. This suggests that online learning and in-house training are universally recognized as standard approaches for workforce development.

However, notable regional differences emerge in other skill gap mitigation strategies. Mentorship and coaching initiatives ($\bar{x}$ = 3.32) are more commonly used in Serbia (3.66) and Greece (3.64), while Austrian organizations report the lowest adoption of this approach (2.68). This suggests that mentorship culture may be more assertive in Southern and Eastern European countries than in Austria.

Upskilling and reskilling initiatives ($\bar{x}$ = 3.15) show significant variation, with Greek organizations leading (3.50), while Slovenian organizations report the lowest engagement in such programs (2.74). Similarly, developing a clear career progression framework ($\bar{x}$ = 3.09) is more common in Greece (3.58) and Serbia (3.26), while Slovenia and Austria lag (2.68 and 2.81, respectively).

Apprenticeship and internship programs ($\bar{x}$ = 2.97) are most utilized in Greece (3.44) and Serbia (3.49), whereas Slovak organizations report the lowest engagement (2.49). This suggests that Southern European countries place greater emphasis on work-based learning opportunities. Collaboration with government or industry bodies ($\bar{x}$ = 2.86) is another area of significant variation, with Greek (3.31) and Serbian (3.29) stakeholders reporting stronger partnerships, while Slovakia reports the lowest collaboration levels (2.09). A similar pattern is observed in cross-industry collaboration for shared training ($\bar{x}$ = 2.84), where Greece (3.28) and Serbia (3.14) lead, while Slovakia (2.43) and Austria (2.58) lag behind.

Financial incentives for employee skill development ($\bar{x}$ = 2.63) and job rotation or cross-functional training ($\bar{x}$ = 2.56) also show striking differences. Greek (3.42, 3.39) and Serbian (3.03, 3.03) organizations are more likely to offer financial incentives and implement job rotation, whereas Austrian (1.71, 1.87) and Slovak (2.34, 2.14) organizations report significantly lower adoption of these strategies.The findings suggest that Greek and Serbian organizations are the most proactive in implementing diverse skill gap mitigation strategies, including mentorship, apprenticeships, government collaboration, financial incentives, and job rotation. In contrast, Austrian and Slovak organizations rely more on traditional methods such as e-learning and recruiting professionals with pre-existing skills while engaging less in career progression frameworks, government collaboration, and financial support for employees' professional growth. These regional differences highlight varied approaches to workforce development, with Southern and Eastern European organizations appearing more engaged in hands-on, structured employee growth strategies compared to their Central European counterparts.

Table 28: Statistical Differences in Current Skill Gap Mitigation Strategies

Skill gap mitigation strategies	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Utilizing e-learning platforms and online courses	3.24	3.87	3.49	3.58	3.46	**3.52**	*0.230*
Internal training programs	3.50	3.26	3.49	3.86	3.29	**3.49**	*0.113*
Recruitment of professionals with pre-existing skills	3.32	3.23	3.37	3.33	3.71	**3.40**	*0.424*
Mentorship or coaching initiatives	3.41	2.68	3.11	3.64	3.66	**3.32**	*0.002***
Partnerships with educational institutions	3.18	3.16	3.23	3.19	3.20	**3.19**	*0.999*
Upskilling or reskilling initiatives for current staff	2.74	3.00	3.11	3.50	3.37	**3.15**	*0.046**
Developing a clear career progression framework	2.68	2.81	3.06	3.58	3.26	**3.09**	*0.010***
Apprenticeship or internship programs	2.79	2.58	2.49	3.44	3.49	**2.97**	*0.001****
Collaboration with government or industry bodies	2.79	2.81	2.09	3.31	3.29	**2.86**	*0.000****
Cross-industry collaboration for shared training	2.74	2.58	2.43	3.28	3.14	**2.84**	*0.020**
Financial incentives for employee skill development	2.50	1.71	2.34	3.42	3.03	**2.63**	*0.000****
Implementing job rotation or cross-functional training	2.26	1.87	2.14	3.39	3.03	**2.56**	*0.000****

Findings in Table 29 indicate regional differences in the prioritization of workforce development approaches for the future. The most highly prioritized strategies overall include mentorship and coaching initiatives ($\bar{x}$ = 4.02), with Slovak and Slovenian stakeholders rating them the highest (4.37 and 4.35, respectively), while Greek stakeholders rate them the lowest (3.58). This suggests that mentorship is seen as a key future strategy in Slovenia and Slovakia, whereas it may be less of a focus in Greece. Similarly, partnerships with educational institutions ($\bar{x}$ = 3.74) are rated significantly higher in Slovenia (4.21) and Slovakia (4.03) compared to Austria (3.42) and Greece (3.36), indicating that Central European countries place a greater emphasis on stronger collaboration between businesses and academia.

Developing a clear career progression framework ($\bar{x}$ = 3.86) is another key area where Slovenia (4.15) and Serbia (4.00) prioritize it more than Austria (3.94) and Greece (3.42), suggesting that structured career growth pathways are more valued in Slovenia and Serbia. Apprenticeship and internship programs ($\bar{x}$ = 3.50) also show significant differences, with Slovenian (4.21) and Serbian (4.06) stakeholders emphasizing them far more than Austrian stakeholders (2.71), suggesting that Slovenia and Serbia see work-based learning as a critical area for future workforce readiness.

Upskilling or reskilling initiatives ($\bar{x}$ = 3.71) are most highly prioritized in Serbia (4.06) and Slovenia (3.94). At the same time, Greek stakeholders rate them the lowest (3.25), indicating that lifelong learning and workforce adaptability are more urgent in Slovenia and Serbia than in Greece. Recruitment of professionals with pre-existing skills ($\bar{x}$ = 3.64) follows a similar pattern, with Serbian (4.06) and Slovenian (3.97) stakeholders placing greater importance on hiring experienced talent. At the same time, Austrian respondents rate this strategy the lowest (3.13), possibly due to Austria's stronger reliance on internal training rather than external recruitment.

Other notable differences include financial incentives for skill development ($\bar{x}$ = 3.63), which Slovenian (4.06) and Serbian (3.83) stakeholders prioritize more than Austrian respondents (3.19), suggesting that financial motivation is seen as a key driver for workforce skill development in some countries. Collaboration with government or industry bodies ($\bar{x}$ = 3.35) is most highly prioritized in Greece (3.64) and Serbia (3.71), while Slovakia (2.80) and Austria (2.97) place much less emphasis on this approach. This indicates that Southern and Eastern European countries may rely more on external governmental support, while Central European countries may focus on other internal strategies.

The regional disparities indicate that Slovenian and Serbian stakeholders place the highest emphasis on mentorship, apprenticeships, career progression frameworks, and reskilling initiatives, while Austrian and Slovak stakeholders prioritize these methods significantly less. Greek organizations emphasise government and industry collaboration, while Austrian stakeholders are the least likely to prioritize these partnerships. These differences highlight regional variations in workforce development priorities, with Slovenia and Serbia emphasizing structured learning and career growth. At the same time, Austria and Slovakia place less focus on external collaborations and financial incentives for skill development.

Table 29: Statistical Differences in Emphasis on Future Workforce Development Approaches

Skill gap mitigation strategies	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Mentorship or coaching initiatives	4.35	3.94	4.37	3.58	3.86	**4.02**	*0.004***
Developing a clear career progression framework	4.15	3.94	3.83	3.42	4.00	**3.86**	*0.028**
Internal training programs	4.06	3.42	3.89	3.72	4.00	**3.82**	*0.061*
Utilizing e-learning platforms and online courses	3.82	3.35	3.91	3.53	4.11	**3.75**	*0.032**
Partnerships with educational institutions	4.21	3.42	4.03	3.36	3.69	**3.74**	*0.001****
Upskilling or reskilling initiatives for current staff	3.94	3.39	3.89	3.25	4.06	**3.71**	*0.002***
Recruitment of professionals with pre-existing skills	3.97	3.13	3.63	3.36	4.06	**3.64**	*0.000****
Cross-industry collaboration for shared training	3.76	3.39	3.63	3.33	4.00	**3.63**	*0.052*
Financial incentives for employee skill development	4.06	3.19	3.57	3.47	3.83	**3.63**	*0.016**
Apprenticeship or internship programs	4.21	2.71	3.23	3.25	4.06	**3.50**	*0.000****
Implementing job rotation or cross-functional training	3.65	3.10	2.94	3.33	3.74	**3.36**	*0.006***
Collaboration with government or industry bodies	3.56	2.97	2.80	3.64	3.71	**3.35**	*0.000****

The survey results reveal significant differences in how stakeholders across countries perceive the ways in which academic institutions can better align career education programs with labour market needs (Table 30). The most highly rated strategy overall is integrating practical internships and on-the-job training ($\bar{x}$ = 4.12) with Slovenian (4.62) and Serbian (4.49) stakeholders giving it the highest ratings, while Greek stakeholders rate it significantly lower (3.44). This suggests that work-based learning is considered a top priority in Slovenia and Serbia, whereas it may be less emphasized in Greece. Similarly, promoting lifelong learning opportunities such as upskilling and reskilling ($\bar{x}$ = 4.04) is rated the highest in Slovenia (4.47) and Serbia (4.34), while Greek stakeholders again report the lowest emphasis (3.42). This highlights a stronger focus on continuous learning in Slovenia and Serbia than in Greece. Enhancing partnerships between academia and industry ($\bar{x}$ = 4.03) follows a similar trend, with Slovenian (4.47) and Serbian (4.34) stakeholders strongly emphasizing its importance, while Greek stakeholders rate it much lower (3.31). This suggests that Slovenia and Serbia recognize stronger academic-industry collaboration as a key to workforce readiness, whereas Greek stakeholders may perceive existing gaps in this area.

Including industry professionals in curriculum design and teaching ($\bar{x}$ = 4.03) is another high-priority strategy, especially in Slovakia (4.37) and Slovenia (4.41), whereas Greek stakeholders rate it the lowest (3.22). This suggests that stakeholders in Slovakia and Slovenia see a greater need for direct industry involvement in education compared to Greece.

A key area of concern is adapting programs to respond quickly to labour market changes ($\bar{x}$ = 4.01), with Slovak (4.40) and Slovenian (4.35) stakeholders rating it the highest. At the same time, Greek respondents give it the lowest priority (3.28). This suggests that flexibility in curriculum updates is seen as more essential in Central and Eastern Europe than in Greece. Focusing on soft skills development ($\bar{x}$ = 3.95) is another area where Slovak stakeholders rate it the highest (4.43). In contrast, Greek respondents rate it significantly lower (3.47), indicating that soft skills training may be perceived as more crucial in some regions than others.

When it comes to increasing the focus on emerging technical skills ($\bar{x}$ = 3.94), Serbian (4.26) and Slovenian (4.15) stakeholders rate it higher, suggesting that these countries see a more substantial need to integrate new technical competencies into academic programs compared to Austria and Greece.
Encouraging interdisciplinary approaches in education ($\bar{x}$ = 3.91) is rated highest in Slovenia (4.35) and Serbia (4.23). In contrast, Slovak (3.51) and Greek (3.47) stakeholders rate it lower, suggesting that Slovenian and Serbian stakeholders see more value in combining different fields of knowledge for better career preparation. Offering tailored career guidance and mentoring programs ($\bar{x}$ = 3.81) is another area where Slovenian (4.26) and Austrian (3.90) stakeholders place higher emphasis. In contrast, Greek stakeholders report the lowest need (3.08), suggesting more substantial career counseling initiatives are more needed in Slovenia and Austria.
In contrast, addressing diversity and inclusion in career education ($\bar{x}$ = 3.61) shows no significant differences, suggesting a shared perception across all countries that while diversity and inclusion are important, they are not the most pressing priority for aligning education with labour market needs.

The findings demonstrate that Slovenian and Serbian stakeholders emphasise integrating internships, promoting lifelong learning, and strengthening academia-industry partnerships. In contrast, Greek stakeholders consistently rate these strategies the lowest. Slovak respondents highlight the importance of soft skills and industry involvement in curriculum development, while Austrian stakeholders show a moderate but steady prioritization across multiple categories. These differences suggest that labour market needs and education priorities vary significantly across regions, with some countries placing greater emphasis on practical, industry-aligned training. In contrast, others may focus more on traditional academic models

Table 30: Statistical Differences in Alignment of Career Education with Labor Market Needs

Alignment of career education	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Integrating practical internships and on-the-job training	4.62	3.87	4.20	3.44	4.49	**4.12**	*0.000****
Promoting lifelong learning opportunities (upskilling/ reskilling)	4.47	3.87	4.09	3.42	4.34	**4.04**	*0.000****
Enhancing partnerships between academia and industry	4.47	4.19	3.89	3.31	4.34	**4.03**	*0.000****
Including industry professionals in curriculum design and teaching	4.41	4.03	4.37	3.22	4.14	**4.03**	*0.000****
Adapting programs to respond quickly to labour market changes	4.35	3.74	4.40	3.28	4.29	**4.01**	*0.000****
Focusing on the development of soft skills	4.29	3.71	4.43	3.47	3.86	**3.95**	*0.000****
Increasing the focus on emerging technical skills	4.15	3.94	3.94	3.44	4.26	**3.94**	*0.003***
Encouraging interdisciplinary approaches in education	4.35	4.00	3.51	3.47	4.23	**3.91**	*0.000****
Offering tailored career guidance and mentoring programs	4.26	3.90	3.83	3.08	4.00	**3.81**	*0.000****
Addressing diversity and inclusion in career education	3.85	3.48	3.60	3.36	3.77	**3.61**	*0.406*

Comparing the responses across regions highlights clear regional differences in how stakeholders prioritize measures to improve youth employability (Table 31). The most highly rated strategies overall include structured internships and practical work experiences ($\bar{x}$ = 4.23) and mentorship and career guidance initiatives ($\bar{x}$ = 4.02), with Slovenian (4.56, 4.62) and Serbian (4.46, 4.14) stakeholders placing the highest importance on these strategies. Meanwhile, Greek respondents rate them the lowest (3.81, 3.44), suggesting that internships and mentorship programs may be less developed or less prioritized in Greece than in other regions.

Similarly, Slovenia and Serbia strongly emphasise creating industry-aligned curricula in academic institutions ($\bar{x}$ = 3.95) and enhancing partnerships between academia and companies ($\bar{x}$ = 3.92). At the same time, Austrian and Greek stakeholders rate these measures significantly lower. This suggests that Slovenia and Serbia recognize the need for stronger integration between education and industry, whereas Austria and Greece may already have more established models or different priorities.

Soft skills training programs ($\bar{x}$ = 3.87) and continuous upskilling and reskilling initiatives ($\bar{x}$ = 3.84) also show notable regional differences. Slovenian (4.38) and Serbian (4.00) stakeholders prioritize soft skills training significantly more than Austrian (3.68) and Greek (3.39) respondents, suggesting that soft skills gaps may be perceived as a more pressing issue in some countries. Similarly, upskilling and reskilling programs receive the highest ratings in Serbia (4.26) and Slovenia (4.15). At the same time, Greece (3.31) gives it the lowest importance, indicating that lifelong learning programs may be more necessary in certain labour markets.

Finally, offering financial incentives or subsidies for hiring and training young employees ($\bar{x}$ = 3.77) is most strongly supported in Slovenia (4.38) and Serbia (4.20), while Austria (3.00) shows significantly lower support for such financial measures. This suggests that Central and Eastern European stakeholders may see financial support as necessary, whereas Austrian stakeholders may rely on alternative mechanisms for youth workforce integration.

Responses revealed that Slovenian and Serbian stakeholders strongly emphasize practical work experience, industry-aligned education, and financial incentives as key measures for improving youth employability. In contrast, Austrian and Greek stakeholders place less priority on these areas. Soft skills training, mentorship programs, and continuous upskilling are more valued in Slovenia and Serbia, while Austria and Greece show lower enthusiasm for these strategies. These differences suggest that labour market challenges and workforce development priorities vary significantly across regions, with some countries emphasizing hands-on learning and financial support. In contrast, others may focus on different policy approaches.

Table 31: Statistical Differences in Priority Measures for Youth Workforce Integration

Measures	SI	AU	SK	GR	RS	x̄	p-value
Providing structured internships and practical work experiences	4.56	4.10	4.26	3.81	4.46	**4.23**	*0.004***
Establishing mentorship and career guidance initiatives	4.62	3.87	4.06	3.44	4.14	**4.02**	*0.000****
Creating industry-aligned curricula in academic institutions	4.32	3.74	4.23	3.28	4.20	**3.95**	*0.000****
Enhancing partnerships between academic institutions and companies/organisations	4.15	3.65	3.97	3.47	4.37	**3.92**	*0.000****
Promoting digital literacy and proficiency in emerging technologies	4.18	3.81	3.89	3.44	4.14	**3.89**	*0.014**
Ensuring equitable access to career development resources for all youth	4.21	3.77	3.83	3.58	4.09	**3.89**	*0.096*
Developing soft skills training programs	4.38	3.68	3.89	3.39	4.00	**3.87**	*0.001****
Supporting continuous upskilling and reskilling programs for youth	4.15	3.58	3.89	3.31	4.26	**3.84**	*0.000****
Offering financial incentives or subsidies to companies/ organisations hiring and training young employees	4.38	3.00	3.60	3.58	4.20	**3.77**	*0.000****

Analysis revealed regional differences in how organizations perceive their role in improving youth employability (Table 32). The most highly rated contributions overall include supporting soft skills development ($\bar{x}$ = 4.00), providing mentorship or coaching programs ($\bar{x}$ = 3.97) and offering internships and apprenticeships ($\bar{x}$ = 3.91). Slovenian (4.44, 4.29) and Serbian (4.03, 4.17) stakeholders rate these contributions the highest, while Greek (3.78, 3.72) and Austrian (3.81, 3.90) respondents assign them lower importance. This suggests that Slovenian and Serbian organizations emphasis direct learning and mentorship as key workforce development strategies.

Similarly, partnering with academic institutions to align educational programs ($\bar{x}$ = 3.88) is seen as particularly important in Slovenia (4.15) and Serbia (4.17), while Greek (3.42) and Austrian (3.58) stakeholders rate it much lower. This indicates that Slovenia and Serbia recognize stronger academia-industry collaboration as crucial in preparing young talent for the labour market.Organizing upskilling and reskilling initiatives ($\bar{x}$ = 3.73) is another area where Serbia (4.11) stands out, while Slovakia (3.54) and Austria (3.45) place less emphasis on this approach. This suggests that Serbian organizations need lifelong learning initiatives more than their Central European counterparts.

Providing funding or resources for youth-focused initiatives (3.46) is most strongly supported in Serbia (3.97) and Greece (3.64), while Austria (3.03) and Slovakia (3.14) show the least support for financial contributions. This indicates that financial investment in youth workforce development is prioritised more in Southern and Eastern Europe than in Central Europe. Meanwhile, participating in policy discussions or advocacy for youth employability ($\bar{x}$ = 3.55) is most valued in Serbia (3.83) and Slovakia (3.69). At the same time, Austrian stakeholders rate it the lowest (3.03), suggesting a lower inclination towards direct involvement in shaping workforce policies in Austria.

Ultimately, the data suggests that Slovenian and Serbian organizations are the most proactive in providing mentorship, internships, and academic partnerships to support youth employability, while Austrian and Greek organizations place lower importance on these measures. Serbian organizations stand out in their commitment to upskilling, reskilling, and financial support for youth initiatives, while Austrian and Slovak organizations are less likely to invest in funding or engage in policy advocacy. These differences highlight regional variations in how organizations contribute to workforce development, with some countries emphasizing practical training and mentorship, while others focus on different structural or economic approaches.

Table 32: Statistical Differences in Role of Organizations in Youth Workforce Development

Measures	SI	AU	SK	GR	RS	$\bar{x}$	p-value
Supporting the development of soft skills	4.44	3.81	3.94	3.78	4.03	**4.00**	*0.044**
Providing mentorship or coaching programs for young employees	4.29	3.90	3.77	3.72	4.17	**3.97**	*0.033**
Offering internships and apprenticeships for practical experience	4.15	3.61	3.49	3.83	4.46	**3.91**	*0.002***
Engaging in career fairs and networking event	4.12	3.94	3.66	3.67	4.09	**3.89**	*0.200*
Partnering with academic institutions to align educational programs	4.15	3.58	4.06	3.42	4.17	**3.88**	*0.004***
Organizing upskilling and reskilling initiatives tailored to industry	3.65	3.45	3.54	3.83	4.11	**3.73**	*0.041**
Investing in technology or digital platforms for training and development	3.56	3.52	3.43	3.75	3.97	**3.65**	*0.233*
Promoting diversity and inclusion to support young talent	3.82	3.42	3.49	3.56	3.80	**3.62**	*0.437*
Participating in policy discussions or advocacy for youth employability	3.56	3.03	3.69	3.58	3.83	**3.55**	*0.026**
Providing funding or resources for youth-focused initiatives	3.47	3.03	3.14	3.64	3.97	**3.46**	*0.005***

CONCLUSION AND NEXT STEPS

The ELIX project research conducted across Slovenia, Austria, Slovakia, Serbia, and Greece has provided valuable insights into labour market trends, competency gaps, and strategies for improving career opportunities. The findings, based on a combination of qualitative and quantitative analyses, highlight both common challenges and country-specific issues that must be addressed to ensure a better alignment between higher education and workforce demands.A key conclusion emerging from the research is the universal recognition of the importance of practical experience in preparing students for employment. Across all five countries, both students and stakeholders emphasized the need for stronger integration of internships, apprenticeships, and real-world projects into academic programs.

Employers consistently noted that graduates with work-based learning experience are more adaptable and competitive in the labour market. This finding highlights the increasing demand for hands-on learning opportunities that allow students to develop not only technical skills but also critical soft skills such as problem-solving, teamwork, and communication. Traditional academic programs, which primarily focus on theoretical knowledge, often fail to provide students with direct exposure to the challenges and expectations of the professional environment. As a result, many graduates enter the workforce lacking practical experience, making the transition from education to employment more difficult.

Key differences by country:

Country	Primary Concern	Competency Focus	Labour Market Trends
Slovenia	Misalignment between education and labour market needs	Digital literacy, soft skills, career adaptability	Digital transformation, mental health awareness
Austria	Need for AI and leadership skills in the workforce	AI expertise, project-based learning, ethical decision-making	Hybrid work models, sustainability focus
Slovakia	Gap between student perceptions and employer expectations	Problem-solving, resilience, industry knowledge	Workforce shortages, increasing gig economy
Serbia	High youth unemployment and skills mismatch	Entrepreneurship, adaptability, practical experience	Globalization and digital transformation
Greece	Need for workforce retention strategies	Emotional intelligence, adaptability, teamwork	Labour shortages, automation impact

Employers across Slovenia, Austria, Slovakia, Serbia, and Greece expressed concerns that recent graduates often struggle to adapt to workplace dynamics, including managing real-world tasks, working in multidisciplinary teams, and responding effectively to industry-specific challenges. They noted that students who had participated in structured internships or apprenticeships were better prepared for the workforce, as they had already gained familiarity with work environments, industry standards, and employer expectations. This practical exposure enhances their employability by equipping them with job-relevant skills and a greater understanding of workplace culture.

Furthermore, the research found that students themselves recognize the value of practical learning. Many expressed a strong preference for study programs that incorporate real-world applications, such as project-based assignments, company collaborations, and work placements. However, they also reported limited access to high-quality internship opportunities. In some cases, students found that internships were poorly structured, unpaid, or did not provide meaningful learning experiences, limiting their effectiveness in bridging the education-employment gap.

Stakeholders, particularly employers and policymakers, suggested that universities should play a more active role in facilitating partnerships with industries to ensure that students gain relevant work experience before graduation. This could be achieved through expanding internship networks, offering co-op programs where students alternate between study and work periods, and integrating practical training directly into coursework. Additionally, mentorship programs and industry-led workshops were recommended as complementary strategies to help students build professional connections and navigate career pathways more effectively.

Overall, the findings emphasize the urgent need for educational institutions to enhance work-based learning opportunities and strengthen collaborations with industry. By doing so, they can ensure that students develop the practical skills, professional competencies, and industry exposure needed to transition smoothly into the labour market and meet the evolving demands of employers.

Digitalization and technological advancements represent another major trend shaping labour market needs in all partner countries. Digital literacy, artificial intelligence (AI) expertise, and data management skills are increasingly sought after by employers. However, the degree to which these skills are emphasized varies, with Austria prioritizing AI-related competencies, while Slovenia and Slovakia focus more on general digital literacy and adaptability to automation.

A recurring theme in the research is the gap in soft skills among graduates, which employers across all partner countries identified as a significant barrier to employment. While students recognize the value of communication, adaptability, leadership, and critical thinking, they often prioritize technical skills over the development of these competencies. Stakeholders, on the other hand, stress that these skills are essential for long-term career success and that educational institutions should place greater emphasis on their development through project-based learning, mentorship programs, and industry-led training.

Despite these commonalities, the findings also reveal key differences across the partner countries. In Slovenia, the primary challenge lies in the misalignment between education and labour market needs, particularly in the areas of digital literacy and career adaptability. Austria faces an increasing demand for AI expertise and leadership skills, with a strong focus on hybrid work models and sustainability. In Slovakia, the discrepancy between student perceptions and employer expectations is particularly evident, with students emphasizing career planning and employability skills while employers highlight problem-solving, resilience, and industry-specific knowledge. Serbia struggles with high youth unemployment and a significant skills mismatch, requiring greater focus on entrepreneurship, adaptability, and practical training. Meanwhile, Greece is confronted with workforce shortages and retention challenges, necessitating a stronger emphasis on emotional intelligence, teamwork, and adaptability.

A structured table summarizes the similarities and differences between Slovenia, Austria, Slovakia, Serbia, and Greece regarding labour market trends, competency gaps, and career development strategies:

Category	Similarities Across Countries	Differences by Country
Practical Experience	All countries emphasize the importance of internships, apprenticeships, and real-world projects as critical for employability. Employers prefer graduates with hands-on experience.	Slovenia & Slovakia: Strong focus on aligning internships with market needs. Austria: Well-developed university-business collaborations. Serbia: Practical experience seen as a key tool to reduce high youth unemployment. Greece: Limited internship availability in key sectors.
Digital Literacy & Technological Adaptation	Recognized as a key competency across all countries. Students and stakeholders agree that digital skills are crucial for workforce readiness.	Austria: Strong focus on AI and data management. Slovenia & Slovakia: Emphasis on automation and general digital skills. Serbia: Need for greater digitalization in education. Greece: Slow adaptation to digital transformation.
Soft Skills Deficit	Employers in all countries report a lack of critical thinking, teamwork, leadership, and adaptability among graduates. Students acknowledge the importance but prioritize technical skills.	Austria: Leadership and ethical decision-making gaps. Slovakia: Students prioritize employability skills over soft skills. Serbia: Emotional intelligence and resilience seen as critical but underdeveloped. Greece: Teamwork and adaptability are the main soft skills challenges.
Collaboration Between Academia & Industry	Strong need for closer cooperation between universities and businesses to ensure alignment with market needs. Industry-driven curricula are recommended in all countries.	Austria & Slovenia: Existing strong partnerships but need further improvement. Slovakia & Serbia: Limited university-business collaboration; more structured engagement required. Greece: Weak alignment; employers struggle to find well-prepared graduates.
Labour Market Trends & Challenges	Workforce shortages, demographic changes, and digital transformation are common trends across all countries. Employers seek adaptable, tech-savvy employees.	Slovenia: Emphasizes mental health and flexible work models. Austria: Focus on sustainability and hybrid work. Slovakia: Increasing gig economy participation. Serbia: High youth unemployment and globalization impact. Greece: Workforce retention and skill mismatches are major concerns.
Career Planning & Employability Support	Students in all countries express a need for better career guidance, mentoring, and job market awareness.	Slovakia & Slovenia: Students actively seek structured career development programs. Austria: Strong career planning initiatives already in place. Serbia & Greece: Lack of structured career services, requiring more institutional support.

To address these challenges and improve career opportunities, several targeted actions should be taken in each country:

In Slovenia, strengthening work-based learning opportunities, enhancing digital literacy programs, and implementing structured career mentorship initiatives are key priorities.
Austria should focus on developing AI and leadership-focused training programs, enhancing interdisciplinary projects, and introducing more flexible learning models.

In Slovakia, the focus should be on improving career services, expanding entrepreneurship education, and strengthening employer engagement through networking events and job fairs.
Serbia requires an increase in internship and apprenticeship programs to reduce youth unemployment, alongside the integration of soft skills training and the establishment of business incubation initiatives for student entrepreneurs.

Greece must address its labour shortages by implementing targeted upskilling programs, enhancing emotional intelligence and teamwork training, and supporting career transitions through digital education platforms.

This comparative analysis highlights the shared challenges and unique needs in each country, providing a foundation for developing targeted career development strategies. The findings underscore the critical need for a more structured and strategic approach to aligning higher education with labour market demands. Bridging the gap between student expectations and employer requirements will require stronger collaboration between academic institutions and industry stakeholders, as well as an increased emphasis on the development of both technical and transferable skills. By implementing these targeted strategies, each country can take meaningful steps toward preparing students for the evolving job market and fostering long-term economic growth.

Linking Findings to the ELIX Project Goals and Next Steps
The research findings from Slovenia, Austria, Slovakia, Serbia, and Greece align closely with the objectives of the ELIX project, which seeks to bridge the gap between higher education and the labour market through the development of career management pathways and the integration of Community Service Learning (CSL) into academic training. The identified challenges, including the lack of practical experience, gaps in digital and soft skills, and insufficient collaboration between academia and industry, highlight the urgent need for structured interventions to support students' career development and enhance employability.

One of the key goals of the ELIX project is to strengthen practical learning experiences by embedding structured internships, apprenticeships, and real-world projects into university curricula. Across all partner countries, both students and stakeholders emphasized the importance of work-based learning as a critical factor in improving employability. While many universities offer internship programs, they often remain disconnected from academic coursework or lack meaningful engagement with industry. By integrating CSL principles into career management frameworks, the ELIX project aims to create structured pathways that provide students with practical experience while simultaneously addressing societal challenges.

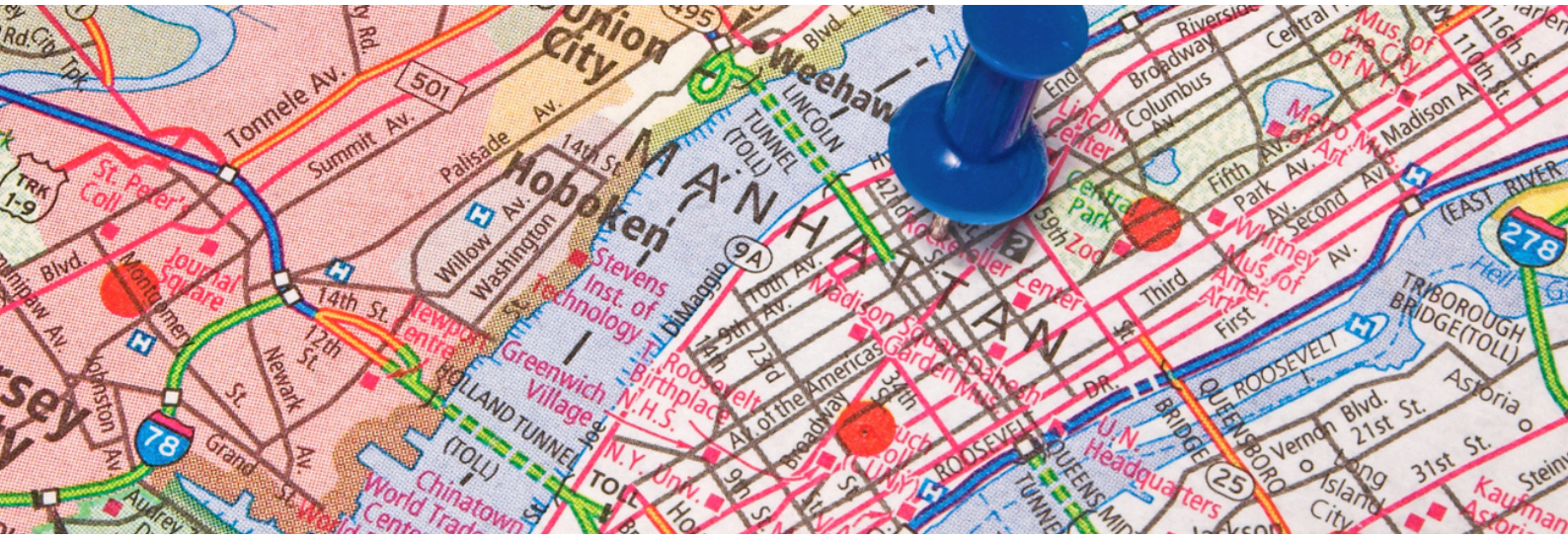
The research findings further underscore the need for improved career management competencies among students. Many students reported feeling unprepared for the transition into the labour market due to insufficient career planning support, a lack of awareness regarding job market trends, and limited exposure to structured career development programs. The ELIX project seeks to address this by developing a comprehensive career management framework that provides structured career guidance, mentorship opportunities, and training in key employability skills. This approach ensures that students are not only equipped with academic knowledge but also develop the competencies needed for long-term career success.

Collaboration between academia and industry emerged as another critical area for improvement. While stakeholders across all partner countries expressed the need for stronger ties between universities and businesses, current partnerships often remain fragmented or ad hoc. The ELIX project aims to formalize and enhance these collaborations by creating sustainable models for university-business engagement. Through industry-led mentorship programs, employer-driven curriculum design, and structured work placements, the project will facilitate closer cooperation between academic institutions and the labour market, ensuring that graduates possess the skills and knowledge that employers seek.

Additionally, the research findings indicate a widespread gap in digital and soft skills among graduates, which employers identified as a significant barrier to employment. While students recognize the value of communication, teamwork, and adaptability, they often prioritize technical skills over the development of these competencies. The ELIX project will integrate targeted training modules into its career management pathways framework, equipping students with critical thinking, leadership, and problem-solving skills. This will ensure that graduates are not only proficient in their respective fields but are also prepared to navigate the evolving demands of the workforce.To address these challenges and implement sustainable solutions, the next phase of the ELIX project will focus on the development of the ELIX Career Management Pathways Framework, which will serve as the foundation for structured career development initiatives in partner countries. This framework will be designed to integrate CSL methodologies into higher education curricula, providing students with hands-on learning opportunities that enhance their employability while fostering active citizenship.

The immediate next steps in the project will produce training materials and toolkits for educators and career counselors, equipping them with the necessary resources to support students in their career development. Pilot implementations will be launched across selected universities to test and refine the framework, ensuring its adaptability and effectiveness in diverse educational and economic contexts.By aligning higher education with the realities of the labour market, the ELIX project seeks to create a more dynamic, responsive, and student-centered approach to career development. Through structured career pathways, strengthened industry partnerships, and targeted skills training, the project will play a crucial role in preparing students for successful transitions into the workforce, while also promoting community engagement and lifelong learning.

The ELIX project is well-positioned to address the competency gaps and labour market challenges identified across partner countries. By developing a comprehensive Career Management Pathways Framework based on Community Service Learning, WP2 will play a crucial role in aligning higher education with workforce needs. The next steps involve finalizing the framework, developing training materials, and testing the model in selected universities to ensure scalability and effectiveness. Through these efforts, ELIX will contribute to improving career readiness, fostering active citizenship, and strengthening local and industry partnerships across Europe.



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ELIX ROADMAP

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