

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

STAKEHOLDERS

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

Focusgroup 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.

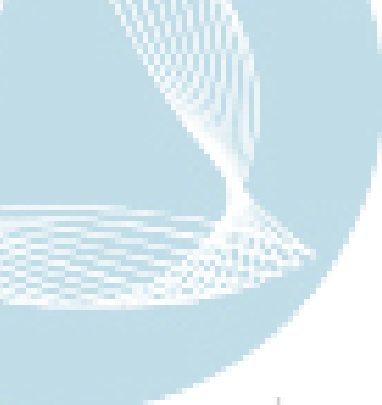
Table 10: Thematic analysis of students' statements on social and market trends, skills gaps, and training delivery

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.	<i>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)</i> - <i>"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)</i>
	The Role of Technology in Society	-Digitalisation reducing physical and manual jobs. -Technology changing how people interact and think.	- <i>"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)</i> - <i>"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)</i>
	Mental Health Challenges	-Increased absenteeism due to workplace pressures.	- <i>"Stress is leading to absenteeism, especially among younger employees who feel overwhelmed by workplace pressures."</i>



Labour market trends with emerging job roles		-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)
	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.	<i>"Universities need to work closely with businesses to ensure their programs match market needs. This partnership is vital to prepare students for the workforce."</i> (Group 2) <i>"Theoretical knowledge is important, but students also need hands-on experience in their fields. Companies and universities should work together to make this happen."</i> (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.	<i>Students need career guidance long before they graduate. Early counseling helps them explore their options and build a clearer path to their goals."</i> (Group 5) <i>"Career fairs are great, but they should offer more than brochures. Students need practical tips and real conversations with industry professionals."</i> (Group 3)
	Strengthening Alumni Networks	-Alumni networks can help bridge education and employment. -Alumni engagement needs better platforms.	<i>"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."</i> (Group 2) <i>-To keep alumni engaged, we need better platforms for them to interact with current students and faculty. This connection benefits everyone."</i> (Group 6)
	Promoting Lifelong Learning	-Employees need access to ongoing training programs. -Lifelong learning is essential for career adaptability.	<i>-The world is changing too fast for education to stop after graduation. Employees need opportunities to upskill throughout their careers."</i> (Group 1) <i>-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."</i> (Group 5)
	Virtual Collaboration Skills	Students lack preparation for remote teamwork.	<i>"Remote work is here to stay, but students often graduate without experience in virtual collaboration. It's a skill we need to teach now."</i> (Group 3)
	Strengthening Internship Opportunities	-Internships should provide structured learning. -Balancing internships with academic demands.	<i>"Internships aren't just about doing tasks—they should be structured to teach students valuable skills and expose them to workplace dynamics."</i> (Group 3) <i>-Students often struggle to balance internships with their studies. Universities need to work with companies to create manageable schedules."</i> (Group 2)

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

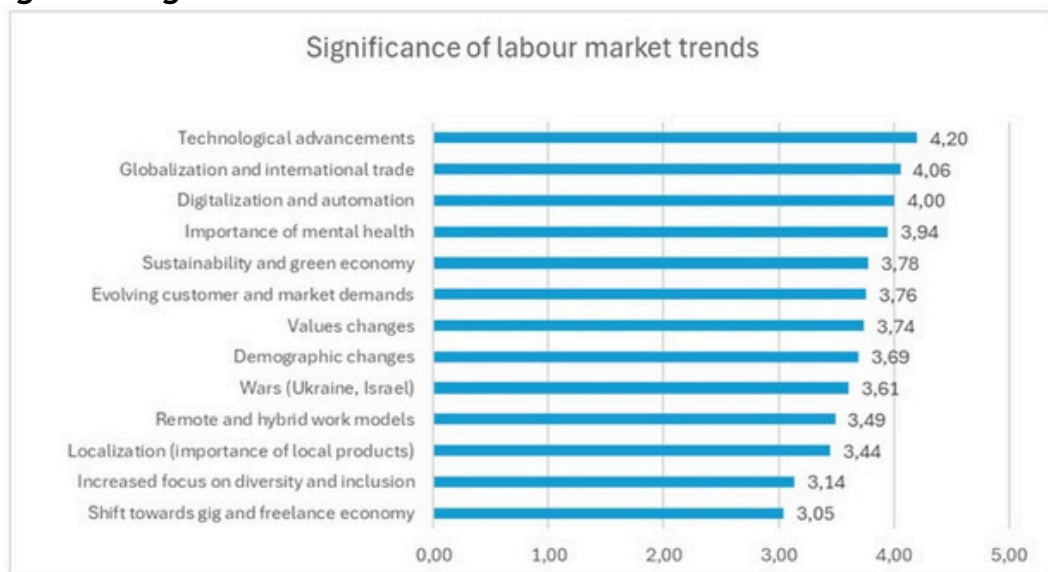
Focus groups conducted at the University of Economics in Bratislava revealed significant insights into labour market trends and educational needs. Students emphasized the growing impact of mental health challenges and the need for work-life balance, reflecting a shift toward flexibility, remote work, 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

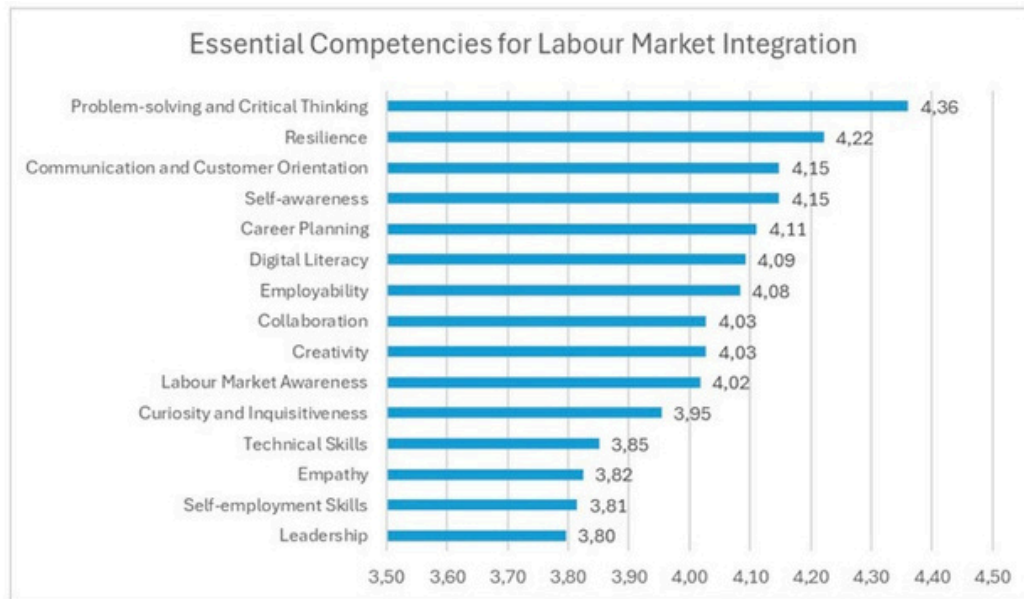
Perception of Current Social Phenomena According to results from survey among Slovak students the most important social phenomena influencing the labour market are technological advancements (with average value 4,2 on scale 1-5 where 1- not significant, 5- very significant), globalization and international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

Figure 38: Significance of labour market trends



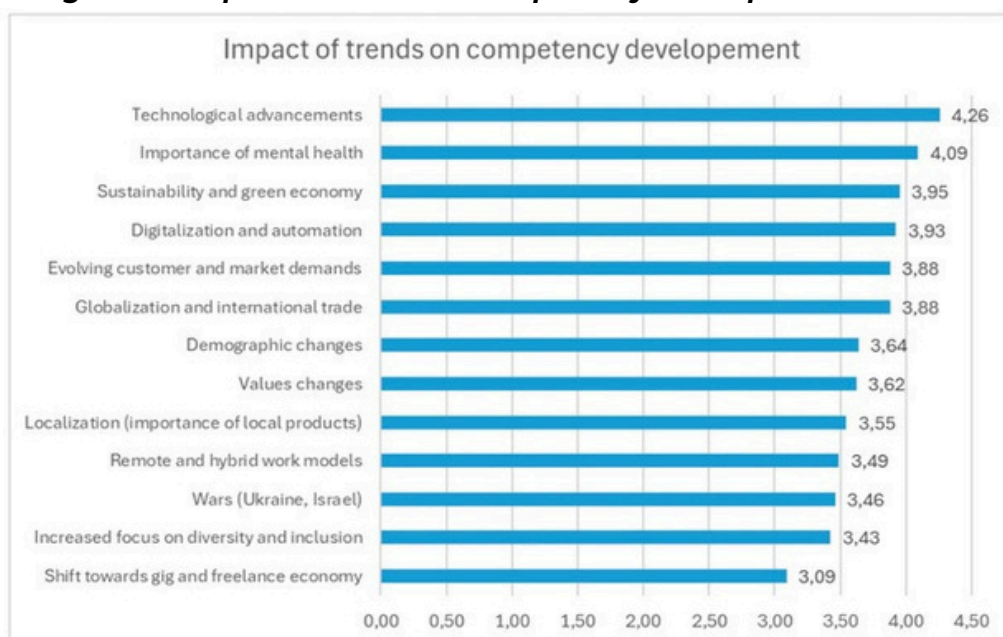
Essential Competencies for Labor Market Integration When students were asked to evaluate what are essential competencies for individuals to successfully integrate into the labour market as the most important was perceived ability to think critically and solve problems (4,36), resilience (4,22), communication 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 gaps 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).

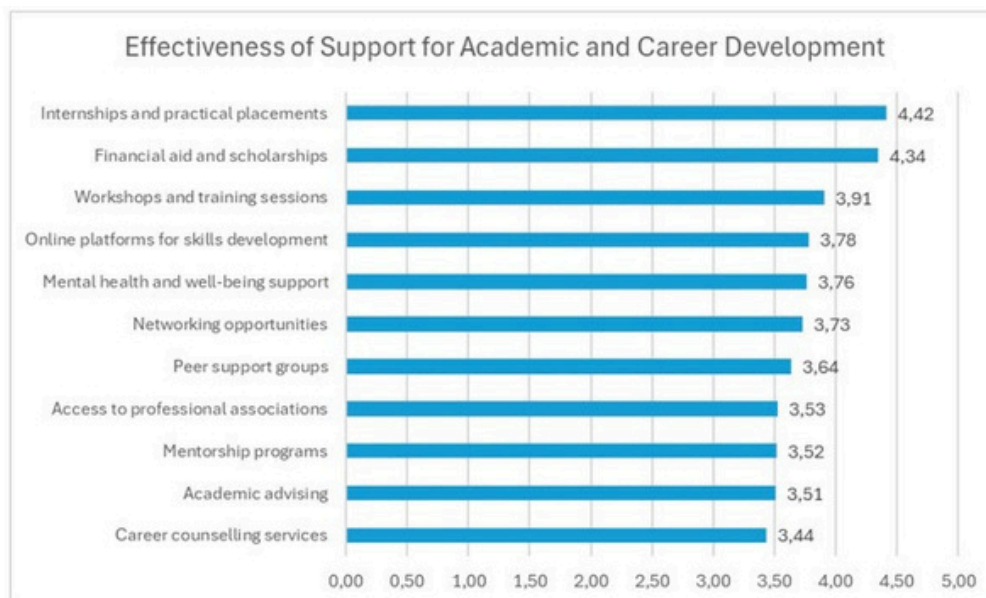
Figure 41: Preparedness in addressing competency challenges



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.

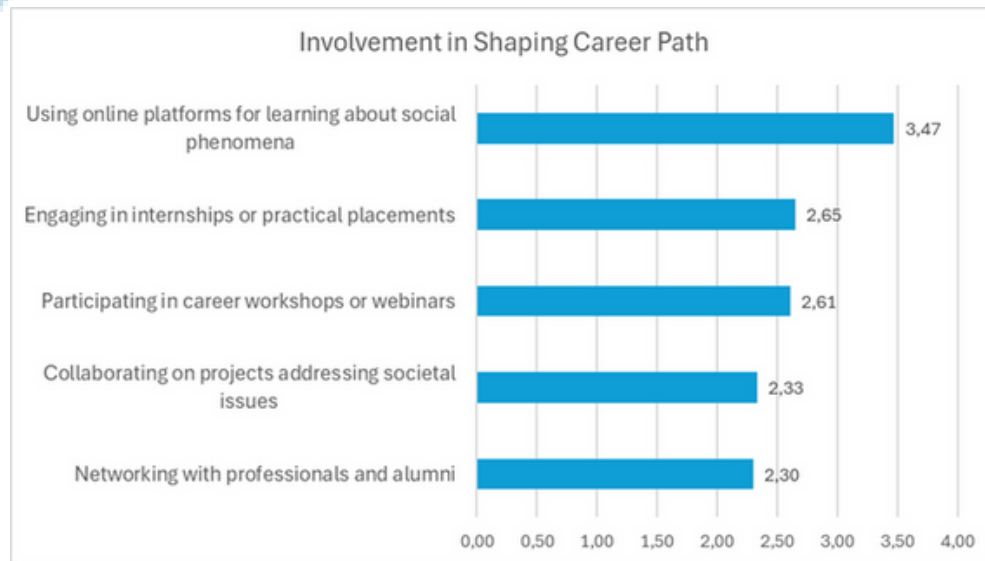
Figure 42: Effectiveness of support for Academic and Career development



When students evaluating their own involvement in shaping career paths were asked 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.

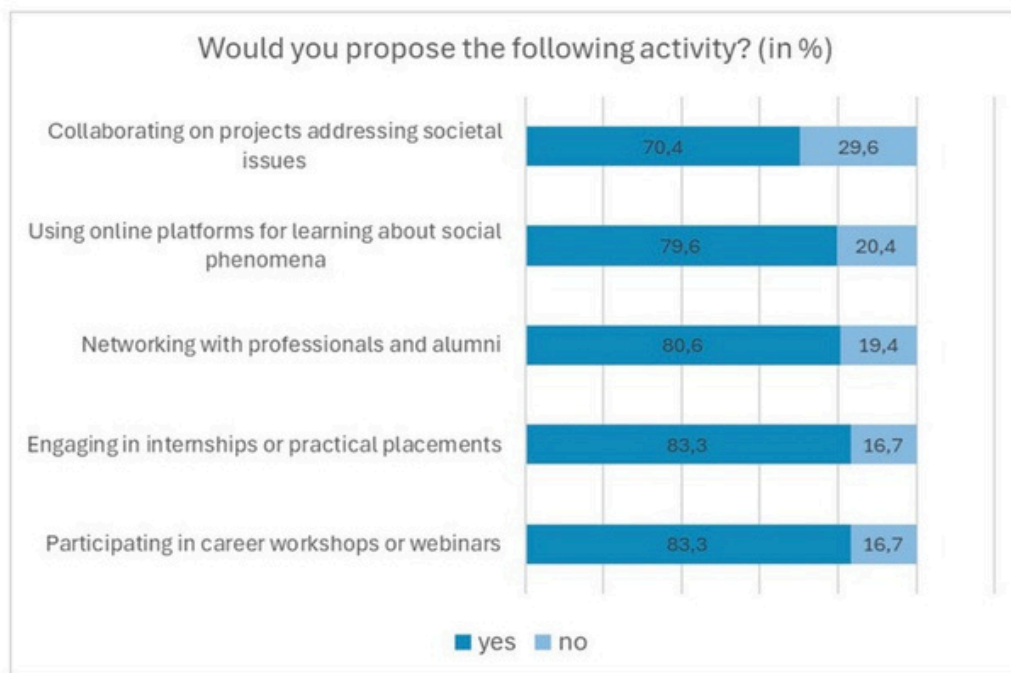


Figure 43: Involvement in shaping Career Path



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



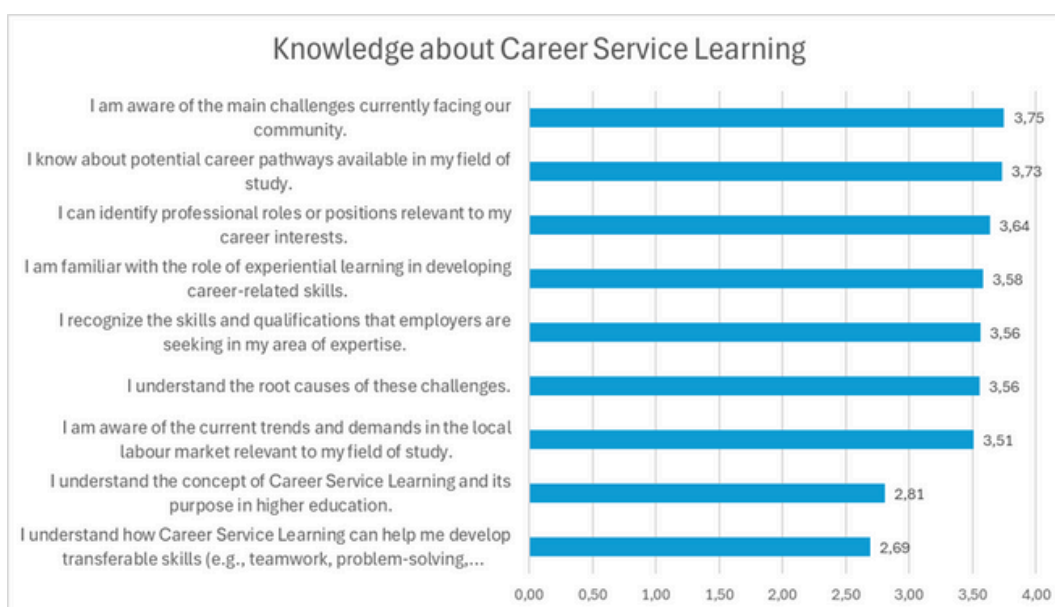
Students were asked to suggest or comment on how universities can better support their students in preparing for the labour market while addressing social needs. The following suggestions were generated based on their comments.

- **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

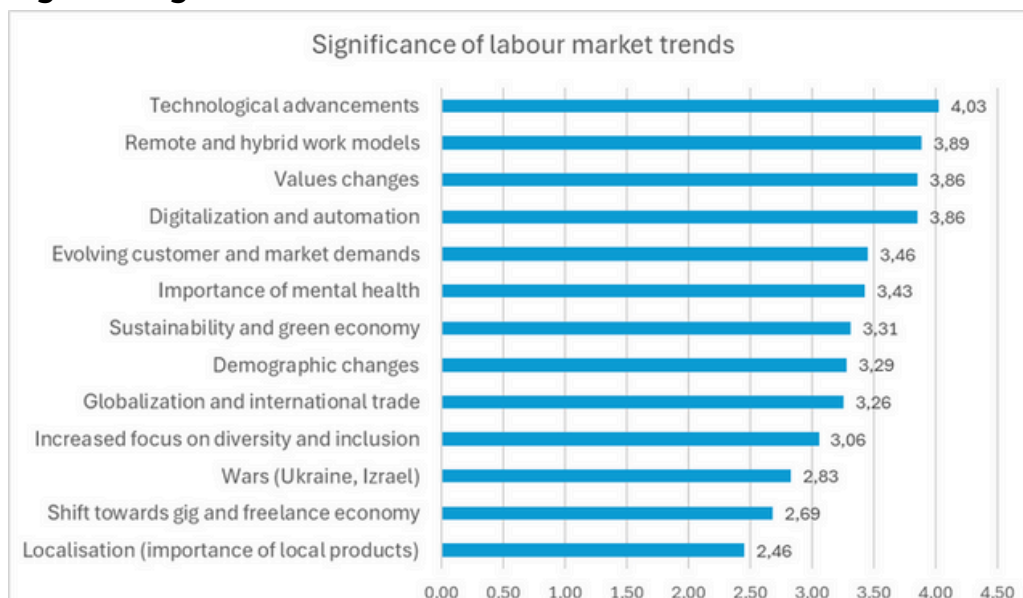


Survey on Labor Market Trends, Competencies, and Youth Employability for Stakeholders

Labor Market Trends and Challenges

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 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).

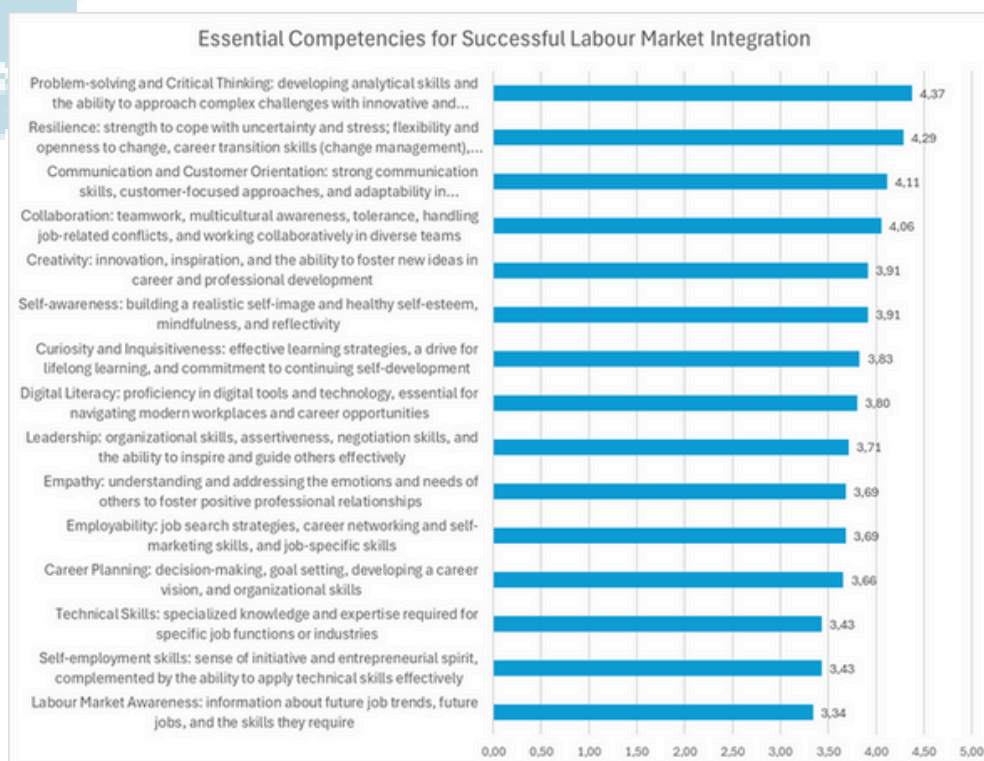
Figure 49: Challenges in Integrating New Employees into the Labour Market



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

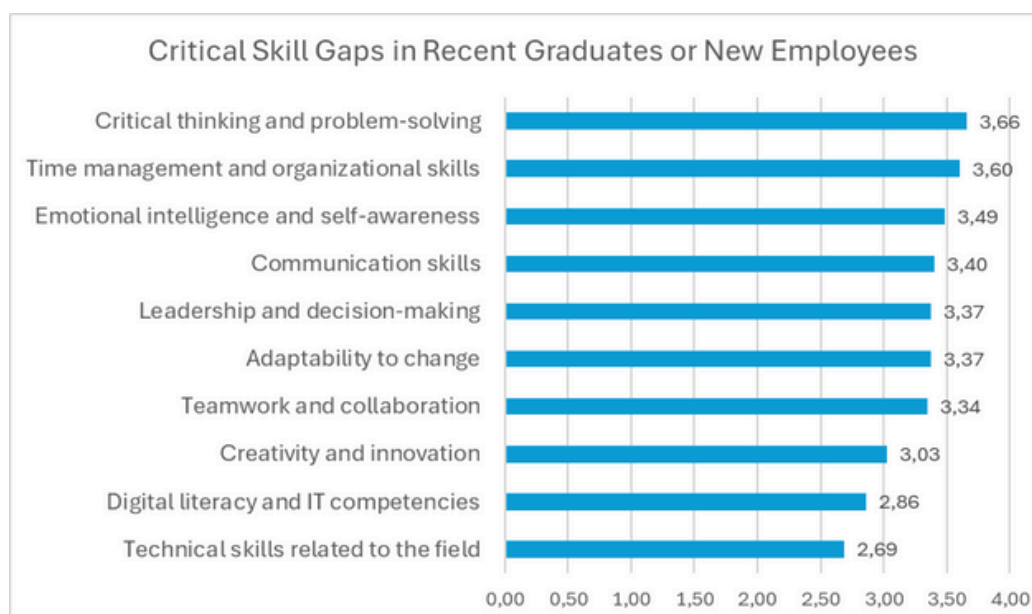


Impact of Trends on Competencies and Skill Gaps

Stakeholders

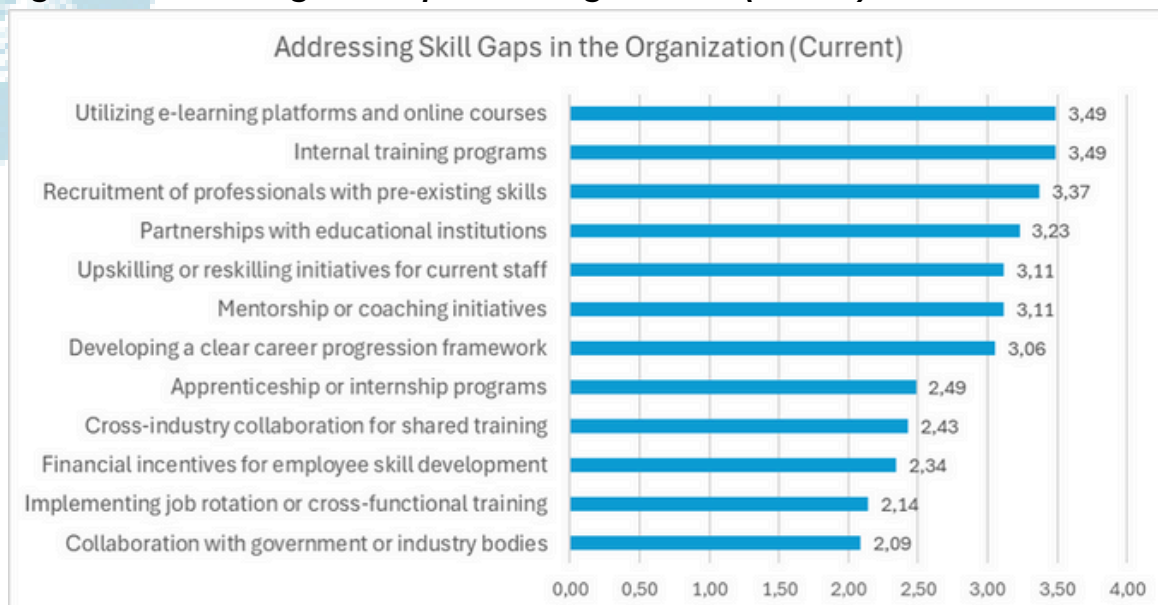
The stakeholders in the survey saw the following skill gaps in recent graduates or new employees as critical. The most perceived skill gap was in critical thinking and problem-solving skill (3,66) time management and organizational skills (3,60) and emotional intelligence and self-awareness (3,49).

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



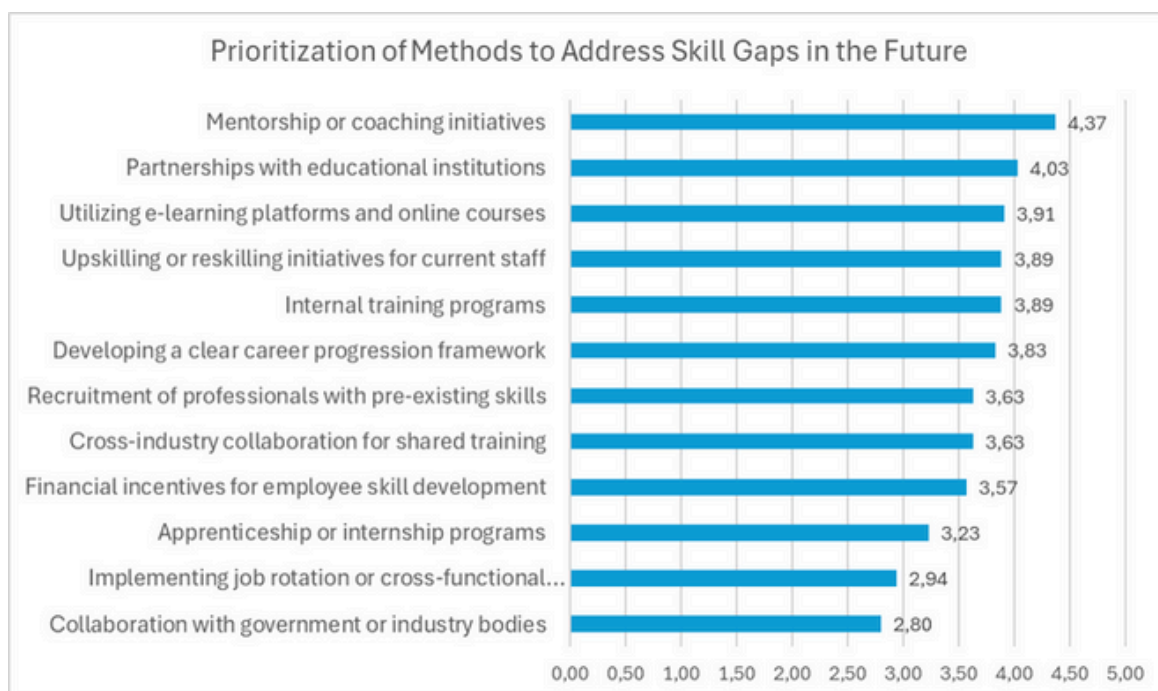
Stakeholders were asked to evaluate the current practice they use in order to address skill gaps within organizations and prioritization of the methods in the future. Among the most used practices were utilising e-learning platforms and online courses (3,49), internal training programmes (3,49) and recruiting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

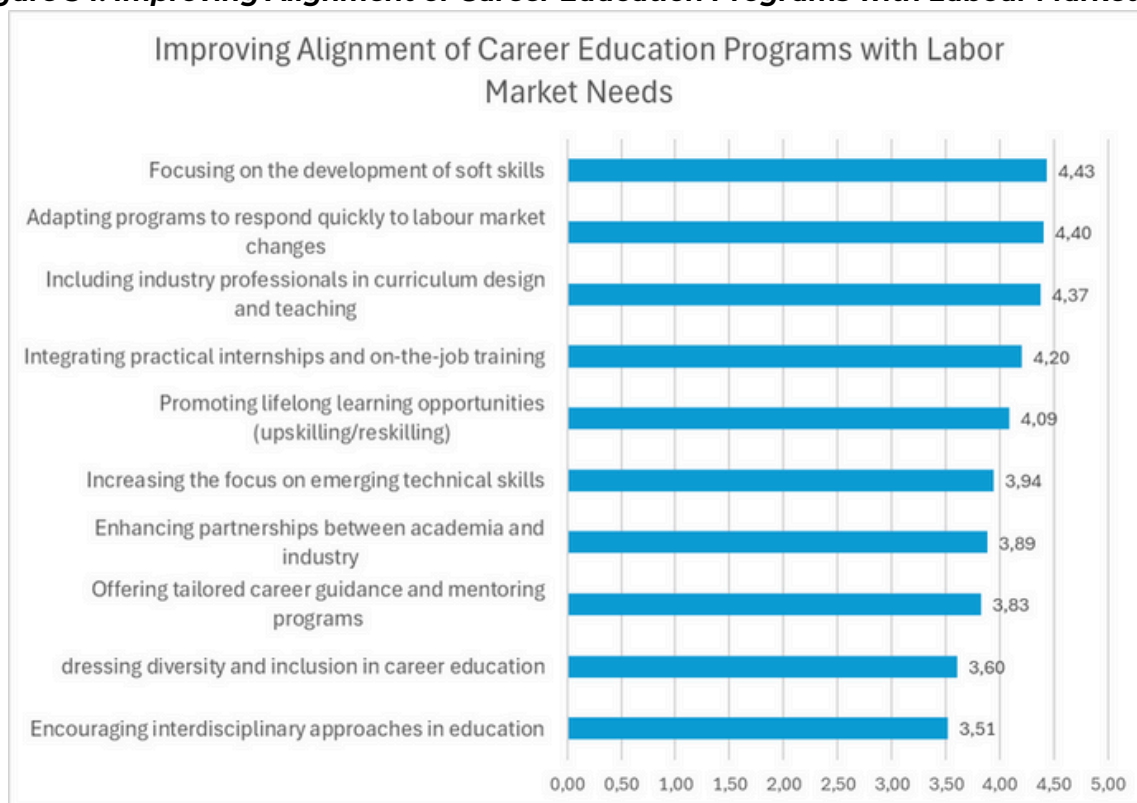
Figure 53: Prioritization of Methods to Address Skill Gaps in the Future



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

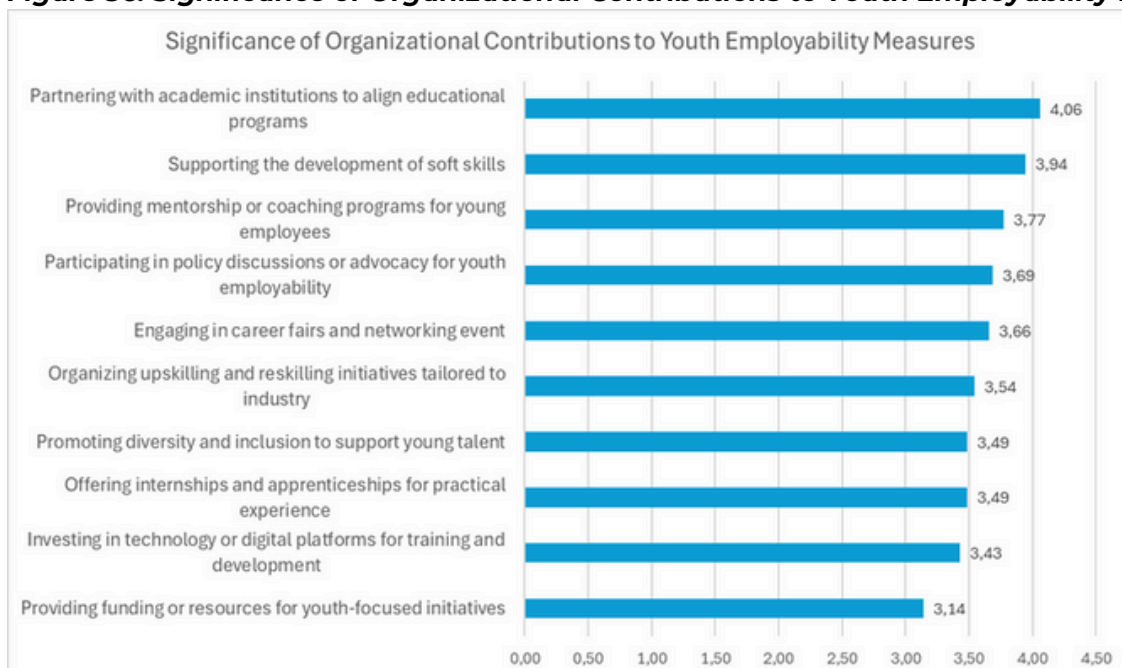
Partners were asked to rate the importance of specific and actionable measures for effectively implementing a plan to improve youth employability. Among the most important were providing structured internships and practical work experience (4,26), creating industry-aligned curricula in academic institutions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

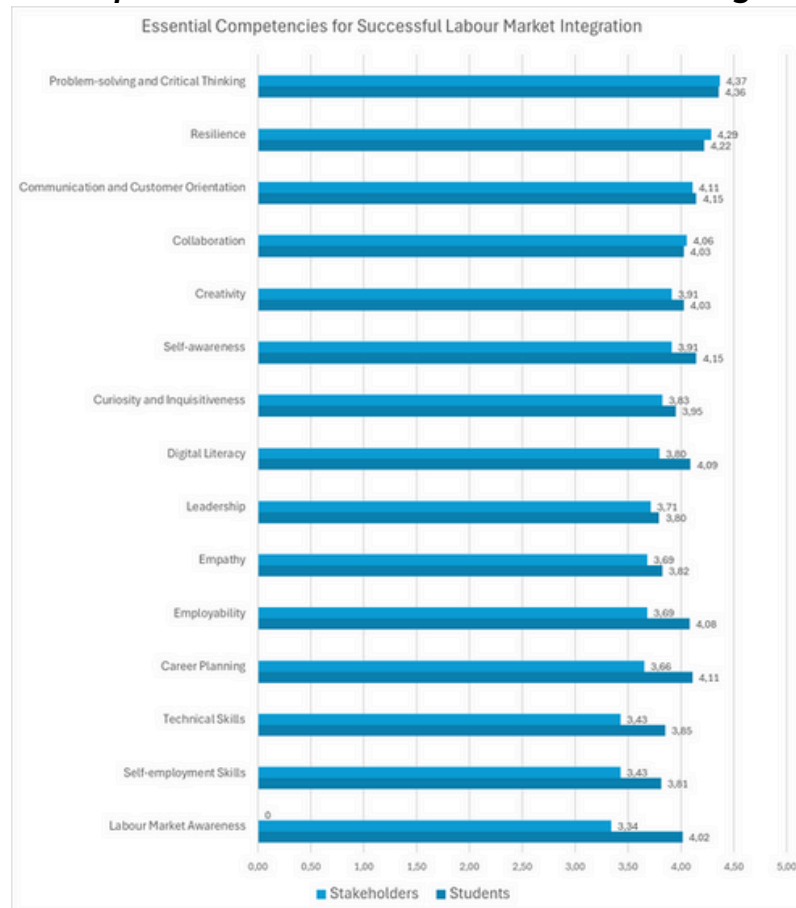
Figure 56: Significance of Organizational Contributions to Youth Employability Measures



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.
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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.

