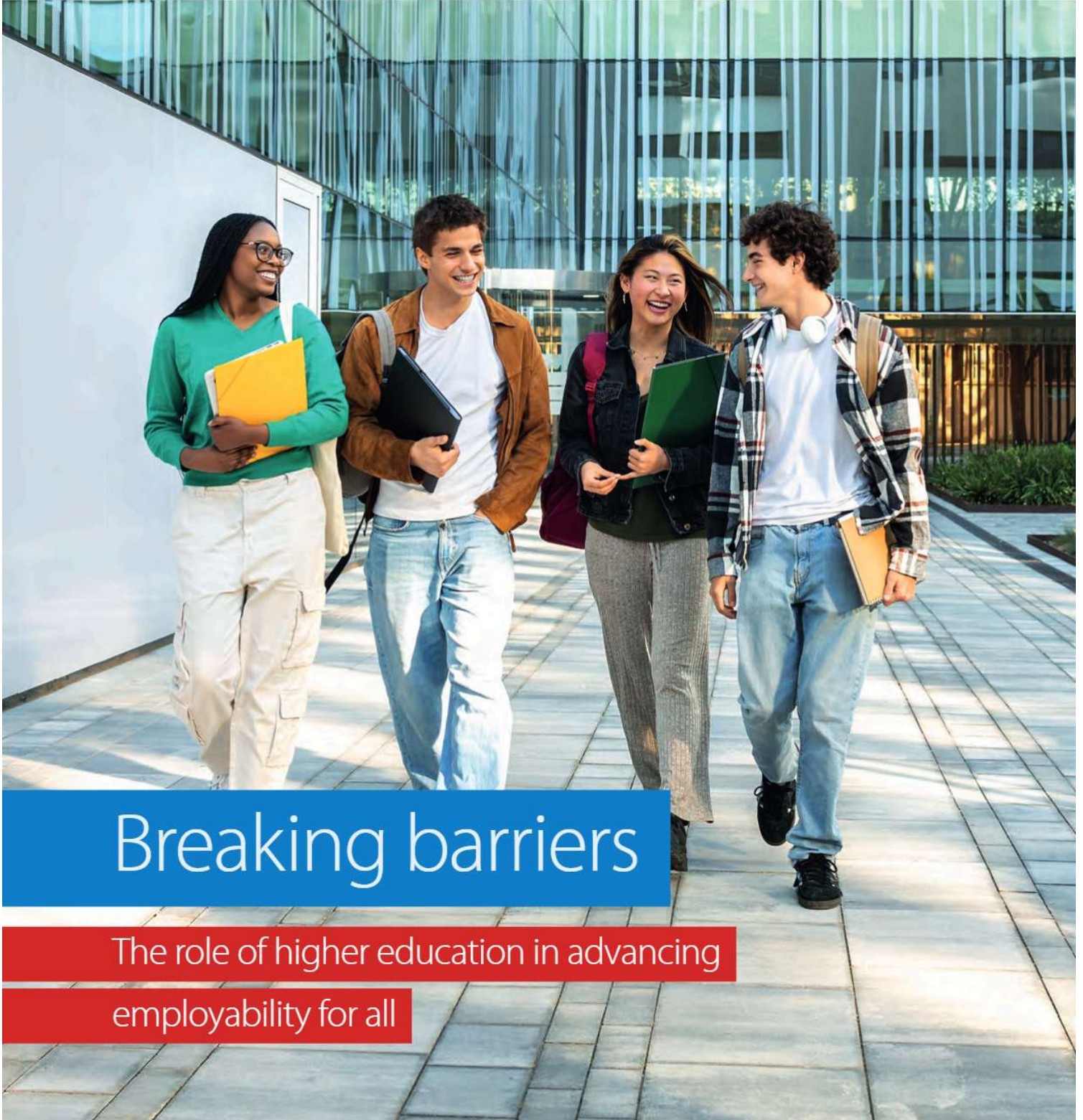




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International Institute for
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America and the Caribbean



Breaking barriers

The role of higher education in advancing
employability for all

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Foreword

Higher education institutions worldwide are increasingly called upon to prepare graduates with disciplinary knowledge and the skills, competencies, and connections needed to navigate complex labor markets. This imperative takes on particular urgency when we consider those students who have been historically underrepresented and underserved: those from low socioeconomic backgrounds, persons with disabilities, migrants and refugees, and Indigenous peoples. For these groups, higher education represents a pathway to individual advancement and a critical mechanism for addressing systemic inequalities that have persisted across generations.

While we must acknowledge that employability is but one dimension of higher education's broader purpose—which encompasses knowledge creation, cultural preservation, civic engagement, and holistic human development—we cannot dismiss its particular significance for vulnerable populations. For many equity-deserving groups, meaningful employment represents the concrete realization of higher education's promise of social mobility and economic justice.

This report provides compelling evidence that strategic interventions can significantly improve employment outcomes for underrepresented students. Through rigorous analysis of global evidence and innovative practices from institutions across the globe, it offers a foundation for evidence-based policy

development and regulatory frameworks that can transform how we approach educational equity.

I sincerely thank the principal author, Dr. Victoria Galán-Muros, and her dedicated team, whose expertise and commitment have made this report possible. Their thorough research and analysis provide invaluable insights for policymakers, institutional leaders, and practitioners. I also appreciate the many reviewers who contributed their perspectives to strengthen this work and the participating institutions that generously shared their experiences and innovations.

The challenges outlined in this report are substantial, but so are the opportunities for meaningful change. As Member States work toward fulfilling their commitments to inclusive and equitable quality education, as articulated in the UN Sustainable Development Goals (SDGs), this report offers practical pathways forward. I am confident that the evidence and recommendations presented here will inspire action and innovation as we strive to ensure that higher education fulfills its promise of advancing employability for all.

Francesc Pedró

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Executive summary

Higher education institutions (HEIs) play a crucial role in shaping equitable access to employment opportunities, yet underrepresented student groups—such as students with disabilities, refugee students, Indigenous students, and students from low socioeconomic backgrounds—continue to face systemic barriers that hinder their academic success and employment prospects. Addressing these disparities is not only a matter of social justice but also essential for fostering inclusive economic growth and social mobility.

This report examines strategies for enhancing employability among these student populations by reviewing existing research and analyzing case studies. The report is divided into several chapters. The first one highlighting the importance of student employability for HEIs and their potential role, followed by four sections each one dedicated to the status, challenges and strategies for a specific underrepresented student group, and concluding with some final remarks.

For students with disabilities, the report highlights its struggle to combine work and studies, limiting early career opportunities. The inaccessibility of housing, transportation, and caregiving needs create significant financial and logistical barriers to employment. Most career services at HEIs lack disability-specific expertise, making it difficult for students to access tailored guidance and workplace accommodations, but four successful case studies are highlighted. Institutions that integrate disability support with career services are more effective in fostering successful employment outcomes.

Refugee students face a wider range of barriers. Since overqualification and skill underutilization are common, many refugees are employed in

jobs below their qualifications. Language barriers and low participation in work-based learning opportunities hinder employment prospects. Also, discrimination based on nationality, accent, or cultural background continues to be a major challenge in hiring processes. Therefore, HEIs that recognize prior qualifications, offer language courses and targeted mentorship programs can significantly improve career prospects for refugee students.

Indigenous students face challenges in both their academic and career transition. However, they benefit from culturally safe support services, such as mentoring programs that integrate traditional knowledge. Bilingual education models and Indigenous-led HEIs improve academic engagement and career preparedness. Also, Indigenous research frameworks help create meaningful connections between students and their communities, fostering long-term employability. In addition, expanding early outreach programs that connect HEIs with Indigenous communities strengthens postsecondary participation rates.

For students from low socioeconomic backgrounds, financial constraints significantly limit access to internships, extracurricular activities, and professional networks that are crucial for career development. Many of these students lack social capital and industry connections, putting them at a disadvantage in job markets reliant on networking. However, flexible work-study models, structured career immersion experiences, and employer partnerships can bridge these gaps. Career readiness programs that integrate financial literacy and job-search skills also enhance long-term employment outcomes.

In order to support all underrepresented student groups, holistic support systems are needed — including career counseling, financial assistance, workshops, networking and mentoring – as they are all essential for bridging employability gaps. Programs integrating academic and professional development yield better long-term outcomes. A focus on emerging trends in the labor market such as digitalization or green jobs represent an opportunity for sustainable employment. However, flexible participation models are needed to accommodate diverse needs along with a consideration intersectionality. This will allow HEIs to develop tailored and effective support mechanisms that address the complex realities of students navigating multiple forms of marginalization.

In addition, partnerships between HEIs, employers, policymakers, and advocacy groups enhance resource sharing and facilitate large-scale change in employability outcomes. Employers should become strategic partners of HEIs with a systemic and integrated approach across these students' educational pathway – engaging in a wide range of activities ranging from guest lectures to inclusive internships. This approach, reminiscent of UNESCO's commitment to fostering inclusive societies through education and cultural understanding, not only empowers individual graduates but also contributes to building more resilient, equitable, and prosperous labor markets capable of embracing the diverse talents and perspectives of all members of society.

For policymakers to successfully integrate these graduates into the labor market, it is crucial to implement a cohesive, whole-of-government approach that strongly aligns education, employment, social protection, and economic development policies. Coordinated efforts across various ministries, incorporating active labor

market measures, targeted support, and robust social protection, reduce skills mismatches and underemployment while bridging the gap between education and labor market needs for these groups, particularly in emerging sectors.

By synthesizing research and real-world examples, this report offers a roadmap for HEIs and stakeholders to improve employment outcomes for underrepresented students. Moving forward, greater institutional commitment, cross-sector collaboration, and targeted policy interventions will be critical in ensuring that all students, regardless of background, have equitable access to fulfilling careers and ultimately fostering resilient labor markets and inclusive growth.

Breaking barriers: the role of higher education in advancing employability for all

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The role of higher education in student employability

Over the past two decades, governments worldwide have made significant strides in expanding access to higher education (HE). This progress is reflected in the increase in gross enrollment rates, which rose from 19% in 2000 to 43% in 2023 (UIS, n.d.a), contributing to SDG4 (quality education for all). However, expanded access alone does not ensure student success in terms of graduation and employment outcomes. Many students who enter HE do not complete their studies, as evidenced by the gross graduation ratio increasing at a much slower pace—from 17% in 2000 to only 26% in 2023 (UIS, n.d.b).

Beyond graduation, securing quality employment remains a challenge, particularly in contexts where economic growth has not kept pace with HE expansion. This is especially evident in low- and middle-income countries, where labor market demand is insufficient to absorb the growing number of graduates. In such contexts, HE expansion has, in some cases, contributed to overqualification, higher unemployment rates, and a scarcity of quality formal employment opportunities (ILO, 2019). These labor market misalignments reduce the economic benefits typically associated with HE, including increased tax revenues, enhanced productivity, and reduced reliance on social welfare systems. For instance, when graduates are unable to secure employment that aligns with their skills and qualifications, they are less likely to obtain higher-paying positions, ultimately affecting their contributions to the economy through taxation and consumption (Bouckaert et al., 2024). As such, HE systems should not only focus on increasing access but also on enhancing graduation outcomes and facilitating smooth transitions into the labor market, contributing towards both SDG8

(decent work and economic growth) and SDG10 (reducing inequalities).

Recognizing the critical role of HE in employability, governments around the world have increasingly incorporated workforce readiness into national HE policies. Evidence from the HE Policy Observatory indicates that 70% of countries now explicitly include employability as a key objective in their HE strategies (UNESCO IESALC, n.d.). This trend reflects the growing recognition that HE attainment is closely linked to improved employment prospects. For example, across OECD countries, 87% of tertiary-educated adults (aged 25-64) are employed, compared to 77% of those with an upper secondary or post-secondary non-tertiary qualification, and only 60% of individuals with lower levels of education (OECD, 2024).

Moreover, higher levels of education attainment are strongly associated with increased earnings, reinforcing the return on investment for individuals. Across OECD countries, young adults (aged 25–34) with tertiary education earn 39% more than those who have only completed upper secondary education (OECD, 2024). A similar trend is observed in the United States, where employment rates decrease with lower educational attainment, while weekly earnings rise as education levels increase. Workers with a bachelor's degree earn an average of US\$1,432 per week, compared to US\$853 for those with only a high school diploma (U.S. Bureau of Labor Statistics, 2023).

HE also plays a broader role in socio-economic mobility and workforce development, ensuring that graduates possess the necessary skills to adapt to evolving job market demands and emerging sectors. By equipping individuals

with relevant knowledge and competencies, HE enables upward mobility, improved job stability, and enhanced quality of life (Bouckaert et al., 2024).

For the purposes of this report, employability is defined as the “portable competencies and qualifications that enhance an individual’s capacity to make use of the education and training opportunities available in order to secure and retain decent work, to progress within the enterprise and between jobs, and to cope with changing technology and labor market conditions” (ILO, n.d.). This definition underscores the importance of lifelong learning, skills adaptability, and responsive HE policies in fostering employment opportunities for graduates.

The importance of student employability for HEIs

Higher education institutions (HEIs) play a pivotal role in equipping graduates with the skills and knowledge necessary to navigate an evolving labor market. By aligning educational programs with industry demands, HEIs contribute to workforce development, ensuring that graduates not only achieve academic success but also secure meaningful and sustainable employment. Furthermore, HEIs foster critical employability competencies, such as autonomy, collaboration, lifelong learning, and self-reflection, which are essential for workforce adaptability in a globalized economy. In doing so, HEIs support national strategies aimed at broadening social participation and reducing barriers to employment, contributing to inclusive economic growth and social mobility (Bonnard, 2020; Cheng et al., 2022; Donald et al., 2018).

However, despite their central role in promoting employability, HEIs face significant challenges in ensuring that graduates successfully transition

into the labor market. One key issue is skills mismatch, where graduates’ qualifications and competencies do not align with labor market needs. This mismatch limits employment opportunities and affects economic productivity. For example, in 2020, Italian companies reported that 30% of job vacancies were expected to remain unfilled, with critical shortages in physics and chemistry, where skill gaps exceeded 65%. Similarly, in fields such as data science, data analysis, and digital marketing, mismatches were estimated at approximately 40% (Predovic & Lawrence, 2020).

Additionally, technological advancements are rapidly reshaping labor market demands, requiring HEIs to continuously adapt their curricula. Yet, in most cases, academic programs do not evolve at the same pace as industry needs, leaving graduates unprepared for emerging job roles. A notable example is the persistent shortage of digital specialists across all EU countries, particularly in the field of cybersecurity, where demand significantly outstrips the number of qualified professionals (EIT, 2022).

Beyond skills mismatches, overqualification remains a major concern, particularly in economies with limited specialized job opportunities. This can result in underemployment, job dissatisfaction, and wage stagnation. For instance, in South Africa, graduate unemployment reached 33.6% in 2023, illustrating the disconnect between HE expansion and labor market absorption (Msuya, 2023). Even among employed graduates, many accept temporary, low-paying jobs that do not require a university degree (Hrich, 2021; Otte, 2024). In the United Kingdom, only 60.4% of graduates secured high-skilled employment, while 26.4% worked in medium- or low-skilled jobs, and 5.5% remained unemployed (Otte, 2024).

The rising cost of HE further complicates employment transitions, as student debt burdens can outweigh the financial benefits of earning a degree, particularly in low-paying sectors. In the United States, student loan debt reached US\$1.6 trillion by the end of 2023, making it the third-largest category of household debt (Peterson Foundation, 2024). This financial strain limits graduates' career mobility, as many are compelled to accept low-wage positions to meet debt obligations, rather than pursuing opportunities with greater long-term earnings potential (Vaghul, 2015). For instance, while the unemployment rate for recent U.S. graduates (aged 22–27) was approximately 4.3% in 2023, the underemployment rate was significantly higher, at 40%, indicating that a large proportion of graduates were working in jobs that did not require a HE qualification (Federal Reserve Bank of New York, n.d.).

Actions of HEIs to promote employability

Given the evolving labor market landscape, HEIs must ensure that the education they provide translates into meaningful and sustainable employment opportunities. Academic environments often differ significantly from the realities of the professional world, and HEIs cannot directly guarantee job placement or employment security (Ali & Jalal, 2018). Therefore, it is essential for HEIs to critically assess and implement targeted initiatives that actively support student employability, equipping graduates with the skills, experiences, and networks necessary for long-term career success.

To address these challenges, HEIs are increasingly adopting practical, skills-based approaches, integrating entrepreneurship, industry engagement, and career development

services into their programs. One effective strategy adopted by HEIs is the implementation of cooperative education programs, commonly referred to as “co-op” or work-study programs. These programs provide students with hands-on work experience, career exploration opportunities, and enhanced employability, ensuring that graduates enter the labor market with practical, job-relevant skills (Sanchez, 2024).

Furthermore, HEIs provide an academic setting that cultivates soft skills, such as communication, problem-solving, and teamwork—competencies that are widely recognized as essential by employers (Malik & Ahmad, 2020). For instance, the incorporation of entrepreneurship education into curricula has been shown to significantly improve employability by nurturing innovative skills and an entrepreneurial mindset, both of which are highly valued in the labor market (Wei et al., 2023). These efforts not only enhance graduate readiness but also foster resilience and adaptability, which are crucial in today's dynamic labor market (Donald et al., 2018).

Beyond classroom instruction, HEIs serve as centers for innovation and professional networking, connecting students with industry leaders and potential employers. By fostering entrepreneurial mindsets and facilitating engagement with the private sector, HEIs help develop a workforce that is skilled, adaptable, and prepared for the demands of a knowledge-based economy (Walsh & Powell, 2018).

Career services in HEIs play a critical role in bridging the gap between academic learning and employment, offering structured guidance to help students align their career aspirations with their skills, interests, and academic background (ILO & ETF, 2021; OECD, 2004). HEI

career services typically organize a range of initiatives, including:

- **Career guidance and counseling** to help students navigate job market demands and develop tailored career strategies.
- **Interview preparation workshops**, career fairs, and networking events that connect students with potential employers.
- **Internship and placement programs** designed to provide practical exposure to the workplace (Davis et al., 2025).

However, despite their importance, career services in many institutions remain insufficiently integrated into the broader academic experience. Faculty and career services are often disconnected, as academic staff may not systematically incorporate career-oriented learning into their teaching practices or actively promote the employment resources available to students. Also, career services offices often operate with limited staff and funding, reducing their capacity to reach all students effectively. In addition, many HEIs lack strong engagement with industry stakeholders, limiting their ability to provide students with up-to-date labor market insights and job placement support. (Davis et al., 2025). These limitations particularly affect underrepresented students.

Employability in HE for underrepresented students

As HE policies increasingly prioritize employability, it is essential to acknowledge the diverse needs and challenges faced by underrepresented student populations. Students from low-income backgrounds, migrants, Indigenous communities, women, first-generation college attendees, persons with disabilities, and other marginalized groups often encounter additional barriers in accessing career

opportunities offered by HEIs. Without targeted interventions, these students do not fully benefit from employability initiatives, thereby reinforcing disparities in workforce outcomes.

Several interrelated challenges contribute to unequal access to employment opportunities among underrepresented students:

- **Economic constraints:** Financial limitations may prevent students from participating in unpaid internships, career workshops, or networking events, which are often essential steppingstones to employment.
- **Social and cultural biases:** Discriminatory hiring practices, unconscious bias in recruitment, and limited professional networks may restrict access to high-quality employment for marginalized groups.
- **Institutional and workplace barriers:** Lack of accommodations, inaccessible infrastructure, and rigid employment structures can create additional challenges for students with disabilities or those with caregiving responsibilities.

Many students experience multiple, overlapping forms of discrimination, known as intersectionality, as factors such as race, gender, socioeconomic status, and disability collectively shape their employability prospects. Despite well-intentioned efforts, most HEIs do not consider intersectionality for the tailored design of support mechanisms and policies, so they inadvertently leave behind the most marginalized students and perpetuate inequalities.

Conversely, students from higher socioeconomic backgrounds remain overrepresented in prestigious academic programs that serve as gateways to high-skilled, high-paying jobs (Bonnard, 2020). These disparities highlight the need for inclusive policies that actively support

underrepresented students in navigating an increasingly complex labor market. These policies should consider the opportunities that the digitalization of the labor market and emerging sectors around the green economy could bring to these underrepresented students

To bridge existing gaps, some HEIs are adopting holistic and equity-driven approaches that go beyond conventional career services. Key strategies include:

- **Financial support initiatives:** Expanding scholarships, stipends, and paid internship opportunities to mitigate economic constraints.
- **Targeted mentorship and career guidance:** Establishing mentorship programs that connect underrepresented students with diverse role models and industry professionals.
- **Institutional partnerships with inclusive employers:** Collaborating with private and public sector organizations committed to equitable hiring and workplace diversity.
- **Advocacy and structural reform:** Advocate for policies that eliminate systemic barriers in the labor market, such as flexible work arrangements, disability accommodations, and anti-discrimination measures in hiring processes.

To do this, HEIs should follow data-driven approaches by identifying the specific underrepresented groups within their areas of influence, collecting demographic and employability data, and designing targeted employability programs that address regional and institutional disparities in their particular context. These can be done in cooperation with employers, policymakers or both. This way, HEIs not only expand the employability outcomes of their students but also contribute to broader systemic change. Through sustained

collaboration, the three actors can create a more equitable world of work—one where all graduates, regardless of background, have access to meaningful, dignified employment and opportunities to thrive.

In response to these challenges, the UNESCO Employability for All Project, funded by Lumina Foundation, aims to enhance employability for underrepresented students by exploring the current situation, key challenges and emerging practices to support four commonly recognized underrepresented student groups:

- Students from low socioeconomic backgrounds (See Chapter 1)
- Individuals with disabilities (See Chapter 2)
- Migrants and refugees (See Chapter 3)
- Indigenous populations (See Chapter 4)

A twin report entitled '[Pathways to Success: how universities are boosting career opportunities for underrepresented students](#)' complements this one by providing the full 15 case studies of innovative university-led employability programs. Together, these documents offer actionable insights for policymakers, institutions, and employers seeking to create more inclusive pathways to employment for underrepresented students.

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1. Low socioeconomic status students

Introduction

HE is widely recognized as a powerful driver of social mobility, yet students from low-socioeconomic backgrounds (low-SES students) continue to face substantial barriers in accessing, completing, and fully benefiting from it. Despite significant increases in global HE enrollment over the past two decades (UIS, n.d.), students from higher-income backgrounds remain significantly more likely to pursue and complete tertiary education than their low-income peers (Reber & Smith, 2023). In Bolivia, for example, only 1% of the poorest students access HE, compared to 66% of the wealthiest. Similar disparities exist in Panama, Mongolia, and, to a lesser extent, in certain European countries such as Luxembourg (UNESCO, 2022).

Academic attainment

Despite a general increase in the enrolment of low-SES students in HE, they are more likely to enroll in public two-year colleges and less selective four-year institutions (Fry & Cilluffo, 2019, Reber & Smith, 2023) or undertake certificate or vocational programs, a trajectory that tends to yield lower lifetime earnings (Carnevale et al., 2015). In the United States, for example, over 50% of low-SES students are enrolled in two-year programs, compared to only 11.3% at private non-profit four-year institutions (Taylor & Turk, 2019). These enrollment patterns have long-term implications for economic mobility, as higher-income students benefit disproportionately from access to institutions with stronger labor market connections and higher post-graduation salaries (Reber & Smith, 2023).

For those who manage to enroll, financial hardship remains a key barrier to academic success. Even with financial aid, many low-SES students struggle with living expenses, which

can contribute to heightened stress, decreased academic performance, and higher dropout rates (Broton & Goldrick, 2016). In the United States, for instance, only 11% of students living below the poverty line complete their degree within six years, compared to significantly higher completion rates among wealthier students (Lumina Foundation, n.d.). Similarly, only 9% of individuals from the lowest income quartile earn a bachelor's degree by age 24, compared to 77% from high-income families (Lumina Foundation, n.d.).

Many low-SES students are compelled to work part-time or even full-time to finance their education. In the United States, for example, 25% of working learners are both enrolled in college and employed full-time, with 40 percent of undergraduates and 76 percent of graduate students working at least 30 hours a week. This leaves limited time for academic engagement and increasing their likelihood of dropping out (Neyt et al., 2019).

Rising tuition costs further exacerbate the issue: in the United States, where tuition fees are some of the highest worldwide, 38% of students balancing work, financial, or family responsibilities drop out within their first year (Lumina Foundation, n.d.). However, high tuition fees are not the only reason why HE students engage in paid work, since there are many associated costs to undertaking HE beyond tuition fees. The Nordic region is an example of a territory where HE is free and students receive a study allowance, but a large share of students work to gain financial independence and move out of their parental homes (OECD, 2015).

Furthermore, low-SES students are disproportionately employed in sectors such as food service, retail, and administrative

support—fields that provide limited career progression opportunities and do not align with high-demand industries such as STEM, business, or healthcare (Carnevale et al., 2015). While 14% of higher-income students gain work experience in these lucrative fields during their studies, only 6% of low-SES students secure such opportunities (Carnevale et al., 2015).

Transition to employment and career advancement

Beyond financial constraints, low-SES students often lack access to career-building opportunities that are crucial for post-graduation employment. Internships, networking events, and mentorship programs—often key steppingstones to high-quality employment—are less accessible to students from disadvantaged backgrounds, resulting in greater challenges in securing desirable positions after graduation (Carnevale & Smith, 2018). Unpaid internships, for example, remain a common pathway into competitive fields, yet financial constraints prevent many low-SES students from participating in these opportunities (The Chronicle of Higher Education, n.d.). Additionally, many lack the professional networks and social capital that wealthier students acquire through family and institutional connections.

In addition, employers increasingly prioritize candidates with transversal skills, such as communication, teamwork, adaptability, and leadership (OECD, 2020). While some HEIs have introduced innovative teaching approaches—such as problem-based and project-based learning—low-SES students often experience lower self-confidence and reduced engagement with these opportunities, further limiting their employability (Wang et al., 2022).

Furthermore, disparities in career knowledge and employment expectations contribute to

post-graduation wage gaps. Students from elite institutions tend to have a clearer understanding of labor market trends and salary expectations (Baker et al., 2018), whereas low-SES students are more likely to misjudge their job prospects and earning potential (Baker et al., 2018; Parks-Yancy, 2012). In addition, they are less aware of effective strategies to achieve their professional goals, such as the career resources, mentorship opportunities, and professional networking offered at their HEIs (Parks-Yancy, 2012).

Additionally, financial pressures often force low-SES students to prioritize immediate income over long-term career planning, leaving them with little time to explore extracurricular activities or internships that could enhance their employability. As a result, low-SES graduates start their careers earning only 80% of what their wealthier peers make, with the gap widening to 70% by mid-career (The Chronicle of Higher Education, n.d.). However, as digital and green economies continue to expand, employers are increasingly valuing practical, skills-based training over traditional credentials, allowing low-SES graduates to access career opportunities previously limited by financial constraints (World Bank, 2022)

Strengthening employability pathways

To address these challenges, an emerging number of HEIs are starting to implement targeted interventions that support both academic success and career readiness among low-SES students. These includes:

- **Offering personalized career support:** In some HEIs, career counseling services are being tailored to the unique challenges faced by low-SES students, including limited networks and financial constraints. More HEIs are offering tailored career coaching,

professional development workshops, and networking opportunities to help these students navigate the labor market.

- **Expanding access to paid internships:** HEIs in collaboration with employers are developing paid internship programs at least for students from disadvantaged backgrounds, ensuring that they can gain relevant work experience without financial hardship.
- **Enhancing financial and career resources:** Some career centers are working together with financial aid offices to provide grants for professional development, covering costs related to job searches, such as travel for interviews or professional certification fees.
- **Offering mentorship and alumni networks:** More HEIs are establishing structured mentorship programs that connect low-SES students with alumni and industry professionals, providing industry knowledge, guidance on career advancement and expanding professional networks.
- **Offering shorter and low-cost** or free digital upskilling opportunities such as online courses, microcredentials, and coding bootcamps, which presents new pathways into high-demand sectors like information technology, data analysis, and e-commerce .

By implementing these measures, HEIs can play a crucial role in mitigating disparities and ensuring that students from all socioeconomic backgrounds have equitable access to quality employment opportunities after graduation.

This chapter will analyze four case studies of HEIs that have successfully implemented initiatives to enhance the employability of low-SES students. These cases illustrate effective strategies for addressing the barriers outlined above and provide actionable insights for policymakers,

institutions, and stakeholders committed to promoting inclusive employability pathways.

Analysis of three case studies

This section analyzes some key aspects of three case studies of HEIs that successfully support the employability of low-SES students. The full version of these cases can be found in the twin publication [‘Pathways to Success: how universities are boosting career opportunities for underrepresented students’](#).

The University of Edinburgh’s Insights Programme in the United Kingdom, part of its wider Widening Participation strategy, connects low-SES students with alumni through workshops, networking sessions, and fully funded workplace visits. This initiative aims to demystify professional environments, build career confidence, and expand students’ industry connections.

At Royal Melbourne Institute of Technology (RMIT) in Australia, the Work Integrated Learning Grant helps students participate in unpaid work placements by alleviating financial burdens. The Get Career Ready Week program builds essential career knowledge through intensive bootcamps, while the Mentoring Women in STEM mentoring initiative fosters career readiness and professional connections for female students in STEM fields.

In the United Kingdom, the University of Manchester’s Work Experience Bursary provide financial support for low-paid or unpaid work placements and the Student Experience Internships offers paid work experiences, ensuring students can gain valuable experience without economic hardship. The Global Graduates program extends this support internationally by funding student travel to meet alumni across different industries, helping to broaden professional perspectives.

a. Rationale and activities

The initiatives at the University of Edinburgh, RMIT, and the University of Manchester were established to address critical gaps in career readiness among low-SES students. The three HEIs, identified the most common obstacles encountered by these students in their context, such as limited financial resources, weak professional networks, and reduced confidence in navigating career pathways. Then they developed structured tailored programs that offer financial assistance, networking opportunities, and skill development to improve employability outcomes for low SES students.

Each initiative incorporates a diverse set of activities designed to enhance career readiness among low-SES students. A common feature across all three universities is the emphasis on skill-building workshops, networking opportunities, and practical work experience.

The skill-building workshops cover essential topics for career success. For example, The University of Edinburgh's Insights Programme offers professional development sessions covering topics such as LinkedIn optimization, networking, and workplace etiquette. Student confidence in networking increased significantly, from 20% to over 80%, after participating in the program. RMIT's Get Career Ready Week includes intensive career bootcamps that provide students with practical tools for workforce entry, leading to consistently high engagement rates.

These initiatives also promote networking opportunities by engaging with industry professionals and alumni. The Insights Programme at Edinburgh organizes Immersion Week visits, allowing students to meet alumni at their workplaces and gain first-hand exposure to professional environments. Manchester's Global Graduates program connects students with alumni in international cities, fostering global

career perspectives and encouraging returning participants to become alumni hosts, ensuring program sustainability.

Hands-on practical career experiences are also part of these programs and financial support for work placements is a crucial element in improving access to these experiences. RMIT's Work-Integrated Learning Grant provides funding for unpaid placements, achieving a 96% completion rate among low-SES students. Manchester's Work Experience Bursary similarly enables students to undertake work opportunities that would otherwise be financially inaccessible. Additionally, University of Manchester's Student Experience Internships allow students to collaborate with academics at the university, fostering a deeper understanding of research careers and offering an opportunity to directly explore these careers.

In addition, tailored guidance is provided in order to enhance students' professional confidence and specifically supporting their career development. This can be done through one-on-one mentoring. For example, RMIT's Mentoring Women in STEM initiative connects low-SES female students with industry professionals, helping to close gender gaps in science, technology, engineering and mathematics (STEM) career readiness and advancement.

b. Innovative approaches

These programs employ creative strategies to address the specific needs of low-SES students, ensuring tailored and effective support.

Edinburgh's Insights Programme builds independence and resilience by encouraging students to navigate new environments independently through group travel experiences only facilitated by PhD candidates. These are particularly valuable skills for students

with limited prior exposure to international and professional settings. The Insights Lab workshops further strengthen networking skills in an interactive and supportive setting.

Innovatively integrating financial support with career development can be seen in the RMIT's WIL Grant. It links financial aid with structured career development activities, requiring students to complete career development tasks such as résumé updates and supervisor feedback reports. This dual approach simultaneously enhances two barriers of low-SES students, practical experience and employability skills.

Expanding career horizons is another innovative approach of these initiatives. Manchester's Student Experience Internships offer a distinctive learning-through-research model, providing students with direct insights into academic careers through project collaborations. Additionally, the Global Graduates program leverages alumni philanthropy to facilitate international networking opportunities and exposure to diverse professional environments, while expanding students' global career awareness and global mindset.

c. Main challenges

Despite their positive impact, these initiatives face common challenges:

Resource limitation is a challenge across the three HEIs, as demand for these initiatives often exceeds available funding and staff capacity. For example, Manchester's bursary programs must prioritize applicants due to high demand, and similar constraints affect RMIT's WIL Grant and Edinburgh's Insights Programme.

Engagement barriers of students are also common, and the lack of confidence and / or experience are reasons for this low engagement. For instance, RMIT's Mentoring Women in STEM

program faced lower-than-expected attendance rates in their first edition, and Edinburgh had to refine its outreach strategies to ensure engagement from students genuinely interested in the developmental aspects of the program.

There are also financial sustainability concerns. Many of these programs, including Manchester's Global Graduates and Edinburgh's Insights Programme, rely on alumni donations, making long-term sustainability uncertain. Additionally, managing the administrative aspects of funding disbursement and program logistics remains a significant challenge for staff at the three HEIs.

d. Success factors and recommendations

The success of these programs can be attributed to several factors, such as collaborative institutional efforts. Coordinating resources across HEI departments—such as career services, alumni networks, and widening participation teams—enhances program efficiency and reach. For example, Edinburgh's Insights Programme benefits from the combined expertise of its Careers Service, Development and Alumni, and Widening Participation teams. Tailored support, such as one-on-one mentoring and PhD facilitation, are also key to ensure that students receive the guidance they need. And innovative networking models, like RMIT's mentoring initiatives and Manchester's alumni connections, effectively address the social capital gap faced by low-SES students.

Some key lessons highlighted by the managers of these initiatives are related with the importance of feedback-driven adaptations. They continuously refine programs based on student feedback, such as Edinburgh's shift to second-year students and its emphasis on interactive activities, which were direct responses to participant suggestions. Alumni engagement for sustainability was also

mentioned as pivotal lesson learnt. Many former participants return as mentors or program hosts, ensuring a sustainable cycle of support. Alumni-driven networking initiatives have proven effective in bridging the social capital gap for low-SES students.

To develop, strengthen and scale similar initiatives, the managers of these initiatives recommend other HEIs to:

- **Diversify funding sources:** Seek corporate sponsorships and government grants to reduce reliance on alumni donations.
- **Enhance accessibility:** Expand hybrid participation options, as seen in RMIT's Get Career Ready Week, to accommodate students with different schedules.
- **Refine outreach strategies:** Improve marketing and application processes to maximize engagement from eligible students, as proven by Manchester's expanded income thresholds for its bursary program.
- **Integrate career support of low-SES students into general career services:** Embed these initiatives into broader career services can help enhance their scalability and impact.

These case studies illustrate the effectiveness of targeted, innovative programs in addressing disparities in career readiness among low-SES students. By implementing strategic financial support, networking opportunities, and hands-on career experiences, HEIs can play a transformative role in promoting equitable employability outcomes. Strengthening these initiatives through sustainable funding and expanded accessibility will be key to their long-term impact in fostering social mobility through HE.

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2. Students with disabilities

Introduction

Disability is increasingly recognized as a social construct arising from the interaction between individuals with impairments and environmental or attitudinal barriers that restrict their full and equal participation in society (OHCHR, 2007). The Convention on the Rights of Persons with Disabilities defines a person with a disability as an individual “who has long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others” (OHCHR, 2007). Globally, an estimated 1.3 billion people—approximately 16% of the population—live with a disability (WHO, 2022).

Academic attainment

Educational attainment among individuals with disabilities remains significantly lower than that of their non-disabled peers. Only 3% of individuals with disabilities are literate, with this figure dropping to just 1% for women with disabilities (UN, 2021). Almost half of individuals with permanent disabilities have low literacy skills, while 55% have low numeracy skills, compared to just over 20% and 25%, respectively, for the general population (OECD, 2022).

The educational gap for students with disabilities begins early in life and persists over time. Children with disabilities are less likely to attend school, more likely to drop out, and less likely to complete primary or secondary education. For instance, in the United States, the postsecondary completion rate for young adults with disabilities is lower (38%) compared to their peers in the general population (51%) (NCSE, 2011). Consequently, their overall years of schooling tend to be significantly lower

(UNESCO UIS, 2018). This early educational exclusion significantly limits their access to HE opportunities.

The underrepresentation of students with disabilities continues at the tertiary level. In OECD countries, only 30% of individuals with disabilities aged 25-29 attain a tertiary qualification, compared to 45% of their non-disabled counterparts (OECD, 2022). Similar disparities exist across different national contexts. In Australia, for example, 17% of individuals aged 20 and over with disabilities held a bachelor’s degree or higher in 2018, compared to 35% of those without disabilities (AIHW, 2024). In the United Kingdom, 21.8% of disabled individuals had a degree in 2019, compared to 38.0% of non-disabled individuals, a gap that remained consistent between 2013 and 2019 (ONS, 2019). Similarly, in the United States, only 18% of individuals aged 25 or older with disabilities held a bachelor’s degree or higher in 2019, compared to 36% of their non-disabled peers (PNPI, 2024).

Students with disabilities face substantial challenges in accessing and succeeding in HE. Administrative barriers, insufficient information about HEIs, and a lack of tailored support services contribute to feelings of isolation and disengagement (OECD, 2011). Transition difficulties further exacerbate academic disparities, leading to lower retention and completion rates among students with disabilities (Parsons et al., 2023). Physical inaccessibility remains a critical issue, with many HEI buildings lacking necessary adaptations to accommodate students with mobility impairments. Moreover, inadequate teacher training in inclusive methodologies and the absence of accessible learning resources further

hinder academic success. (Fernández-Batanero et al., 2022).

An additional barrier is the limited provision of disability support services, often due to insufficient funding (Fernández-Batanero et al., 2022). Even where these services exist, they are often underutilized. Some students with disabilities may avoid seeking support or only do so after facing difficulties due to concerns about stigma, while others may lack awareness of available services or their benefits (Parsons et al., 2023). These challenges contribute to lower integration into the HEI community, lower academic performance and increased dropout rates, resulting in reduced representation in HE and subsequent career pathways (OECD, 2011).

Despite these barriers, the enrollment of students with disabilities in HE has steadily increased over the past two decades, driven by international and national legislative frameworks (UNESCO IESALC, 2023). Governments have also played a role in promoting inclusivity through scholarships and financial aid. According to the Higher Education Policy Observatory, nearly half of all countries with established scholarship programs for students with disabilities (Galán-Muros et al., 2024). In the United States, for instance, 58% of students with disabilities received financial aid in the 2019-20 academic year, compared to 54% of non-disabled students (PNPI, 2023).

HEIs have also implemented various strategies to facilitate access that often involve a wide range of key stakeholders and encourage family participation. These strategies include targeted admission pathways, support networks, and personalized action plans for students outlining available accommodations and support (OECD, 2011).

Transition to employment and career advancement

Like in the general population, where disabled individuals are significantly less employed than their non-disabled peers, graduates with disabilities also encounter additional barriers in securing employment (Smith, 2024). In the United States, there is a 39-percentage-point employment gap between individuals with and without disabilities who hold a bachelor's degree or higher (NCES, 2017). Similarly, in Canada, 63% of individuals with disabilities who hold a HE qualification are employed, compared to 78% of their non-disabled counterparts. In Norway, the employment rate stands at 64% for individuals with disabilities, significantly lower than the 87% rate for those without disabilities (OECD, 2022). However, across all demographic groups, HE attainment correlates with increased employment prospects (OECD, 2022; NCES, 2017).

Beyond employment disparities, individuals with disabilities often experience lower wages (particularly women), for example in countries like Costa Rica and Mexico, individuals with disabilities earn 20% less than their non-disabled counterparts (World Bank, 2021). Individuals with disabilities also present higher job precarity. This can be seen in Latin America and the Caribbean, where the informal employment rate among individuals with disabilities is 11 percentage points higher than that of non-disabled workers. These individuals with disabilities also experience limited career advancement opportunities, leading to being overrepresented in lower-level positions and underrepresented in managerial and professional roles (Ananian & Dellaferrera, 2024).

The transition from HE to the workforce presents unique challenges for students with disabilities.

Many graduates have limited employment history, lacking internships or part-time work experiences that are crucial for securing full-time graduate jobs (Parker & Markle, 2021). Combining work and studies is also less common among students with disabilities, further restricting early career opportunities (OECD, 2011). This limits their ability to gain industry experience in sectors where young graduates typically begin their careers, ultimately making it more difficult to meet employer expectations for prior work experience (Smith, 2024).

A key obstacle concerns logistical and financial barriers. Accessible housing remains scarce, significantly limiting options for individuals with physical disabilities who require features such as wheelchair ramps, widened doorways, or adapted bathrooms. Similarly, transportation infrastructure often fails to provide full accessibility, with public transit systems lacking essential modifications such as elevators, ramps, or designated assistance services. These limitations make commuting either highly challenging or altogether unfeasible. Furthermore, individuals who rely on caregivers—whether family members or professional assistants—may face additional constraints. The need for continuous support can make it difficult to relocate for employment or adjust schedules to accommodate workplace demands. Securing accessible housing, reliable transportation, and caregiving services can also impose considerable financial strain, further restricting workforce participation (Parker & Markle, 2021).

Another critical challenge lies in self-advocacy within the workplace. The ability to effectively communicate and request necessary accommodations is essential for ensuring a supportive work environment. However, many

students with disabilities are unaware of their rights or the appropriate channels through which to request support. Fear of stigma or potential discrimination may also discourage them from disclosing their needs, further complicating their ability to access reasonable accommodations (Parker & Markle, 2021).

The lack of specialized career services tailored to students with disabilities represents an additional barrier (Parker & Markle, 2021). Key concerns such as disclosing a disability to potential employers, accessing available support systems, and implementing workplace accommodations are frequently not addressed with the depth and nuance required (OECD, 2011). Disability support services within HEIs tend to focus primarily on pedagogical and psychological assistance, often overlooking professional development strategies. Furthermore, a lack of collaboration between disability support offices and career services means that accessibility considerations are not fully integrated into employment pathways.

Discriminatory hiring practices and a lack of employer awareness regarding workplace adaptations further exacerbate these challenges. Concerns about recruitment adjustments, workplace accommodations, and misconceptions about the capabilities of workers with disabilities can deter hiring (Bonaccio et al., 2020; Smith, 2024; Parker & Markle, 2021; Young & Rooney, 2023). Some employers report frustration with delayed disclosure of disabilities, a perceived overemphasis on limitations rather than strengths, and a lack of job readiness among candidates with disabilities (OECD, 2011). At the same time, some students report being subjected to inappropriate personal inquiries about their disabilities during interviews rather than being assessed based on their qualifications and competencies. Others are

denied reasonable accommodations, such as sign language interpreters, which significantly limits their ability to participate in recruitment processes on an equal footing (McKinney & Swartz, 2021).

Despite these barriers, the digital transformation of the labor market presents significant opportunities for graduates with disabilities, particularly through the expansion of remote work, assistive technologies, and inclusive design industries. Digital platforms and flexible work arrangements can help overcome traditional barriers to physical access and enable greater participation in knowledge-based economies, as well as contributing to environmental, social and governance (ESG) policies. Sectors such as information technology, UX/UI design, digital marketing, and online education are increasingly accessible through tailored tools and software, including screen readers, voice recognition, and adaptive learning environments (ILO, 2024).

Strengthening employability pathways

To address these challenges, HEIs have implemented initiatives designed to improve employment outcomes for students with disabilities. Some programs provide tailored support and accommodation arrangements, enabling these students to effectively balance their academic and professional responsibilities. Others prioritize assisting students in securing regular stable employment or actively encourage employers to interview students with disabilities, thereby fostering opportunities for on-the-job experience and post-training employment. These programs frequently offer critical guidance on employment-related matters, including strategies for disclosing disabilities to potential employers, information

on workplace accommodations, and resources for securing internships (OECD, 2011).

To address these multifaceted barriers some HEIs are implementing reforms encompassing a range of targeted interventions. These include expanding access to work experience opportunities, enhancing physical and digital accessibility, providing comprehensive self-advocacy training, and strengthening career services to better accommodate the specific needs of students with disabilities (Parker & Markle, 2021; Young & Rooney, 2023). By implementing such measures, fostering inclusive learning environments, equipping students with the tools to navigate employment challenges and working with employers, some HEIs are empowering students with disabilities to develop the skills, confidence, and professional networks necessary for long-term career success.

Specifically, to take advantage of these digital opportunities and transform them into equitable employment outcomes, some HEIs are providing a combination of early exposure to digital skills, accessible curricula, and targeted career support services. Promoting inclusive pathways into STEM and digital sectors is an additional action to ensure that students with disabilities are not left behind in the future of work.

This chapter examines four case studies of HEIs that have successfully implemented initiatives to enhance the employability of neurodivergent students and those with disabilities. These institutions serve as models for inclusive education and workforce integration, offering valuable insights into effective policies and practices.

Analysis of four case studies

This section analyzes some key aspects of four university-led case studies designed to

support neurodivergent students and students with disabilities in their transition from HE to employment. The full version of these cases can be found in the twin publication [‘Pathways to Success: how universities are boosting career opportunities for underrepresented students’](#).

The University of Connecticut’s Neuroinclusive Candidate Network links neurodivergent students across the United States with inclusive employers, mentors, and workplace resources.

Carleton University’s Accessible Career Transitions Program in Canada provides career advising and connects students with disabilities to meaningful employment opportunities. It also assists employers in fostering inclusive work environments.

In the United States, the University of Illinois’ DRES Career Services offers tailored career support, including customized workshops and one-on-one coaching, to help students navigate workplace dynamics and disclosure.

Rochester Institute of Technology’s Spectrum Support Program in the United States prepares neurodivergent students for employment through Career Ready Bootcamps and Career and Connect workplace visits, while also assisting employers in recruiting and supporting neurodiverse talent.

a. Rationale and activities

Each of the four initiatives was developed to address some key barriers that neurodivergent students and students with disabilities face in transitioning to and maintaining employment, such as:

- **Insufficient career readiness:** For example, the Spectrum Support Program and the Neurodiverse Hiring Initiative at Rochester Institute of Technology were specifically developed to fill

gaps in career preparation of neurodivergent students, with the former focusing on personal and academic growth, while the later emphasizes job placement and employer engagement.

- **Lack of personalized career support:** For example, the DRES Career Services at the University of Illinois and the [Carleton University’s Accessible Career Transitions Program](#) builds on these universities’ long-standing commitment to supporting students with disabilities through individualized career coaching.
- **Limited structured employment opportunities:** For example, Carleton University’s ACT program offers employability skills training, job placements, and employer education to promote inclusive hiring.
- **Limited employer education and engagement:** For example, the Wells Fargo Center for Neurodiversity and Inclusive Employment at the University of Connecticut was created to connect students with employers while training companies on inclusive hiring practices and helping them implement strategies to recruit and retain neurodiverse talent. DRES Career Services at the University of Illinois also plays an important advocacy role with employers.

The four initiatives incorporate three primary types of activities:

Career coaching and mentorship

One-on-one coaching and mentoring seems to be effective activities for students with disabilities. For example, Spectrum Support Program at Rochester Institute of Technology provides structured coaching to build students’ confidence and career preparedness. DRES Career Services offers similar support, focusing on job applications, self-advocacy, and workplace communication. Carleton University’s ACT program transform this into an ongoing support by providing individualized career

guidance, including assistance with workplace accommodations and professional development.

To complement these efforts, some HEIs are offering specialized training programs. This is the case of Neurodiverse Hiring Initiative at Rochester Institute of Technology. It includes structured initiatives like Career Ready Bootcamp, which has significantly increased participants' interview and job offer rates.

Experiential learning opportunities

These HEIs are establishing real-world learning through immersive job readiness experiences. Students engage with employers and develop professional skills in real-world settings, like in the Career and Connect and Career Ready Bootcamp at Rochester Institute of Technology or the Neurodiversity Career Experience at the University of Connecticut. This is complemented by practical workshops, such as the hands-on sessions on resumé writing, networking, and interview preparation offered by DRES Career Services. In addition, work placements are offered to help students gain experience, improving workplace confidence and self-advocacy. For example in ACT to Employ at Carleton University Carleton University's, which has placed over 1,575 students.

Employer engagement and training

Some HEIs provide training to employers, such as the Wells Fargo Center, which established the Inclusive Employers Network and equipped companies with resources for neuroinclusive hiring or the NHI at Rochester Institute of Technology, which also conducts employer training. Similarly, Carleton University's ACT program works closely with employers to foster inclusive hiring practices. All selected HEIs also host networking events with employers, which can lead to partnership-building opportunities, such as the collaboration of DRES Career Services with local businesses and government agencies

to expand employment opportunities for students with disabilities.

b. Innovative approaches

One innovative approach is the implementation of employer-centered inclusion strategies. These programs actively prepare employers to support neurodivergent and disabled employees by implementing inclusive hiring practices, mentorship programs, and workplace accommodations. By working directly with companies, they facilitate structural changes that ensure long-term success for employees with disabilities. The connection of students with these committed employers reduces the risk of discrimination and increase the opportunities of meaningful contributions and success.

Another Innovative approach is the offering of career immersion experiences. Unlike traditional career counseling, these initiatives integrate experiential learning through internships, job shadowing, co-op programs and employer-led projects. Through initiatives like Career Ready Bootcamp at Rochester Institute of Technology, the Neurodiversity Career Experience at the University of Connecticut, students gain essential workplace skills and build professional networks.

The flexible participation models are another innovative approach. All the programs analyzed allow students to engage at various levels, facilitating access and effectiveness by providing various entry points in a way that meets their unique needs. In addition, they are not required medical verification, ensuring accessibility and individualized support.

c. Main challenges

A common challenge is scaling the programs to meet increasing demand, either due to enrolment growth or increased participation. For example, SSP at RIT has expanded by over

700% since its inception, requiring additional resources. At the University of Illinois, more students seek career guidance from DRES Career Services and ACT to Employ at Carleton University also face rising demand, necessitating innovative strategies such as hiring interns and collaborating with external organizations.

Another challenge is financial sustainability, as initiatives usually operate through a combination of university funding, external grants, and corporate sponsorships. Programs like the Career Ready Bootcamp at Rochester Institute of Technology required significant initial funding but has since adjusted and evolved into a self-sustaining model. The ACT to Employ program at Carleton University has also successfully transitioned to a self-funding model. Other have large external support, such as the Wells Fargo Center, which benefits from grant funding, allowing it to expand its impact on a national scale.

Student engagement is another key challenge, since it is difficult for students to balance academics and career preparation, so many of them delay job readiness efforts. NHI at Rochester Institute of Technology has addressed this challenge by involving parents in early career discussions, while DRES Career Services at University of Illinois focuses on educating students about workplace rights to ease concerns about self-advocacy and disclosure.

d. Success factors and recommendations

A key success factor across all programs is their commitment to employer partnerships and workforce integration. These initiatives have proved that strong employer engagement is critical for long-term program success. Universities should provide structured networking and training opportunities to enhance inclusive hiring practices.

The offer of structured career immersion experiences is another success factor. The integration of hands-on career development, including job shadowing and co-op placements help students develop transversal skills, workplace skills, gain confidence, and build professional networks. Success is also achieved due to the flexible program design via tiered support models that allow students to access services based on their needs. This ensures accessibility while optimizing institutional resources. Removing restrictive eligibility requirements and offering continued career support beyond graduation are also critical for students.

The continuous improvement through feedback have proven to be critical for success. All four initiatives actively collect student and employer feedback through focus groups, feedback forums or surveys to refine their services and ensure effectiveness and relevance. This feedback loops and data-driven program refinement is done periodically, often after each work term.

To develop, strengthen and scale similar initiatives that prepare neurodivergent students and students with disabilities for successful, sustainable careers, the managers of these initiatives recommend other HEIs to:

- **Establish strong employer networks** to support neurodivergent hiring and retention.
- **Train employers in inclusive hiring practices** and creating a safe environment for students with disabilities.
- **Develop structured career immersion experiences** that provide real-world learning.
- **Offer flexible participation models** that cater to diverse student needs.
- **Continuously collect and act on feedback** to ensure the relevance and effectiveness of programs.

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3. Migrant and refugee students

Introduction

In 2020, an estimated 281 million people—representing 3.6% of the global population—were international migrants (IOM, 2024). While no universally accepted definition of ‘migrant’ exists, the term generally refers to individuals living outside their country of citizenship, birth, or habitual residence. Migration may be permanent or temporary, documented or undocumented, and may include stateless individuals (IOM, 2019). While economic opportunities, family reunification, and education remain key drivers of migration, many individuals migrate due to conflict, persecution, or environmental disasters. Refugees and asylum seekers constitute a smaller but highly vulnerable group in need of specific protection and support (IOM, 2024).

The scale of migration has reached unprecedented levels, with more than six million new permanent migrants arriving in OECD countries in 2022, excluding Ukrainian refugees (OECD, 2023). In the United States alone, approximately 1.6 million new migrants were recorded in 2023—the largest increase in more than two decades (Gramlich & Passel, 2024). Similarly, 2.9 million asylum applications were registered across 162 countries in 2022, with the United States and Germany as the top destinations (IOM, 2024). The global refugee population reached 43.4 million in 2023, reflecting a 7% increase from the previous year (UNHCR, 2023).

Academic attainment

Despite growing migration trends, refugees and migrants continue to face significant barriers in accessing education. Refugee enrollment remains disproportionately low at all levels of education: only 37% are enrolled in pre-primary

education, 65% in primary education, and 42% in secondary education (UNHCR, 2024). Tertiary education enrollment has seen notable progress, increasing from 1% in 2019 to 7% in recent years. However, this remains far below the global average of 42% for non-refugees (UNHCR, n.d.). To address this gap, UNHCR is advancing the 15by30 initiative, which aims to ensure that 15% of refugee youth are enrolled in HE by 2030 (UNHCR, 2023).

Refugees’ right to education, including HE, is safeguarded by international legal frameworks that guarantee non-discriminatory access to education regardless of legal or migratory status (Martin & Stulgatis, 2022). However, multiple barriers persist, particularly in HE. A key challenge is the low number of refugee secondary school graduates eligible for HE admission (UNHCR, 2024). Legal and administrative hurdles—such as the non-recognition of prior academic qualifications—prevent many from continuing their studies at the appropriate level (Arjona, Reuter & Chibuzor, 2017; Berg, 2023). Additionally, lengthy admission processes, bureaucratic delays in asylum applications, and visa restrictions further obstruct timely enrollment (Martin & Stulgatis, 2022).

A lack of comprehensive HE policies tailored to refugees further compounds these challenges. The intersection of HE, legal, and immigration frameworks often results in inconsistent eligibility criteria and legal uncertainty (Berg, 2023; Martin & Stulgatis, 2022). Many HEIs lack awareness of the specific legal constraints and educational needs of refugees, resulting in institutional policies and support services that fail to address these challenges (Berg, 2023). Even in countries with refugee support

programs, policies are mostly recent and frequently change, creating confusion for both students and institutional staff (Arjona, Reuter & Chibuzor, 2017).

Financial barriers further limit access to education. High tuition fees, lack of financial aid, and restricted eligibility for scholarships disproportionately affect refugees (UNHCR, 2024; Arjona, Reuter & Chibuzor, 2017; Berg, 2023). Economic hardship often forces many migrant and refugee students to prioritize work over education, limiting their ability to enroll in HE, particularly in full-time study programs (Arjona, Reuter & Chibuzor, 2017).

Language barriers also hinder both access and completion. Migrants in countries with different official languages struggle with entrance exams, the application process and coursework (Arjona, Reuter & Chibuzor, 2017; Berg, 2023). Unfamiliar educational structures that vary across countries and HEIs and a lack of adequate language support programs further exacerbates this issue. Inadequate academic, psychological, and social support structures—such as limited access to language teachers and intercultural training for HEI staff—reduce refugees' ability to integrate into educational settings and make informed academic and career decisions (Berg, 2023; Earnest et al., 2010). Additionally, social discrimination, cultural barriers, and precarious living conditions create psychological obstacles to academic success (Berg, 2023; Arjona, Reuter & Chibuzor, 2017).

Addressing these challenges requires coordinated efforts across educational systems, particularly in host countries. Initiatives such as the 15by30 Roadmap provide strategic guidance for stakeholders to increase refugee enrollment in HE (UNHCR, 2023). Policy recommendations include facilitating access to secondary school exams, expanding financial aid, and improving

qualification recognition processes. Raising awareness of the long-term economic and social benefits of HE—especially for female refugee—and showcase success stories can further encourage enrollment (UNHCR, 2023).

Governments have begun implementing strategic measures to improve refugee access to HE. These include transparent credential and prior knowledge recognition procedures and ratification of Global and Regional UNESCO Conventions on the Recognition of Qualifications, which promote standardized frameworks across borders for recognizing academic qualifications (Bouckaert et al., 2024). Additionally, language support programs, multilingual advisors, translated materials, tailored financial aid, and improved awareness campaigns ensure that eligible students access available opportunities (Arjona, Reuter & Chibuzor, 2017).

HEIs are also adopting targeted initiatives for refugee students, including establishing clearer communication channels and support networks, intercultural training for students and staff, feedback sessions, structured buddy programs and long-term advising to support them throughout their academic journey (Arjona, Reuter & Chibuzor, 2017). These measures are crucial in ensuring not only access but also successful program completion.

Transition to employment and career advancement

Limited access to and completion of HE also has long-term consequences for refugee employment prospects. In many host countries, refugees face high unemployment rates upon arrival. In the United States, only 50% of refugees are employed within two years, with employment rate at par with the national population taking over five years. In

the European Union, only 20% of refugees find employment within three years, and integration into the labor market may take over a decade (Poutvaara & Wech, 2016). For example, in Germany, about 60% of refugees are employed seven years after arrival, rising to 68% after eight years (Mellersh, 2024). Legal restrictions often prevent asylum seekers from working while awaiting status approval—a process that can take months (Eurostat, 2023; Mellersh, 2024). Many refugees also lack awareness of their employment rights, increasing their vulnerability to precarious working conditions and exploitation (Arnita, 2022).

Employers often hesitate to recognize foreign qualifications and experience, contributing to brain waste, where skilled migrants are unemployed, underemployed or forced to lower-paying jobs (Mellersh, 2024; European Employment Policy Observatory, 2016, Eurostat, 2023). In Germany, more than one-third of employed refugees work in positions that require lower qualifications than those they held in their country of origin (Fachinger et al., 2024; European Employment Policy Observatory, 2016). This mismatch not only results in significant economic inefficiencies—such as reduced tax revenues and lost productivity—but also contributes to financial instability for affected individuals and their families. Furthermore, underemployment and prolonged job insecurity can negatively impact mental health, exacerbating stress and social exclusion (Arnita, 2022).

Language barriers present an additional challenge to labor market integration. Many countries report long waiting lists for language courses, limiting refugees' ability to acquire the linguistic proficiency needed for professional and social mobility. While employers recognize the benefits of on-the-job language acquisition,

structured support for language learning remains insufficient in many contexts (Gribble et al., 2017; OECD, 2023). Beyond linguistic challenges, many refugees face difficulties in developing and demonstrating key transversal skills essential for securing employment. These include résumé writing, crafting compelling cover letters, preparing for interviews, and understanding verbal and nonverbal professional expectations (Arnita, 2022). Additionally, systemic discrimination poses a significant barrier to employment, with refugees often experiencing bias based on nationality, skin color, accent, or clothing style (Eurostat, 2023).

Despite these barriers, the digitalization of the labor market offers promising avenues for their inclusion and empowerment. Careers in technology, digital marketing, translation services, and the social impact sector are increasingly accessible through remote work, skills-based hiring, and global demand for multilingual and cross-cultural competencies (UNHCR, 2023). Digital jobs often require flexible or non-traditional credentials, allowing refugee graduates to bypass systemic barriers such as non-recognition of prior qualifications or language limitations (OECD, 2019). In addition, refugee graduates bring valuable lived experience that can inform roles in advocacy, policy, community engagement, and humanitarian work—fields that increasingly value diverse perspectives and global awareness (UNESCO, 2022).

Strengthening employability pathways

HEIs play a crucial role in improving refugee employability by strengthening partnerships with UNHCR, promoting credential recognition, and offering career development support. Strategies such as internships, mentorship

programs, and job search workshops improve career readiness (Llinares et al., 2020; UNHCR, n.d.; van Dijk, 2021). Collaboration with employers and industry stakeholders can further enhance access to the job market while fostering inclusive hiring practices (Szkudlarek, 2019).

HEIs play a critical role in improving the employability of refugee students by strengthening partnerships with UNHCR to support the 15by30 target for refugee HE (UNHCR, n.d.). These partnerships enable HEIs to deepen their engagement with governments, advocating for the institutionalization of inclusive HE systems that address the structural barriers refugees face (UNHCR, n.d.).

Beyond national efforts, international collaboration among HEIs can further enhance their capacity to respond to forced migration through cross-border initiatives, knowledge exchange, scholarship opportunities, and joint targeted programs that address the educational and employment challenges faced by refugees (UNHCR, n.d.). Additionally, implementing assessment and recognition systems for incomplete or missing academic credentials is crucial in enabling refugees to resume their studies, secure local accreditation, and improve their employment prospects (UNHCR, n.d.).

Comprehensive career development support is also essential in fostering refugee students' transition into the workforce. Some HEIs are providing tailored career counseling, facilitating access to internships and apprenticeships, and offering job search workshops focusing on résumé writing, interview preparation, and networking strategies (Llinares et al., 2020; UNHCR, n.d.; van Dijk, 2021). Strengthening partnerships with employers and industry stakeholders through mentorship programs, networking events, and job fairs can further expand employment opportunities. At the same

time, advocating for inclusive hiring practices ensures that refugee graduates have equitable access to the labor market (Szkudlarek, 2019).

In addition to career support, HEIs can play a vital role in addressing legal and administrative barriers to employment. Providing guidance on work permits and employment rights can help refugees navigate complex bureaucratic processes, reducing economic and legal obstacles to workforce participation (Humboldt-Universität zu Berlin, 2024). Language training is another key factor in enhancing employability, as it reduces communication barriers, facilitates workplace integration, and increases confidence in professional settings (UNHCR, n.d.; van Dijk, 2021).

The following section will explore case studies of universities that have developed innovative programs to enhance employability for migrant and international students through inclusive and supportive initiatives.

Analysis of four case studies

This section analyzes some key aspects of four case studies of HEIs that successfully support the employability of migrant and refugee students. The full version of these cases can be found in the twin publication '[Pathways to Success: how universities are boosting career opportunities for underrepresented students](#)'.

NEBO Fellowships at Dominican University in the United States provides undocumented students with structured, mentored experiential learning opportunities while ensuring legal and ethical compliance.

Mentoring.INTERKULT at Osnabrück University of Applied Sciences in Germany supports refugee students in transitioning to the German workforce through structured mentorship and targeted workshops for both mentors and mentees.

FIT for Success@RWTH Aachen in Germany is a holistic initiative offered across the entire student lifecycle of refugee students to equip them with essential professional skills. It includes counseling, peer coaching, and a certificate program.

Sciences Po's Professional Certificate for Young Refugees is a two-year program integrating academic coursework with practical and transversal skills, mandatory internships, and cultural adaptation support to succeed in the France labour market.

a. Rationale and activities

These initiatives were established to support international and refugee whose education had been disrupted due to forced migration and to ensure smoother transitions into academic and professional life. The initiatives address key structural barriers such as disrupted education, lack of professional networks, cultural and linguistic challenges, and financial instability.

Programs like NEBO Fellowships and FIT for Success@RWTH Aachen specifically address employment barriers by helping students acquire work-related skills. NEBO enables students to gain professional experience without requiring traditional work authorization. Social and cultural integration is another key objective, exemplified by Mentoring.INTERKULT, which fosters professional networking and community building, and by Sciences Po's Professional Certificate, which incorporates cultural partnerships with performing arts institutions to enhance students' societal integration through theater visits, workshops, and internships.

Each program offers tailored activities designed to improve migrants and refugee students' career readiness and overall well-being.

Structured mentorship and career development are cornerstones of all four initiatives. Mentoring.INTERKULT, FIT for Success@RWTH Aachen, and Sciences Po's Professional Certificate, providing students with professional guidance throughout their academic and career journeys. NEBO Fellowships offer semester-long projects aligned with students' career aspirations, coupled with faculty mentorship to foster practical learning.

Career exposure and networking are a second type of activities that all initiatives incorporate via networking and job application support. For example, Sciences Po organizes site visits and business coaching, while RWTH Aachen facilitates employer-student connections through targeted events such as the "Meet and Greet" sessions.

Language and cultural training activities are present in some initiatives, since language proficiency is crucial for integration and employability. For example, FIT for Success @ RWTH Aachen provides pre-arrival German language courses, while Sciences Po offers intensive French instruction, enhancing students' ability to navigate their new environments and professional settings.

Financial assistance is provided by some initiatives too, since financial barriers often hinder academic success of refugee students. Sciences Po provides a monthly grant, while NEBO Fellowships offer financial aid awards instead of stipends or wages. These funding structures ensure inclusivity without requiring students to engage in traditional employment.

b. Innovative approaches

A common innovation among these programs is the structured use of different types of mentorships as a support mechanism. Mentoring.INTERKULT connects students with

external professionals, NEBO Fellowships pairs them with faculty mentors, and Sciences Po assigns university employees for academic and social guidance. FIT for Success@RWTH Aachen extends this approach to peer mentoring, easing transitions for new students.

The non-employment-based financial support models also demonstrate innovation in some of the initiatives. NEBO Fellowships provide financial aid rather than stipends, ensuring that undocumented students can participate. Similarly, Sciences Po offers grants without employment prerequisites.

An innovative feature of FIT for Success@RWTH Aachen is its holistic, multi-stage support model. By covering language training, academic assistance, career services, and networking under a single program, it ensures a structured pathway from pre-arrival to professional integration.

c. Main challenges

Despite their successes, these programs face significant challenges, including financial sustainability, industry skepticism, and logistical difficulties.

Sustainable funding is the most common challenge. Programs such as NEBO Fellowships and Sciences Po's Professional Certificate depend on private donors, foundations, and institutional backing. FIT for Success@RWTH Aachen faced financial difficulties in 2019, leading to a temporary suspension until new public funding was secured.

The limited employer engagement and the prevalent industry skepticism around hiring international students, and specifically refugees, remains a challenge due to legal and visa-related concerns as well as workplace integration. FIT for Success@RWTH Aachen proactively engages

employers to address these issues, leveraging networking events with students to build employer confidence.

Student engagement can also be a challenge and participation inconsistencies can arise due to students' varied academic schedules. For example, Mentoring.INTERKULT used to face challenges in maintaining regular engagement. Program adaptations might be needed, like in the case of Sciences Po, which continually adapts its offerings to students' needs. In this context, it increased for example psychological support for trauma-affected students.

d. Success factors and recommendations

Several factors have contributed to the success of these initiatives, such as the establishment of strong partnerships. Collaboration with businesses, government agencies, and non-profits enhances program effectiveness in the four initiatives. Particularly, FIT for Success@RWTH Aachen has successfully worked with small businesses, which are often more flexible in hiring international students.

Flexibility and responsiveness to student needs is also a key success factor, since programs that continuously evolve tend to be more effective. Sciences Po adapted its financial aid structure, while FIT for Success@RWTH Aachen and Mentoring.INTERKULT refined their career support mechanisms based on student feedback.

Bundling multiple support services under a single initiative enhances student outcomes. FIT for Success@RWTH Aachen exemplifies this by combining career training, mentorship, language support, and networking in a comprehensive program.

To develop, strengthen and scale similar initiatives that prepare migrants and refugee

for successful, sustainable careers, the managers of these initiatives recommend other HEIs to:

- **Develop holistic programs** that support students from pre-arrival through career placement.
- **Secure diverse funding sources** to ensure financial sustainability.
- **Establish partnerships** with SMEs, which tend to be more flexible in hiring international students.
- **Implement structured mentorship programs**, leveraging faculty, alumni, and industry professionals.
- **Maintain structured feedback** mechanisms for continuous improvement.
- **Expand language training** to help students meet employability requirements in their host country.

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4. Indigenous students

Introduction

Indigenous peoples constitute approximately 476 million individuals across 90 countries, representing 5% of the global population and encompassing 5,000 distinct cultures and 7,000 languages (UN, 2024). Asia is home to two-thirds of the global Indigenous population, comprising over 2,000 unique civilizations and languages (ILO, 2017). In Latin America and the Caribbean, Indigenous peoples make up 10% of the regional population (UNESCO, 2023), while they account for 5% of Canada's population (Government of Canada, 2023), 3.8% of Australia's (Australian Bureau of Statistics, 2021), and 1% of the United States' (PNPI, 2025).

Indigenous peoples are self-identified communities recognized by their own members, maintaining historical continuity with pre-colonial or pre-settler societies. They possess distinct social, economic, political, linguistic, and cultural systems and often exist as non-dominant groups within broader societies (UN, n.d.a). Their ways of life are shaped by historical contexts, geographic locations, and interactions with dominant societies (UN, 2024). Despite their rich cultural heritage, Indigenous peoples face systematic challenges regarding the protection of their rights. As a result, they remain among the most disadvantaged and vulnerable populations, experiencing high rates of poverty, limited access to education and healthcare, and restricted political representation (UN, 2024; UNESCO, 2023; ILO, 2017; Crazy Bull, 2024).

Academic attainment

Although their right to education is safeguarded by the UN Declaration on the Rights of Indigenous Peoples and other international human rights instruments, Indigenous students continue to encounter significant barriers in completing primary education and progressing

to higher levels (UNESCO, 2019). Indigenous children are more likely to attend school under conditions of food insecurity and poor health and to experience bullying based on ethnic and cultural discrimination, all of which contribute to poor academic performance and high dropout rates (UN, n.d.b.). Rural Indigenous communities frequently lack access to adequate educational resources and infrastructure, while urban schools may fail to provide culturally relevant services, such as mother tongue-based education (UNESCO, 2019).

Indigenous peoples are less likely to obtain a degree, diploma, or certificate than their non-Indigenous counterparts (UNESCO, 2019; Crazy Bull, 2024). In Canada, for example, Indigenous students accounted for only 5% of newly enrolled postsecondary students in 2021 (Statistics Canada, 2024). In the United States, the college enrollment rate for Native American youth aged 18–24 was 25.8% in 2022, compared to 39% for the overall U.S. population (PNPI, 2025). In Colombia, just six out of every 100 Indigenous individuals have access to HE (El Observatorio de la Universidad Colombiana, 2024).

Barriers to HE access for Indigenous students stem from both systemic and social factors. Low secondary education graduation rates limit eligibility for tertiary education. Admission criteria in many HEIs often do not recognize Indigenous knowledge systems and are predominantly based on dominant national or colonial languages, which are rarely the first language of Indigenous students (Preston, 2008). Additionally, limited career counseling and a lack of educational role models hinder Indigenous students' awareness of postsecondary opportunities and career pathways (Preston, 2008). Financial constraints, including the

affordability of childcare, further impede access to HE, particularly for Indigenous mothers, who tend to have children at a younger age. Relocation to urban areas for HE also presents challenges such as housing shortages, limited access to quality childcare, and the fear of losing cultural and family ties, particularly for students with dependents (Cameron et al., 2024).

Even after gaining admission, Indigenous students encounter significant challenges that affect retention and graduation rates. Postsecondary institutions often employ pedagogies, communication styles, cultural frameworks and curricular structures that differ substantially from traditional Indigenous learning approaches (Preston, 2008). This cultural mismatch can foster feelings of isolation, disengagement, and a lack of belonging, resulting in lower academic performance and higher dropout rates (Hutchinson & Buckingham, 2021). Financial hardships, institutionalized racism, and family responsibilities further impact well-being and academic success (Cameron et al., 2024; Durmush et al., 2024).

Therefore, Indigenous educational attainment remains significantly lower than that of the general population. Globally, only 7.8% of Indigenous individuals hold a HE degree, compared to nearly 20% of non-Indigenous individuals. In Australia, between 8% and 10% of Indigenous people have a university degree, compared to 32% of the broader population (Moodie, 2024). In the U.S., 16.8% of American Indian or Alaskan Native individuals aged 25 or older have earned a bachelor's degree or higher, compared to the national average of 36.2% (PNPI, 2025). In Canada, 37% of Indigenous people have obtained a postsecondary degree, compared to 54% of the total population (Cameron et al., 2024).

Transition to employment and career advancement

HE attainment significantly improves employment outcomes for Indigenous individuals. In Canada, for example, the employment rate for Indigenous individuals with only a high school education is 58%, while for those with a bachelor's degree or higher, it rises to 82.6%, matching that of non-Indigenous individuals (Melvin, 2023). Similar trends are observed in Australia and the U.S.; however, Indigenous people remain overrepresented in laboring and personal service occupations while being underrepresented in managerial and professional roles (AIHW, 2023; Brundage, 2023).

Employment patterns vary significantly across regions. In Latin America and the Caribbean, 85% of Indigenous workers are engaged in the informal economy, either as self-employed or unpaid family workers. Those in salaried positions earn approximately one-third of non-Indigenous workers' wages (ILO, 2022). In Asia, Indigenous communities frequently rely on informal labor, hazardous jobs, or migration for economic survival (ILO, 2015).

Discrimination and biases in hiring practices persist, leading some Indigenous individuals to conceal their identity during the hiring process (DCA, 2023; Santoro & Walsch, 2022; ILO, 2008). Additionally, mainstream training programs and workplaces rarely accommodate Indigenous worldviews, languages, or traditional knowledge (Eva et al., 2024; Queensland Government, 2024). Insufficient access to quality childcare, healthcare, and job-placement services compounds these challenges, further reducing Indigenous communities' ability to obtain and maintain steady employment (Queensland Government, 2024).

Despite these barriers, Indigenous HE graduates are uniquely positioned to contribute to and benefit from the growing green economy, particularly in roles that integrate sustainability, environmental stewardship, and cultural knowledge. The expansion of green jobs—ranging from renewable energy and environmental planning to land management and cultural tourism—offers pathways that align with Indigenous worldviews and traditional ecological knowledge. TEK plays a critical role in sustainable resource management and biodiversity conservation (Berkes, 2018; UNESCO, n.d.), making Indigenous graduates valuable contributors to national and global sustainability goals.

In Australia, Canada, and parts of Latin America, programs that support Indigenous leadership in climate adaptation and environmental governance are gaining momentum (OECD, 2020). Furthermore, the inclusion of Indigenous perspectives in policy, research, and industry has been increasingly recognised as essential for achieving inclusive and sustainable development (UN, 2021).

Strengthening employability pathways

Governments have sought to address these persistent structural disparities through national access quotas, reserving spaces in HEIs for Indigenous students (Davis et al., 2024). Additionally, 13% of countries have legislated targeted scholarships for Indigenous students in HE (Galán-Muros et al., 2024). However, without integrating Indigenous histories, languages, and knowledge systems into curricula and research agendas, these measures risk being insufficient (Mato, 2011).

HEIs play a pivotal role in facilitating Indigenous students' access to and success in HE through

targeted support programs. Transition-year and bridging programs tailored specifically for Indigenous learners can provide culturally responsive coursework and mentoring, easing their transition into postsecondary education. Additionally, early and proactive recruitment efforts—beginning in elementary and secondary school—can strengthen institutional ties with Indigenous communities and encourage HE aspirations (Presto, 2008).

Once enrolled, Indigenous students can benefit from comprehensive on-campus support systems that promote both retention and academic achievement. The establishment of dedicated Indigenous HE units and culturally safe student services—such as affordable childcare, financial aid, and holistic well-being support—helps mitigate barriers associated with family responsibilities, socioeconomic disparities, and institutional biases (Durmush et al., 2024; Cameron et al., 2024). Furthermore, mentoring programs and community-based education models provide students with guidance rooted in shared cultural values, fostering a greater sense of belonging (Presto, 2008).

The integration of bilingual approaches, language nests, and culturally relevant pedagogical methods is essential in preserving Indigenous languages and worldviews while simultaneously developing academic competencies (World Bank, 2019). Several countries, including Bolivia, Mexico, Colombia, Brazil, Ecuador, and Peru, have established HEIs that incorporate Indigenous cosmovision, values, and pedagogies into their curricula. These institutions play a critical role in reinforcing cultural identity and enhancing student engagement (Mato, 2011). Also, to ensure these opportunities of the green jobs are accessible, some HEIs are designing culturally responsive curricula, creating pathways into STEM and environmental sciences, and fostering

partnerships with Indigenous communities to co-design career-relevant education and training.

Beyond curriculum design, HEIs can further support Indigenous students by embedding Indigenous research frameworks into teaching, mentorship, and leadership structures. Such an approach fosters respectful and reciprocal partnerships with Indigenous communities, ensuring that HE is both inclusive and representative of diverse knowledge systems. By implementing these measures, HEIs can contribute to equitable educational outcomes, strengthen Indigenous representation in academia, and build a more inclusive HE landscape for all learners (Reano, 2020).

HEIs can also play a pivotal role in improving Indigenous employment outcomes by offering a set of services. Tailored career support and job placement services for Indigenous students can help bridge employment gaps by offering job search assistance, résumé workshops, and interview preparation (University of Calgary, n.d.). In addition, culturally inclusive transversal skills training can ensure that Indigenous students develop essential workplace skills while maintaining their cultural identity (Rasmussen, 2024). Specifically, entrepreneurship and leadership development programs can equip Indigenous students with the skills and resources needed to establish their own businesses or contribute to economic development within their communities.

Connecting Indigenous students with both Indigenous and non-Indigenous professionals provide guidance, builds confidence, and expands professional networks. Collaborations with Indigenous businesses, government agencies, and community organizations can provide hands-on experience via placements and work-integrated learning and foster

employment pathways. Furthermore, HEIs can advocate for recognizing Indigenous knowledge and skills in the labor market while promoting inclusive hiring practices and addressing workplace discrimination and tokenization (Santoro & Walsch, 2022), ensuring that Indigenous candidates are valued for their skills and expertise rather than to fulfill diversity quotas (Eva et al., 2024).

The following section will explore case studies of universities that have developed innovative programs to enhance Indigenous student employability through inclusive and supportive initiatives.

Analysis of four case studies

This section analyzes some key insights of four HEI-led case studies with initiatives designed to enhance the employability of Indigenous students. The full version of these cases can be found in the twin publication [‘Pathways to Success: how universities are boosting career opportunities for underrepresented students’](#).

The University of British Columbia (UBC) Career Centre supports Indigenous students through a dedicated Career Strategist, offering counseling, workshops, and hosting a career fair. It also runs the Community-Based Work Learn pilot to connect students with relevant employment and internship opportunities.

The University of Saskatchewan facilitates Indigenous student success through its Indigenous Student Employment Readiness Program (ISERP), which develops employability and job search skills. Additionally, the Indigenous Students Internship Program (ISIP) provides paid internships to support career transitions.

Monash University’s Indigenous Student Services team delivers tailored career support through workshops, priority job listings, and leadership

training. The university also fosters employment pathways by training and hiring Indigenous graduates through its Indigenous Graduates Program.

The University of Auckland empowers Indigenous students via its culturally responsive Te Haerenga employability workshops series and acknowledges leadership potential through its Leadership Through Learning program.

a. Rationale and activities

A shared motivation behind these initiatives is to enhance Indigenous students' employability by integrating cultural knowledge with career development. Many Indigenous students encounter systemic barriers to employment, including workplace discrimination, the absence of culturally safe environments, and limited professional networks. To address these challenges, institutions have designed programs that offer skill-building within culturally supported environments. Examples include University of Saskatchewan's Student Employment Readiness Program (ISERP), Community-Based Work Learn pilot at the University of British Columbia, Monash University's Indigenous Graduate Ready Workshop, and the University of Auckland's Te Haerenga workshops.

These initiatives also aim to fill the lack of leadership pathways for Indigenous students. Programs such as Monash's Indigenous Leaders Program, the University of Auckland's Leadership Through Learning, and University of British Columbia's Indigenous Career Fair provide opportunities for leadership training and networking with employers who genuinely value Indigenous knowledge and perspectives. By creating these pathways, universities seek to empower students with confidence and a sense of agency in their professional journeys.

Another crucial driver is the need to increase Indigenous student engagement with career services. Recognizing lower participation rates among Indigenous students compared to their peers, University of British Columbia appointed a dedicated Career Strategist for Indigenous Students. Finally, these initiatives also aim to increase the traditionally low relevant work experience of Indigenous students. For example, the University of Saskatchewan's ISIP was established to provide hands-on work experience, enabling students to transition into the workforce more effectively.

A central component of these initiatives is the provision of career counseling, mentoring, and workshops specifically tailored to Indigenous students. UBC's Career Strategist Workshops, Monash's Indigenous Graduate Ready Workshop, and USask's ISERP focus on key professional development activities such as resumé writing, cover letter preparation, and interview techniques. These sessions emphasize integrating Indigenous identity into career materials by encouraging students to use traditional names and highlight community involvement.

Another key activity is the facilitation of Indigenous career fairs and employer networking events. UBC's Indigenous Career Fair, organized in partnership with the First Nations House of Learning, as well as Monash University's employer engagement efforts and the University of Auckland's workplace visits, create opportunities for students to connect with organizations committed to Indigenous hiring and inclusion in a culturally safe environment.

Some programs incorporate land-based and cultural learning experiences to strengthen student confidence and resilience. USask's ISERP includes guidance from Elders and Knowledge Keepers, ensuring that professional

training is informed by Indigenous wisdom. Similarly, Monash's Indigenous Leaders Program includes cultural identity masterclasses, and the University of Auckland integrates storytelling from Indigenous alumni and success cases to inspire students.

Work-integrated learning is also a pivotal element. UBC's Community-Based Work Learn Pilot and Monash's Indigenous Graduate Program offer hands-on experience, enabling students to apply classroom knowledge in real-world settings. UBC extends this concept by incorporating volunteer and academic experiences alongside formal WIL, allowing students to broaden their exposure to different workplace environments and increase their employability. Additionally, USask's ISIP provides paid internships that blend professional development with cultural mentorship, helping students navigate workplace expectations while maintaining cultural connections.

b. Innovative approaches

An innovative feature of these initiatives is the integration of Indigenous knowledge into career development. Monash's Indigenous Leaders Program incorporates international study tours to Canada to engage with First Nations communities, fostering cross-cultural learning. USask's ISERP blends Indigenous wisdom teachings with employment readiness training, and the University of Auckland involves Indigenous alumni in leadership training to align career development with cultural identity.

Critical evaluation of employer engagement is another innovative approach. UBC, Monash, and USask assess potential employers to ensure they demonstrate a genuine commitment to Indigenous hiring rather than mere compliance with diversity quotas. USask's ISIP, for example, includes employer interviews conducted

by Indigenous representatives to evaluate workplace inclusion efforts.

Financial incentives have also been leveraged to enhance participation. For example, USask's ISERP provides honorariums to students to alleviate financial barriers to engagement. Monash's Indigenous Graduate Program, which recruits recent graduates and places them in university roles tailored to their skills and aspirations, offers competitive salaries and guarantees permanent employment upon completion, reinforcing career stability for Indigenous graduates.

Flexibility and accessibility are prioritized to maximize student participation. UBC's personalized career advising and flexible scheduling have significantly reduced "no-show" rates among Indigenous students from 60% to under 10%. USask's ISERP includes bi-weekly virtual sharing circles for remote engagement, while the University of Auckland offers online participation options to accommodate students not based on the City Campus.

c. Main challenges

Sustained student engagement remains a key challenge. Some Indigenous students prioritize academic commitments over career preparation, delaying their participation in employability programs. Monash University has observed that some students hesitate to engage due to feelings of disconnection from their Indigenous identity, prompting the integration of cultural workshops to strengthen their sense of identity. The University of Auckland emphasizes the importance of building trust and connections, as many students are the first in their family to attend university.

Another significant challenge is identifying employers who are genuinely committed to Indigenous workforce inclusion. Both Monash

University and USask report difficulties in distinguishing between genuinely committed employer and those mostly interested in meeting quotas. To mitigate this, rigorous assessment frameworks have been developed for employer partnerships.

Financial constraints pose additional hurdles. USask's ISERP initially operated on a limited budget before securing external funding from Scotiabank. Similarly, UBC's Community-Based Work Learn pilot faced difficulties in scaling its initiative due to funding limitations, and the University of Auckland initially encountered challenges in offering comprehensive support without adequate financial backing.

Recruitment of students has also proven difficult. USask's ISIP initially struggled with enrollment due to challenging coordination of efforts, such as marketing. Additionally, academic schedules often conflict with program participation, necessitating flexible engagement models to accommodate students' needs.

d. Success factors and recommendations

A key factor in the success of these initiatives is the strength of employer and community partnerships. Programs such as USask's ISIP and ISERP, Monash's Indigenous Leaders Program, the University of Auckland's workplace visits, and UBC's Indigenous Career Fair thrive due to strong collaborations with Indigenous organizations, businesses, and government agencies committed to Indigenous employment.

Ensuring cultural relevance in career programming has also been instrumental. USask's ISERP and ISIP successfully integrate Indigenous teachings into employment training, ensuring that students feel culturally empowered rather than assimilated into Western career models. Monash's Indigenous

Leaders Program similarly fosters leadership development through an Indigenous lens, reinforcing students' cultural identities while preparing them for professional roles.

To develop, strengthen and scale similar initiatives that prepare Indigenous students for successful, sustainable careers, the managers of these initiatives recommend other HEIs to:

- **Prioritize Indigenous leadership** in program design, ensuring authenticity and alignment with cultural values with Indigenous staff and faculty.
- **Integrate Indigenous knowledge** into career development activities to reinforce students' identities and experiences.
- **Establish partnerships with Indigenous organizations** and businesses to create meaningful employment pathways.
- **Invest in long-term sustainability** by securing dedicated funding.

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Final remarks

Insights

Given these findings, it is imperative that HE policies go beyond access and completion rates to ensure that graduates are effectively prepared for the labor market. This requires a comprehensive, multi-stakeholder approach and need to include a series of activities such as addressing skills mismatches, adapting curricula to emerging labor market trends, strengthening career support services, or fostering industry collaborations.

As labor markets continue to evolve, the ability of HEIs to adapt their strategies and provide inclusive, skills-focused education will be crucial in enhancing workforce readiness and ensuring long-term career success for students. A strategic approach that aligns education with labor market needs, enhances employability skills, and promotes inclusive economic opportunities will be crucial in maximizing the long-term benefits of HE for individuals, economies, and societies. This is particularly important for underrepresented student groups.

To ensure the successful implementation and sustainability of employability programs for underrepresented student groups, HEIs, employers and policymakers can consider the following insights based on this study.

1. Institutional coordination, resource integration and comprehensive career support

A coordinated institutional approach is essential to maximize resources, align initiatives with broader institutional goals, and foster long-term sustainability. Universities can enhance program quality and effectiveness by integrating employability initiatives across various departments, including career services, student support, Indigenous affairs offices, disability

offices, and academic faculties. Establishing cross-departmental collaboration ensures a holistic approach to student support, avoiding duplication of services and creating synergies between different initiatives.

Incorporating leadership from diverse stakeholders, including student representatives and faculty members from underrepresented communities, further strengthens the inclusivity and responsiveness of these programs. By embedding career development within the institutional framework, universities can create a sustainable model that continuously evolves to meet student needs.

Holistic career support models are more effective than isolated career services in fostering long-term student success. Career development should be embedded within the student experience from the early years of university education through graduation and beyond. Providing structured, culturally responsive career workshops, career counseling, and networking events ensures that students receive tailored support at different stages of their career journey.

Beyond traditional career services, universities should offer alternative engagement methods, such as group coaching sessions, peer-led career workshops, and culturally informed social events. These initiatives enhance student interaction with career services, fostering a sense of belonging and encouraging participation. Additionally, incorporating career-readiness courses into academic curricula ensures that career development is not treated as an optional service but as an integral part of the student experience.

2. Comprehensive student-centered support

To effectively address the different barriers that these students face, HEIs should adopt comprehensive support systems that extend from pre-arrival through career placement. This involves designing holistic career programs that provide tailored guidance, mentorship, and networking opportunities to ensure students are equipped with the necessary skills and confidence to transition into the workforce successfully. These programs should be embedded within institutional frameworks to offer continuous support at every stage of a student's academic and professional journey.

Language training is another critical component, helping foreign students meet the linguistic requirements of their host country and enhancing their ability to communicate effectively in professional settings. Expanding access to structured career immersion experiences, such as internships, apprenticeships, and cooperative education programs, ensures students gain practical, hands-on learning opportunities that align with industry expectations.

To accommodate diverse student needs, universities should implement flexible participation models, allowing students to engage in career development opportunities through part-time, hybrid, or asynchronous formats. This is particularly important for students balancing studies with work, family responsibilities, or accessibility challenges. In addition, expanding hybrid and remote career services can bridge geographic and financial barriers, making career development resources more accessible to students from all backgrounds.

In addition, it is critically important for HEIs to pay special attention to the intersectionality of these underrepresented student groups

because individuals might belong to more than one of these categories, leading to unique and compounded challenges that a singular focus on any one identity fails to address. Ignoring intersectionality risks overlooking the specific and often more significant obstacles these students encounter and creating support systems and policies that inadvertently leave behind the most marginalized students, perpetuating inequalities despite well-intentioned efforts. By adopting an intersectional lens, HEIs can develop tailored and effective support mechanisms that address the complex realities of students navigating multiple forms of marginalization.

3. Representation and mentorship

Employing mentors and program coordinators who share lived experiences with underrepresented student groups is a critical factor in the success of employability initiatives in HE. Representation not only fosters trust and a sense of belonging but also serves as a powerful motivator for students who may not see themselves reflected in traditional academic or professional spaces. When students engage with mentors who have navigated similar barriers—be they related to disability, displacement, indigeneity, or socioeconomic hardship—they gain more than just career advice; they receive validation, inspiration, and culturally grounded guidance that resonates with their own journeys.

Structured mentorship programs that intentionally pair students with professionals from comparable backgrounds can create safe, empowering spaces for skill-building, knowledge-sharing, and career exploration. These programs should be designed with flexibility in mind, incorporating both one-on-one and group mentorship models to expose students to a range of voices and lived

experiences. For example, peer mentorship models—where more advanced students support those earlier in their academic journey—can complement professional mentoring by building solidarity and easing transitions within the university setting. Group mentorship can also foster collective learning and community-building, especially for students who may feel isolated within their institutions.

Importantly, mentorship should not be limited to traditional career pathways but should also highlight non-linear and alternative trajectories that reflect the diverse realities of underrepresented groups. This includes showcasing careers in social enterprise, public service, community development, and cultural work—areas where many marginalized students may already be engaged or hold interest. Programs that bring alumni or local professionals back into the university setting—as guest speakers, facilitators, or career coaches—can also reinforce the relevance of HE to real-world outcomes and demonstrate what success can look like in various forms.

To ensure effectiveness, mentorship programs must be properly resourced and embedded within broader institutional support systems. Digital platforms can also expand access to mentorship for students in remote or underserved areas, particularly when designed with accessibility and language diversity in mind. Ultimately, centering lived experience in mentorship structures not only improves individual employability outcomes but also contributes to systemic transformation within HE. It challenges dominant narratives of success, fosters inclusive professional networks, and empowers the next generation of graduates to enter the workforce with confidence, agency, and a sense of purpose grounded in their unique identities and experiences.

4. Continuous program assessment and adaptation

HEIs must move beyond static program models and embrace a culture of iterative learning, grounded in robust evaluation frameworks that incorporate multiple perspectives - structured feedback, employer input, and labor market trend analyses. Structured mechanisms such as surveys, focus groups, and individual consultations can yield rich, actionable feedback on program effectiveness, accessibility, and relevance.

A data-informed approach enables HEIs to remain agile in the face of evolving student needs and rapidly changing economic landscapes. By integrating real-time feedback loops into program design and delivery, institutions can ensure that their employability efforts remain aligned with both the aspirations of students and the demands of employers. For underrepresented groups, whose experiences may differ significantly from the majority population, this responsiveness is especially critical. Programmatic flexibility, informed by timely data, allows HEIs to adjust and respond to such specific needs more effectively.

Embedding student voices in the assessment and redesign process not only improves program quality but also strengthens student engagement and ownership. Participatory evaluation methods, such as student advisory boards or co-design workshops, can empower learners as active stakeholders in their own success. These practices also contribute to building institutional cultures that value equity, transparency, and shared responsibility. Furthermore, clear and consistent data collection can support internal advocacy efforts, helping program coordinators and faculty demonstrate the tangible value of their

initiatives to institutional leaders and potential funders. Quantifying outcomes such as graduate employment rates, internship placements, or skill acquisition offers compelling evidence for resource allocation and long-term investment.

More complex, longitudinal tracking of student outcomes, especially for underrepresented groups, provides critical insights into the real-world impact of employability initiatives. Developing systems to follow graduates over time, with appropriate ethical safeguards and consent, can illuminate which interventions are most effective in supporting meaningful, sustained employment. This information can inform future program design, highlight areas for improvement, and contribute to national and global evidence bases on inclusive HE and workforce integration. Ultimately, continuous assessment is not simply a technical exercise, but a vital strategy for ensuring that employability programs remain inclusive, effective, and impactful in a changing world.

5. Program sustainability and scalability

Despite their potential to advance social equity and inclusive development, institutional initiatives often face significant challenges related to financial sustainability and scalability. These initiatives are frequently resource-intensive, requiring specialized staff, tailored programming, and ongoing support services. Without sustained funding and institutional commitment, many promising programs remain small in scale or become unsustainable once initial funding cycles end.

To address these challenges, HEIs must adopt a multi-pronged approach that leverages partnerships, diversifies funding sources, and embeds inclusive employability efforts within broader institutional and national frameworks.

Cross-sector collaboration is key: partnerships with public and private sector actors - including industry, local employers, government agencies, and international organizations - can provide both financial support and practical pathways into the labor market. Similarly, strategic alliances with non-governmental organizations and philanthropic foundations can unlock access to targeted funding and capacity-building opportunities. In some contexts, shared service models between HEIs or with local authorities may also reduce costs and enhance program reach.

Financial sustainability can further be strengthened through diversification of income streams. HEIs can pursue competitive grants, engage alumni networks and social impact investors, or embed social enterprise components into employability programs, for example, student-run consultancies or fee-based digital training platforms that generate revenue while offering experiential learning. At the same time, the adoption of scalable, low-cost delivery models - such as blended learning, online modules, or train-the-trainer systems - can expand reach while reducing dependency on external experts. Modular, stackable credentials and digital learning platforms can be reused across disciplines and target groups, enhancing both efficiency and impact.

Critically, these initiatives should not remain peripheral but should be institutionalized within the university's strategic planning and quality assurance mechanisms. Embedding inclusive employability goals into long-term institutional policies and securing dedicated budget allocations will ensure their durability. Data collection and impact assessment are also vital for demonstrating value to stakeholders, informing continuous improvement, and attracting future investment. Finally, greater

alignment with national policy frameworks—including incentives tied to equity, graduate outcomes, or regional development targets—can enhance the enabling environment and promote systemic change. A coherent, multi-level approach offers the best path toward sustaining and scaling inclusive employability initiatives in HE.

6. Employer engagement and strategic partnerships

While HEIs can implement a range of initiatives to improve the employability of underrepresented student groups, the long-term effectiveness of these efforts is significantly enhanced when aligned with employer engagement. Building strong, trust-based partnerships is essential for expanding inclusive career pathways and ensuring that academic programs reflect real-world demands. Employers are increasingly recognizing that hiring diverse talent is not only a matter of corporate responsibility or reputation—it directly contributes to innovation, creativity, and improved employee engagement and retention, ultimately enhancing a company's competitive edge.

To capitalize on this shared interest, HEIs must proactively engage employers as strategic partners across the educational journey. This involves not only connecting students to job opportunities but also collaborating on curriculum design and delivery to ensure that academic content is aligned with industry needs. Employers can contribute their expertise through guest lectures, co-teaching, mentoring, and collaborative projects, which enrich the learning experience and expose students to current practices and expectations. By embedding employer input into the academic environment, HEIs can help students build

the competencies and confidence needed to succeed in a diverse labor market.

Employers, for their part, should deepen their commitment by offering inclusive work-integrated learning experiences such as internships and apprenticeships tailored to the needs of students from underrepresented groups. These opportunities should include accommodations, mentorship, and financial support to ensure equitable participation. Additionally, employers can play a vital role on advisory boards focused on equity and inclusion, helping shape institutional strategies and contributing to system-level change. Co-investment in support services, career infrastructure, and outcome tracking systems can further institutionalize inclusive practices and enhance shared accountability.

Engagement with small and medium-sized enterprises (SMEs) can be especially impactful. While they may lack the resources of large corporations, SMEs often have flexible hiring practices and closer community ties that can support more personalized, inclusive opportunities. HEIs can assist employers by providing resources on equitable recruitment and culturally safe workplace practices, helping to build their capacity for diversity. In return, students gain access to meaningful work experiences that align with their backgrounds and aspirations, fostering stronger labor market integration.

Finally, employer partnerships must be underpinned by transparent processes and rigorous vetting. HEIs should assess organizational commitment to inclusion—not only through diversity pledges but through tangible workplace practices, retention policies, and career advancement pathways. Monitoring and evaluation frameworks that track both

student and employer outcomes will ensure continuous improvement and long-term impact. When employers and HEIs work together strategically and inclusively, they create the conditions for all graduates—regardless of background—to access meaningful, future-focused employment and contribute to more just and equitable societies.

7. Collaboration with other HEIs and policymakers

In the pursuit of equitable employability outcomes, collaboration between HEIs and with policymakers is essential. No single institution can address the systemic barriers faced by underrepresented student groups alone. By forming strategic partnerships, HEIs can share best practices, pool resources, and co-develop inclusive strategies that are both scalable and sustainable. Such collaboration enhances institutional capacity and fosters innovation by enabling experimentation across diverse contexts. Inter-university alliances can also amplify the voices of marginalized students in national and regional dialogues, strengthening collective advocacy for inclusive labor market policies and education reforms.

Partnerships with policymakers are equally critical to aligning institutional efforts with broader social and economic development agendas. When HEIs work closely with ministries of education, labor, and social affairs, they can help shape coherent policies that link HE with employment, skills development, and social protection. Policymaker engagement ensures that institutional initiatives—such as work-integrated learning, mentorship, and skills certification programs—are supported by enabling regulations, funding mechanisms, and labor market data systems. Collaborative policymaking also facilitates the creation of

national frameworks for inclusive graduate tracking, the recognition of microcredentials, and employer incentives to recruit diverse graduates.

HEIs can operationalize these partnerships through joint task forces, policy labs, shared career service hubs, and data-sharing platforms. Cross-institutional programs can pilot innovative models—such as regional mentorship networks, co-developed curricula with a focus on inclusion, or coordinated internship schemes for students from low-income or refugee backgrounds. These initiatives can be evaluated collectively to inform policy recommendations and resource allocation at the system level. By fostering multi-stakeholder collaboration HEIs can move beyond isolated interventions and contribute to structural transformation that benefits all learners equitably.

8. Underrepresented students in future labor markets

New avenues for inclusive employment are emerging in response to the rapid transformation of global labor markets, driven by digitalization, the green transition, and shifting social expectations. These transitions present both challenges and unprecedented opportunities for graduates from underrepresented groups in HE. With the right interventions, these students can be positioned not only to participate in the changing world of work but to actively shape it. The digital economy, for example, is opening access to remote, flexible, and gig-based work arrangements, which can be particularly empowering for students with disabilities and refugee learners who often face mobility, legal, or caregiving barriers that limit access to traditional employment settings.

Likewise, the growing green economy is creating demand for skills in environmental

conservation, renewable energy, climate resilience, and sustainable agriculture. These fields offer unique opportunities for Indigenous graduates, whose traditional ecological knowledge and community-centered approaches are increasingly recognized as assets in sustainability and land stewardship. Inclusive climate strategies that center Indigenous leadership and knowledge systems can create meaningful pathways for employment and social empowerment, especially when embedded within educational and policy frameworks that honor cultural identity and sovereignty.

In addition, broader labor market trends such as inclusive hiring practices, advances in assistive technologies, and the expansion of microcredentialing offer new mechanisms for promoting equity across all underrepresented groups. The offer of microcredentials by HEIs provide flexible, modular learning options that can help students from low socioeconomic backgrounds and those with disrupted educational trajectories to upskill and re-skill in a cost-effective and accessible manner. Employers' growing focus on skills-based hiring - rather than relying solely on traditional qualifications - also opens the door for more equitable talent recognition, particularly when supported by mentorship, work-integrated learning, and career navigation services tailored to marginalized learners.

To fully harness these opportunities, coordinated and sustained action is required across government, HEIs, and industry. Expanding access to high-quality digital skills training must be matched with investment in accessible technology, inclusive digital infrastructure, and culturally responsive teaching practices. Similarly, initiatives in green jobs must be coupled with place-based education, environmental justice frameworks, and the co-design of

curriculum with Indigenous communities and other stakeholders. By embedding equity considerations into policy and program design, stakeholders can ensure that no group is left behind in the transition to a sustainable and knowledge-driven economy.

9. Policy coherence and whole-of-government-approach

For policymakers, ensuring the successful integration of these HE graduates into the labor market requires strong alignment across education, employment, social protection, and economic development policies. Fragmentation between these areas often leads to skill mismatches, underemployment, and limited social mobility—particularly for graduates from disadvantaged backgrounds. Therefore, a coherent policy approach is essential to bridge the gap between academic education and training and labor market needs, especially in the context of emerging sectors such as digital technologies and the green economy. Aligning HE systems with national and regional development priorities can improve job readiness, support economic diversification, and contribute to inclusive growth.

A whole-of-government approach is critical to achieving this alignment. Coordinated efforts across ministries such as education, labor, social affairs, finance, and economic planning can ensure that policies are mutually reinforcing and responsive to the complex, interconnected challenges facing today's graduates. This approach promotes shared accountability, efficient resource allocation, and long-term strategic planning that links education with sustainable employment outcomes. It also strengthens institutional capacity to support these vulnerable groups ensuring no one is left behind.

To maximize impact, policy frameworks should incorporate active labor market measures, targeted support for disadvantaged graduates, and robust social protection mechanisms during the school-to-work transition. This includes investing in lifelong learning pathways, incentivizing public-private partnerships, and supporting work-integrated learning opportunities aligned with future skill demands. A whole-of-government, systems-based approach not only improves graduate outcomes but also builds more resilient and equitable labor markets prepared to meet the demands of a rapidly evolving global economy.



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This study, entitled **Breaking barriers: The role of higher education in advancing employability for all**, developed by UNESCO IESALC with the support of Lumina Foundation, explores the importance for higher education to enhance the employability of underrepresented students, such as students with disabilities, students with a low socio-economic status, Indigenous students and refugee students. The report explores the current situation of each of these groups, their main challenges, some actions that higher education institutions are undertaking to address these challenges and analyzes 15 case studies that are included in the twin publication 'Pathways to success: How universities are boosting career opportunities for underrepresented students'. This report provides evidence-based insights to improve institutional policies, career services, and support systems to foster greater equity and inclusion.



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