

Barriers to employment for individuals with Down Syndrome in Uzbekistan

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Employment is widely recognised as a key factor in promoting independence, social inclusion, and quality of life for individuals with Down syndrome (DS). Yet, despite international progress in advancing the rights of people with DS, significant barriers to employment persist worldwide. In Uzbekistan, these challenges are compounded by systemic, legal, and societal factors that remain largely unexamined in existing scholarship. The Law on the Rights of Persons with Disabilities (Government of Uzbekistan, 2020) establishes a legal foundation for inclusion, but inconsistent implementation and restrictive disability classifications continue to limit access to the labour market. Societal misconceptions about DS further reinforce exclusion, while insufficient vocational training and the absence of support mechanisms hinder workforce readiness. This article draws attention to these critical gaps and calls for targeted policies and sustained support systems to expand employment opportunities for people with DS in Uzbekistan.

Keywords: Down syndrome; employment; Uzbekistan.

Introduction

DS, also known as trisomy 21, is a genetic condition resulting from the presence of an extra copy or part of a copy of chromosome 21 (Akhtar & Bokhari, 2023). Although individuals with DS may face certain challenges, they also possess distinctive abilities and personal characteristics that enrich their identities. Intellectual disabilities in individuals with DS typically range from mild to moderate (Akhtar & Bokhari, 2023), but many demonstrate strong social skills, resilience, and a well-developed sense of community. Advances in medical care, such as early interventions and improved therapies, have significantly enhanced health outcomes and extended life expectancy, shifting the focus towards long-term quality of life and meaningful social participation (Ting et al., 2024). As people with DS increasingly seek greater autonomy, employment has become a vital pathway not only to financial independence but also to social inclusion and personal fulfilment.

Research indicates that employment can substantially enhance various aspects of life for people with DS. Engaging in purposeful work boosts self-confidence and encourages self-advocacy and strengthens interpersonal communication (Reynders et al., 2024). Through regular interactions with colleagues, individuals develop important social connections that meet

emotional needs, promote a sense of belonging, and contribute to a positive self-image. Additionally, employment is perceived as therapeutic for individuals with DS, helping to manage behaviour and emotions through the structured routine and nature of the work. This aligns with Adenan et al. (2024), who explain that the workplace provides a supportive environment that enables individuals with DS to manage stress and build emotional resilience. In addition to its personal value, employment can have a significant impact on the broader economic and social wellbeing of individuals with DS and their families. Beyond providing an income, paid work supports greater autonomy and participation in community life. Foley et al. (2014) found that increased family income correlates with better developmental and quality-of-life outcomes for individuals with DS, including improved access to health, educational, and recreational opportunities. Employment can also ease financial pressures within the household, contributing to a more stable and supportive environment.

However, despite these positive outcomes, individuals with DS continue to encounter ongoing difficulties to securing and maintaining employment globally. One of the major contributing factors is the persistence of negative societal perceptions regarding the inclusion of individuals with disabilities in the workforce (Friedman, 2020). In many developing countries, these challenges are compounded by additional factors such as societal ignorance, insufficient policy support, and limited job opportunities for individuals with DS. For instance, in Malaysia, although there is generally a positive attitude towards the inclusion of those with DS in the workforce, a lack of proper training and employer support severely restricts employment prospects (Rahman et al., 2025). Similarly, in Bangladesh, people with DS are often excluded from policymaking processes, leading to inadequate employment opportunities and a lack of support for inclusive hiring practices (Down Syndrome International, n.d.). Even though specific employment data for individuals with DS in these countries is limited, these barriers highlight the urgent need for targeted policies, increased public awareness, and employer education to improve employment outcomes for individuals with DS.

Reflecting similar global patterns, Uzbekistan faces systemic challenges in employing people with disabilities, including those with DS. Before delving into the specific employment issues faced by individuals with DS, it is important to contextualise Uzbekistan's socio-political and economic background, which shapes these challenges. Uzbekistan is a Central Asian nation with a population of approximately 37 million (World Bank, 2024a). As a former Soviet republic, it inherits a legacy characterised by institutionalised and medicalised approaches to disability (World Bank, 2022a). This historical context continues to influence contemporary social attitudes, policy frameworks, and service provision. The country is currently transitioning from a centrally planned economy towards a market-oriented system, yet structural reforms, especially in social sectors such as disability employment, remain incomplete and unevenly implemented.

In this context, official data indicate that employment rates for persons with disabilities remain

low. Although no statistics are available specifically for individuals with DS, only 8.9 percent of men and 4.4 percent of women with disabilities aged 16–59 and 16–54, respectively, are recorded as employed. This translates to an overall employment rate of just 7.1 percent for this group, with rural rates falling even lower, at 5.8 percent (World Bank, 2024b). While legislative measures such as the Law on the Rights of Persons with Disabilities exist, enforcement is inconsistent, and entrenched societal stigma further constrains the workforce participation of individuals with DS.

This paper seeks to explore key barriers to employment for this population, focusing on policy, social, structural, and educational dimensions that impede access to equitable vocational opportunities.

Social context of disability in Uzbekistan

Uzbekistan continues to face significant challenges in ensuring equitable participation for individuals with disabilities, including those with DS. Despite gradual reforms in social sectors aimed at improving inclusion, reliable data on disability prevalence remain limited. Estimates indicate that 13.5% of the population has some form of impairment, far exceeding the official figure of 2.3%, which is approximately 845,300 people (National Agency for Social Protection under the President of the Republic of Uzbekistan & UNDP, 2024). Applying the World Bank estimate to the total population suggests that roughly 4.7 million people may be living with disabilities, highlighting underreporting and gaps in national data (World Bank, 2023).

Within this population, individuals with DS constitute a distinct group whose prevalence and specific needs remain underexplored in national planning. Official statistics report 3,527 children under the age of 17 with DS, based on registration with Medical and Social Expert Commissions, indicating that the actual number is likely higher due to gaps in diagnosis and registration (National Agency for Social Protection under the President of the Republic of Uzbekistan, 2024). International projections provide additional context: the World Health Organization (cited in Anhor, 2024) estimates that DS occurs in roughly one in every 1,000 live births. Given an average of 812,000 births annually, this implies that approximately 800 children with DS are born each year.

These figures underscore the limited availability of accurate national statistics and the broader challenges of designing effective social, educational, and vocational services. In the absence of comprehensive data, understanding the scale and specific circumstances of disability in Uzbekistan is crucial for assessing systemic barriers and guiding targeted interventions. In particular, these insights form an essential foundation for addressing employment inequities and promoting inclusion and equitable opportunities for individuals with DS.

Methodology

This study employed a qualitative, single-case design anchored in a key informant (expert) interview, adopting an exploratory approach to understand the employment challenges faced by young people with DS in Uzbekistan. A case study approach was chosen because research on this topic in Uzbekistan is extremely limited, official statistics are incomplete, and sectoral documentation is fragmented. Under such conditions, expert interviews provide a valuable means of accessing real-life, situated perspectives that cannot be captured through documents or quantitative data alone (Bogner, Littig, & Menz, 2009). The aim was not to produce generalisable claims but to surface context-specific insights that can inform future research, policy, and practice.

The key informant was Ms. Nargiza Makhmudova, leader of IYMON, a non-governmental, non-profit organisation in the Samarkand region supporting the social inclusion of children and young people with DS. Makhmudova, who consented to the disclosure of her name and organisational affiliation, was purposively selected for her recognised expertise. IYMON's initiatives include public awareness campaigns, such as social surveys and a short film portraying everyday life for individuals with DS, as well as parent support clubs offering masterclasses, community outings, and consultations. The organisation has hosted the region's first international forums on inclusive education, and young people involved participate as volunteers in the Samarkand Marathon and exhibit their crafts at city events. Through collaboration with local government, higher education institutions, and other NGOs, Makhmudova and IYMON have advocated to challenge societal stigma and expand opportunities for individuals with DS.

The participant chose to provide her responses in writing rather than orally, allowing her to reflect on questions and provide detailed, considered insights. These written responses were analysed thematically using an iterative process of coding, categorisation, and theme development (Braun & Clarke, 2006). This approach enabled the identification of key patterns relating to barriers, facilitators, and practical strategies for supporting the employment and social inclusion of individuals with DS. While the written format precluded the interpretation of paralinguistic cues such as tone or emphasis, it ensured the accuracy of capturing the participant's perspectives in her own words. The analysis aimed to generate analytically transferable insights, situating the findings within the broader literature on DS and employment. The following sections examine key barriers to employment, drawing on both empirical evidence and insights from the expert interview.

Barriers to employment

Policy related barriers

Policy-related barriers obstruct employment for people with disabilities in Uzbekistan, especially for those with intellectual disabilities such as DS. The legal framework, including the 2008 Law on Social Protection of Disabled People (later replaced by the 2020 Law on the Rights of Persons with Disabilities) and relevant provisions in the Labour Code, formally recognises the right to work. However, practical implementation remains inconsistent. Medical Labour Expert Commissions (known as VTEK), which assess disability status, frequently classify individuals with disabilities as ‘unemployable’, assigning them to disability Groups I and II.

Group I includes individuals with severe disabilities who are entirely unable to work and require constant care, while Group II encompasses those who are also unable to work but do not need continuous assistance. Only individuals in Group III, who are also unable to perform standard job duties but may still be capable of limited work, are formally recognised as partially fit for employment. This classification system effectively excludes the majority from employment pathways, as reflected in national employment figures. As of 2022, fewer than 162,200 individuals across all disability groups were recognised as fit for work, representing just 25% of registered adults with disabilities. Of those, only about 21,100 (approximately 6%) were formally employed. Some estimates suggest that the actual employment rate may be as low as 2% (World Bank, 2022b), further illustrating the impact of restrictive classifications and the ongoing barriers individuals with DS face in accessing the labour market.

The 2020 law mandates that local authorities reserve at least 3% of positions in public and private organisations employing 20 or more people for individuals with disabilities (Government of Uzbekistan, 2020). This quota system aims to promote inclusive employment, but its impact has been limited. The World Bank (2023) highlights that weak monitoring mechanisms hinder employer compliance, a problem exacerbated by the limited capacity of the Labour Inspection unit under the Ministry of Employment and Poverty Reduction, which lacks the necessary staffing and resources to enforce the law effectively. As Yusupov and Abdukhalilov (2022) argue, without targeted enforcement and systemic support, such legislative measures risk remaining largely symbolic, offering little substantive progress for individuals with intellectual disabilities seeking fair access to the labour market.

The Labour Code includes measures of positive discrimination, allowing individuals with disabilities to receive a full-time salary for working reduced hours, along with extended annual leave and other benefits (World Bank, 2022b). While intended to support employment, these benefits can unintentionally create a perception of dependency rather than encouraging

autonomy. This emphasis on special allowances may also lead employers to view hiring individuals with disabilities as less economically viable. Yusupov and Abdulkhalilov (2022) further note that aspects of the social protection system reinforce this dependency, prioritising financial support such as disability allowances over initiatives that promote active participation in the workforce. Consequently, losing access to benefits may be perceived as too risky, discouraging formal employment. This dynamic affects people with disabilities broadly, including those with DS, and contributes to persistently low workforce participation.

This policy approach reflects an ableist framework, in which individuals with disabilities are primarily viewed as passive recipients of care rather than capable contributors to society. Such systemic ableism not only reinforces dependency but also marginalises individuals with DS, limiting their access to employment opportunities. Research demonstrates that ableism negatively impacts employment outcomes by creating barriers within the work environment, complicating disclosure of disabilities, limiting access to necessary accommodations, and fostering workplace discrimination, emphasising the urgent need for reforms that prioritise autonomy, inclusive practices, and sustainable employment (Sharma, Asselin, Stainton, & Hole, 2025).

Societal barriers

Societal barriers continue to pose significant obstacles to the employment of individuals with DS in Uzbekistan. Cultural norms, traditional beliefs, and prevailing social attitudes often frame people with intellectual disabilities as incapable of participating effectively in the workforce. Research in broader international contexts has identified multiple dimensions of these barriers. For instance, Jacob et al. (2022) identify workplace discrimination, stigma, employers' attitudes and management styles, lack of appreciation for employees' contributions, and inadequacies in accommodating individual strengths and needs. Similarly, Adenan et al. (2024) emphasise that such cultural factors reinforce exclusionary patterns, influence employer expectations, and restrict access to meaningful employment opportunities.

Although research specifically addressing the employment experiences of individuals with DS in Uzbekistan is limited, Nam (2021) provides insights into broader challenges faced by people with intellectual disabilities, including stigma among employers and concerns regarding graduates of specialised institutions. Some families establish small businesses to create work opportunities; however, such initiatives are accessible only to a minority, due to financial or social capital constraints. Makhmudova also noted examples from neighbouring countries, demonstrating how individuals and families have organised employment opportunities independently: 'In Moscow, an inclusive café "Different Grains" operates, employing people with Down syndrome and autism. These ideas could also be applied in Uzbekistan.' Nonetheless, such initiatives remain exceptional rather than representative of widespread practice.

Makhmudova's observations further illustrate the capabilities and potential of individuals with DS. She emphasised their distinct personal qualities and practical skills, which make them well suited to specific employment sectors. With appropriate training and support, many individuals with DS can contribute to service-oriented roles, particularly within the hospitality sector, where routine, hands-on tasks align with their strengths. Those involved in sports could take on roles as assistant coaches or support staff in recreational settings, promoting inclusion and visibility. Makhmudova also noted, 'People with Down syndrome really enjoy public attention.

Modelling or theatre could also be suitable for them,' emphasising that their social and performative strengths can be nurtured in creative fields. Scholarly evidence supports these observations, showing that individuals with DS respond well to structured routines, have strong visual memory, and demonstrate social motivation and responsiveness to social cues, facilitating collaboration with colleagues and engagement with clients (Jensen & Bulova, 2014; Assis et al., 2014; Tomaszewski et al., 2018). These interpersonal strengths, combined with emotional regulation and organisational skills, contribute positively to teamwork, customer service, and task management, aligning with the roles identified by Makhmudova.

Despite these strengths, a major barrier remains the lack of societal awareness. Employers often do not fully understand the capabilities of individuals with intellectual disabilities and may feel uncertain about hiring them. As Makhmudova noted:

Employers most often think that people with DS are aggressive, or they have no understanding at all. They doubt whether a young person with DS can manage a job, and some, in my personal view, may also fear damaging their own reputation. These concerns can only be addressed through proper information and awareness-raising.

This point is reinforced by reports from Anhor.uz (2024), a national media outlet, which highlighted how individuals with DS in the Samarkand region continue to face major difficulties accessing employment. Notably, not a single person with DS has been successfully employed in the region, despite vocational training programs, illustrating the persistence of societal and structural barriers.

Educational barriers

While Makhmudova's insights shed light on the regional context, the national picture reveals even more deeply rooted structural issues. According to the World Bank (2022b), vocational training opportunities for persons with disabilities, including those with DS, in Uzbekistan are severely limited and predominantly segregated. Only four specialised vocational colleges operate in the country, located in Tashkent, Samarkand, and Fergana, with a combined enrolment of just 768 students as of 2021. These institutions remain detached from the

mainstream education system and continue to offer outdated training programmes in areas such as garment modelling and manufacturing, the repair and maintenance of radio and television equipment, and the operation of small-scale shoe-making businesses, which fail to reflect the skills demanded by the contemporary labour market. Access to inclusive vocational education remains minimal, particularly for individuals with learning disabilities whose school-leaving certificates are often not recognised for further study.

A 2007 joint ministerial decree further restricts persons with disabilities to a narrow set of low-skilled professions, reinforcing stereotypes about their abilities and limiting access to more advanced vocational pathways. This not only constrains individual career aspirations, but also entrenches societal assumptions about their role in the workforce. Although the government has announced plans to refurbish or build 30 vocational training institutions between 2021 and 2025 to train 1,000 persons with disabilities annually, these initiatives remain focused on segregated provision (World Bank, 2022a). Without a shift towards inclusive models, such measures are unlikely to challenge systemic exclusion or support equitable participation in education and employment. Critical disability studies emphasise that segregated educational provision, even when framed as supportive, sustains ableist structures and reinforces marginalisation, rendering reforms largely symbolic rather than transformative (Goodley, 2017).

Another critical barrier for young people with DS in schools and vocational training centres is the absence of support assistants, which becomes essential when parents cannot accompany their children. Makhmudova explained:

Another barrier is the lack of assistants for people with Down syndrome in schools and vocational training centres. Since parents cannot always be with their child, such assistants are simply necessary. I know from my own experience. I wanted to train my daughter in massage therapy. Getting her a referral to a training centre was not difficult. But the actual learning process was impossible without an assistant.

She continued, laying out how:

To master the material, our children need more time. Teachers are constrained by the structure of the lesson and cannot give extra attention to my child. Since I work full-time and cannot accompany her to classes, we ultimately had to forgo this training.

This example illustrates how structural constraints in educational settings directly limit vocational opportunities for young people with DS, reinforcing broader patterns of exclusion and ableism in Uzbekistan's education system.

This personal story is echoed in international academic literature, which underscores the

importance of targeted support when individuals with DS are acquiring vocational skills. A nationwide Dutch study by Van Gameren-Oosterom et al. (2013) revealed that although some adolescents with DS had developed basic independence in personal routines, significantly fewer had acquired essential vocational skills, such as managing money or using tools. These findings highlight the complexity of preparing individuals with DS for the workforce, suggesting that without structured, individualised instruction and adequate time and support, vocational outcomes remain limited.

Reinforcing this conclusion, a formative evaluation of an Australian education-to-employment programme for adults with DS (Burgess & Cameron, 2018) confirmed the effectiveness of long-term, structured training initiatives with embedded support mechanisms. The programme showed that with consistent, tailored assistance, adults with DS can be successfully prepared for the workforce. This evidence supports the view that, in the absence of provisions such as support assistants, inclusive teaching strategies, and access to contemporary vocational programmes, many individuals with DS will continue to be excluded from equitable employment opportunities.

Overall, the employment prospects of individuals with DS in Uzbekistan are shaped by a complex interplay of social attitudes, structural barriers, and educational constraints. While individuals with DS possess recognised strengths that can contribute to the workforce, persistent stigma, limited access to inclusive, contemporary vocational training and systemic support continue to undermine their right to employment. Personal insights from disability rights activist Makhmudova, combined with national observations and international research, reinforce the urgent need for sustained efforts to raise public awareness, reform vocational education, and embed long-term support mechanisms. Without such coordinated action, barriers to inclusive employment are likely to persist.

Conclusion

The employment landscape for individuals with DS in Uzbekistan remains shaped by a legacy of medicalised, bureaucratic systems and entrenched societal attitudes that continue to hinder equal access to meaningful work. While international instruments such as the CRPD provide a foundation for inclusive employment, translating these into practice requires a comprehensive transformation in policy, service delivery, and public attitudes. This article has identified four critical areas for reform: dismantling the permission-based employment model, strengthening the enforcement and quality of the disability employment quota, investing in trained support assistants within vocational education, and building inclusive education-to-employment pathways.

Each of these areas reveals systemic weaknesses that should be addressed through coordinated, rights-based strategies. Replacing medical gatekeeping with direct access to employment

services would restore the autonomy and dignity of persons with DS. Strengthening quota enforcement, alongside employer training and support, would ensure genuine workplace inclusion. Introducing professionalised support assistants in vocational settings would enable learners with DS to participate and thrive, while structured transitions from education to employment would bridge the gap between training and real-world opportunity.

International examples from other countries demonstrate that substantive progress is possible when inclusive policies are underpinned by effective implementation, accountability, and active local engagement. By adopting and adapting these practices to its own context, Uzbekistan can begin to transform the structural and attitudinal barriers that have long excluded individuals with DS from full economic participation. Such a shift would help to develop a labour market that values people with DS not for perceived limitations, but for their potential, ambitions, and inherent right to contribute as equal members of society.

Recommendations

This article has explored the employment landscape for individuals with DS in Uzbekistan, highlighting legislative, structural, attitudinal, and educational barriers that restrict access to inclusive employment. Despite growing awareness and the ratification of international frameworks such as the Convention on the Rights of Persons with Disabilities (CRPD) (United Nations, 2006), significant gaps remain in implementation, particularly in policy, education, and employer engagement. The following recommendations are informed by this analysis and aim to advocate for systemic change through a rights-based approach that promotes equity, dignity, and participation for people with DS in the labour market. Further recommendations may emerge as ongoing efforts address these challenges comprehensively.

Reforming disability employment pathways

To advance meaningful employment reform for persons with DS and other disabilities, Uzbekistan should move away from a medicalised and bureaucratic framework that restricts autonomy and access to work. Current regulations, including those outlined in the joint resolution ‘On approval of regulatory documents for the rational employment of persons with disabilities’ (World Bank, 2022a), are recommended to be revised to eliminate the requirement for secondary assessments by VTEK commissions. These assessments, based on health status, professional background, and perceived employability, delay access to Employment Support Centres (ESCs) and impose a level of scrutiny not required of other citizens.

To advance equality in employment, Uzbekistan should shift from this permission-based model to one that upholds the rights and agency of persons with disabilities. Under the current framework, access to employment support depends on medical and administrative authorisation, positioning individuals as passive recipients rather than active decision-makers.

This approach is fundamentally incompatible with Article 27 of the CRPD (United Nations, 2006), which affirms the right of persons with disabilities to work on an equal basis with others, free from discrimination and procedural barriers. A rights-based system is advised to allow individuals to access ESCs directly, without requiring validation of their capacity to work. Such a reform should restore individual agency, eliminate unnecessary delays, and challenge entrenched stereotypes that equate disability with incapacity.

International examples offer valuable guidance for aligning policy with inclusive principles. In Bangladesh, despite persistent challenges in securing equitable employment for individuals with DS, there are noteworthy initiatives striving to improve this landscape. Down Syndrome International (n.d.) has documented community-based inclusive employment efforts that enhance labour market participation for individuals with intellectual disabilities. These initiatives focus on personalised support, direct employer engagement, and local-level coordination, enabling individuals to access employment opportunities without navigating overly centralised or medically driven systems. The approach emphasises individual capabilities and aspirations rather than institutional judgments, thereby promoting greater autonomy and inclusion. Uzbekistan is encouraged to consider adopting similar principles to reduce bureaucratic barriers and enhance direct access to employment services.

Strengthening the disability employment quota

To enhance the effectiveness of Uzbekistan's disability employment quota, the government should prioritise enforcement and provide clearer operational guidance. The current requirement for organisations with more than 20 employees to allocate at least 3% of positions to persons with disabilities (Government of Uzbekistan, 2020) ought to be reinforced through mechanisms that promote genuine inclusion rather than symbolic compliance. This includes ensuring that roles offered under the quota meet basic standards for accessibility, meaningful participation, and reasonable accommodation. The legal framework is advised to explicitly recognise flexible and supported work arrangements as valid forms of employment. By establishing clearer expectations and practical standards, Uzbekistan should ensure that persons with disabilities are not merely counted but meaningfully included in the workforce.

To support the quota system, robust monitoring and enforcement mechanisms are recommended to be introduced. A dedicated oversight body is advised to be established and adequately resourced to conduct workplace inspections, audit compliance data, and verify that positions meet the required standards. Penalties for non-compliance should be complemented by supportive measures for employers, including targeted training and technical assistance.

International evidence highlights the transformative potential of strong enforcement. In Kazakhstan, a country with a shared post-Soviet legacy, employment quotas for persons with disabilities are accompanied by targeted compliance tools (Kadyrov & Kaliyeva, 2024).

Employers are legally required to allocate between 2% and 4% of positions, depending on company size, and enforcement is facilitated through a combination of financial penalties and subsidies for creating accessible workplaces. These mechanisms have not only improved compliance but also contributed to shifting employer attitudes towards more sustainable and inclusive practices. For Uzbekistan, adopting a similar approach, grounded in clear legal obligations and supported by both accountability and practical guidance, is recommended to significantly enhance the reach and impact of its quota system.

Complementing enforcement efforts, increased transparency is encouraged to strengthen accountability and promote more inclusive employment. Mandatory reporting requirements are advised to oblige employers to disclose disaggregated data on the employment of persons with disabilities, including job types and workplace adjustments made. Incorporating this information into national labour statistics or corporate responsibility frameworks should embed disability inclusion as a routine employment practice. Lessons can be drawn from Kyrgyzstan, where recent reforms include disability-inclusive employment guidelines and the piloting of the “Accessible Country” programme. These initiatives have encouraged employer responsibility and generated data to inform policymaking and advocacy, demonstrating how transparency measures ought to support gradual yet meaningful progress.

Finally, clarifying and broadening the legal definition of employment is advised to help reflect the diverse ways in which persons with disabilities can contribute to the workforce. Uzbekistan’s current framework, which prioritises traditional full-time roles, often overlooks individuals whose impairments or support needs require more flexible arrangements, such as freelance work, remote roles, or supported employment with varying structures and settings. A more inclusive definition is recommended to formally recognise these alternative forms as legitimate, better matching individual strengths with appropriate opportunities. Such a shift should help dismantle structural barriers, expand access to employment, and empower persons with disabilities to participate fully in economic life, with greater autonomy and more sustainable livelihoods.

Investing in support assistants for inclusive vocational training

To promote genuine inclusion in vocational education, Uzbekistan should invest in the recruitment, training, and deployment of support assistants across all Technical and Vocational Education and Training (TVET) centres. Support assistants are essential for enabling learners with intellectual and developmental disabilities, including those with DS, to access and succeed in vocational programmes. These students often require differentiated instruction, extended processing time, and ongoing, individualised assistance to engage meaningfully with the curriculum. Without such support, they face exclusion from both educational pathways and future employment opportunities.

This challenge is not unique to Uzbekistan. Across Central Asia, inclusive education policies often lack the structural and human resource provisions necessary for effective implementation. In Kazakhstan, for example, despite legislative commitments to inclusive education, a 2024 study found that the provision of reasonable accommodations in TVET institutions, such as trained support assistants, remains insufficient, hindering genuine participation (Assanbayev & Makoele, 2024). Uzbekistan is encouraged to learn from these regional gaps and take decisive action to ensure that support assistants are integrated as a core element of its inclusive vocational training strategy.

Recognising this, the National Agency for Social Protection, in collaboration with UNDP, has emphasised the need for targeted vocational training assistance to promote the economic inclusion of persons with disabilities (National Agency for Social Protection & UNDP, 2024). In line with this, Shaghashvili (2022), who developed the guidelines for social services for people with disabilities in Uzbekistan, also highlighted the critical importance of personal assistance, noting that personal assistants play a multifaceted role, including support in ‘work, training, and educational activities’ (35). However, this recognition now ought to be translated into sustained, systemic action. It is therefore recommended that Uzbekistan develop and implement a national strategy to recruit, train, and deploy qualified support assistants across all TVET centres. This strategy should be underpinned by clear professional standards, sustainable funding models, and alignment with broader national disability inclusion goals.

To implement the proposed strategy effectively, Uzbekistan is advised to establish clear guidelines for the recruitment, training, and deployment of support assistants in all TVET institutions. Recruitment should prioritise individuals with expertise in supporting learners with intellectual disabilities, including those with DS. Support assistants ought to receive training in person-centred support, enabling learners with disabilities to exercise greater control and choice over their learning experience. Personalised needs assessments should be conducted to tailor support to each learner’s unique requirements, ensuring they can make informed decisions about when, how, and in what way support is delivered.

In addition, the roles of support assistants should be formalised within the vocational training framework. This includes establishing clear job descriptions, professional standards, and performance evaluations to ensure that these roles are recognised as fundamental to inclusive education rather than supplementary. The national strategy is recommended to include a robust monitoring and evaluation component focused on student autonomy, academic progress, and emotional well-being. Adjustments to the strategy should be informed by feedback from students, educators, and families to ensure that support services are truly responsive to the needs of individuals with DS and other disabilities.

International experience reinforces the value of this approach. In Georgia, another post-Soviet country, the deployment of inclusive education facilitators in vocational colleges, though still

limited in scale, has been recognised by educators and families as an emerging best practice (Chanturia & Gorgodze, 2016). While inclusive education facilitators focus on broader institutional inclusion, support assistants provide individualised, user-directed support. Despite their differing scopes, both roles serve a shared purpose in vocational settings: enabling learners with disabilities to access training and transition successfully into employment. Each should contribute to dismantling barriers, adapting learning environments, and promoting learner autonomy. Incorporating such support into Uzbekistan's TVET system is advised to be a priority to ensure the full participation of learners with disabilities in both education and the labour market.

Creating inclusive education-to-employment pathways

Uzbekistan is advised to develop coordinated education-to-employment pathways to ensure that inclusive education leads to equitable employment outcomes for individuals with DS. These pathways should be designed through collaboration among schools, vocational institutions, employers, families, and disability support services, to enable smooth transitions from education to work. Early career counselling, work-based learning, supported internships, and tailored job coaching are recommended as integral components, providing learners with the skills, confidence, and workplace readiness necessary to succeed while supporting employers in adopting inclusive practices and preparing workplaces for diverse needs.

International examples offer guidance for this reform. In Slovenia, the "Transition" project combined personalised vocational guidance, professional training, and policy incentives to support young people with disabilities into employment (Tabaj et al., 2014; European Commission, n.d.). Similarly, in the Czech Republic, pilot initiatives involving supported internships and job coaching demonstrated that gradual workplace integration can enhance employability and reduce exclusion (Inclusion Europe, 2020). These experiences underscore that holistic, sustained approaches achieve stronger results than isolated interventions.

Inclusive education should be positioned as the foundation for lifelong participation, with post-training support embedded into the national vocational framework. This requires national commitment to investing in inclusive infrastructure, monitoring outcomes, and adapting provision to meet evolving labour market demands. Pathways should build on the strengths of individuals with DS, including their aptitude for routine, interpersonal communication, and creativity. Employment sectors such as hospitality, the arts, and sports are recommended as natural entry points, provided that employers receive guidance, training, and ongoing support. Coordinated planning, cross-sector collaboration, and targeted employer engagement are advised to ensure that people with DS are not only included in the workforce but enabled to contribute meaningfully to society.

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