The technological and digital divide in education drives the divide in employment and socio-economic development for youth with disabilities in Bangladesh and Kenya

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Sightsavers

Guess the price

Regular/scientific calculator

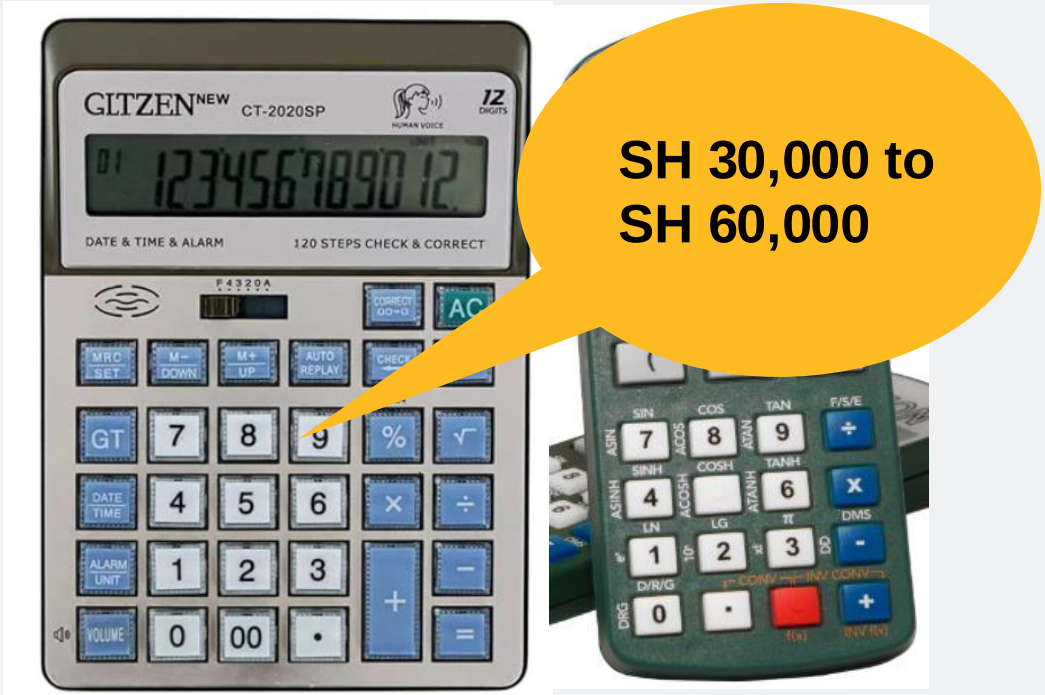
Talking calculator

Guess the price

Regular/scientific calculator

SH 1,500 to SH 3,000

Talking calculator



SH 30,000 to SH 60,000

Guess the price

Calculators designed for blind people and with low vision can cost between £35 and £595, depending on the model and features:

- Talking A4 size desk calculator: £35.59
- SciPlus 3200 scientific calculator: £400
- SciPlus 3300 scientific calculator with speech: £535
- Platon talking scientific calculator: £374
- A95 calculator costs £32.40 and only has an eight-digit display

This is just one example of the digital/technological divide that exists within access to education.

Background - Digital divide

The digital divide refers to the **gap between those who have access to modern information and communication technology (ICT) and those who do not**.

The digital divide in education encompasses disparities in access to ICT that supports learning – including internet connectivity, digital devices and digital literacy – among students, teachers and schools.

Background - Education and training

Education is one of the most powerful tools by which people who are economically and socially marginalised, including young people with disabilities, can lift themselves out of poverty and fully participate in society.

The International Labour Organization highlights the significance of access to accessible and equitable educational and training services as a key resource to acquire a means of living.

Background - Access to technology

The coronavirus pandemic and school closures highlighted the importance of accessing digital learning resources for learners across the world.

Access to technology and digital learning resources has become increasingly crucial in education, and an equally important skillset for employment in today's digital age.

Despite this, the gap in access and its impact on skills acquisition for young people with disabilities is under-researched.

Community-based participatory research

sought to build the evidence base around the lived experiences, aspirations and challenges youth with disabilities face in accessing education and livelihood opportunities in Bangladesh and Kenya.

40 peer researchers led the data collection and engaged in data analysis, finding validation and dissemination, and advocacy activities.

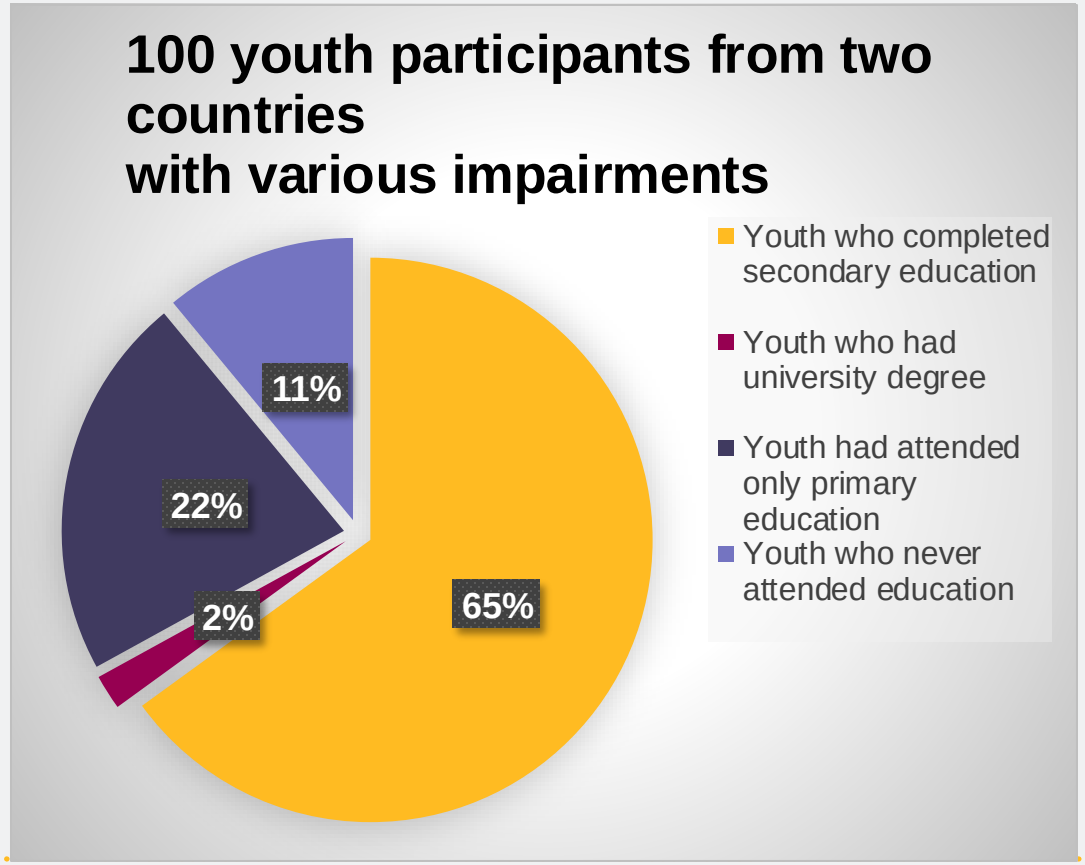
Combination of **innovative visual methods with traditional qualitative research** methods

100 In-depth interviews with youth with disability aged 18 – 35

Geography Information mapping (GIS)

Documentary Photography

Data was thematically analysed using inductive and deductive approach



Findings: Goals and Aspirations

Further education and Formal employment

Despite these relatively modest educational qualifications, nearly all participants described **further education as a life goal.**

Those with secondary education or above were particularly keen t**o garner further educational qualifications in employable subjects such as computer science, mathematics, health sciences and engineering.**

For many, education…

“…was the pathway to improving their chances of finding a permanent employment and earning livelihood.”

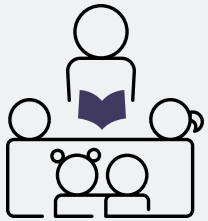
Barriers to accessing education and employment

Despite these aspirations, and both countries' efforts to promote inclusive education and employment, young people with disabilities continued to face significant barriers to accessing education and employment opportunities.

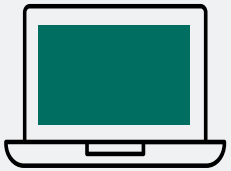
The major barrier reported

“…not being able to start or having to withdraw the enrolment because the local schools lacked accessible technological and digital resources, and could not accommodate their accessibility needs.”

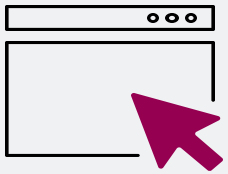
Access to learning and accessibility of learning resources



39 per cent of those who left formal education after primary school left because of **“…lack of access to accessible learning resources, associated costs and inaccessible assessment methods”.**



young people with vision impairments **"...didn't have access to adequate braille books or screen readers and the only accessible 'Perkins Brailler' typewriter was slow, inefficient and noisy."**



Lack of digital literacy

"...was the biggest driving factor preventing them from continuing education.”

Youth with disabilities were "...not allowed to study STEM subjects at school nor at higher education".

The major barrier reported

young people with disabilities from both countries faced challenges in **"…equitable access to digital education despite the countries claiming to make strides in digital literacy programmes."**

There was higher urban vs rural disparities in access to ICT and in digital literacy.

Digital divide in education was reported higher in Bangladesh

Technical and vocational training

Lack of digital literacy and poor access to technology was also cited as barrier **“…in accessing technical and vocational training that could have led to employment at formal or informal sector.”**

Lack of digital literacy was also major barrier for those who wanted to start up their own small entrepreneurship.

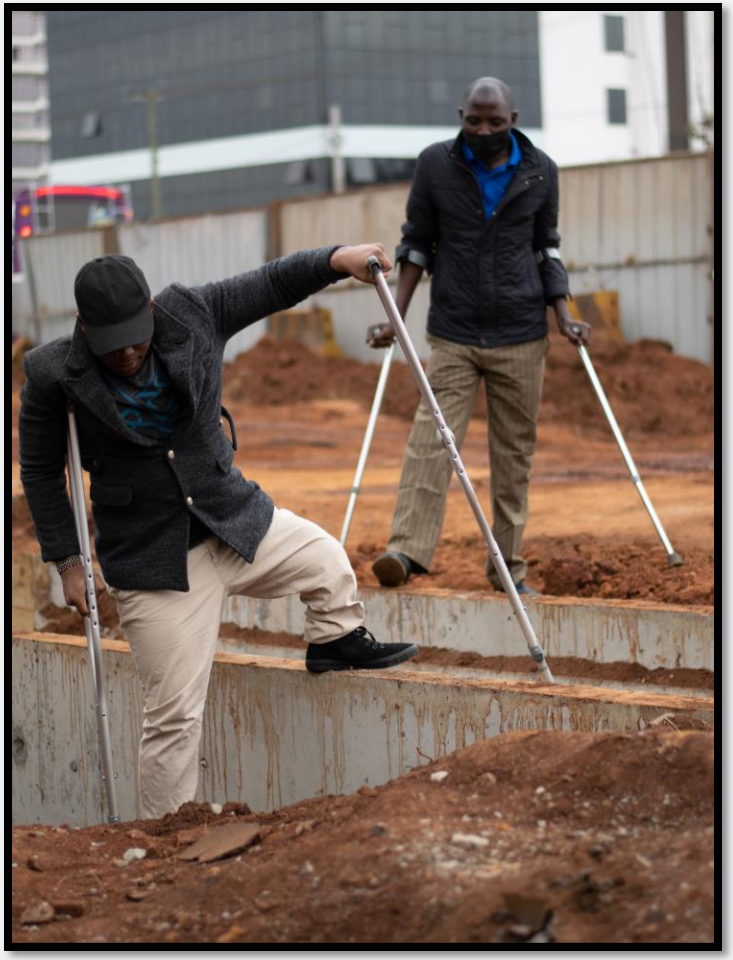
Gendered Experiences

There was clear **gender digital divide** as **"...boys with disabilities were more likely than girls to have access to digital learning resources and tools at home."**

Girls were less likely to be get into STEM subjects at school or higher education which **"...exacerbated existing gender inequalities by limiting girl's access to education, information, and economic opportunities. "**

This **gender digital divide** and **lack of digital literacy** was reported higher in Bangladesh as **"...education of girls with disabilities is undervalued due to societal biases".**

Experiences by disability types



Those with "...**minor visible mobility impairment were favoured by schools for STEM subjects over vision, hearing and learning impairments**."

Those with learning and psychosocial disabilities experienced the highest level of digital divide.

The digital divide in education **mirrored and further exacerbated socio-economic inequities for disabled youth with intersecting identities.** It d**isproportionately impacted those from rural, low-income, blind and visually impaired, and other marginalised communities**.

Discussion

This digital and technological inequality especially affected the employability of youth with disabilities **"…limiting their participation in the digital economy."**

Therefore, it is only by the provision of **"…equitable and accessible inclusive education – across all subjects, digital and technological – that the cycle may be broken and opportunities for education and beyond into work may be levelled."**

Conclusion

Addressing this **divide requires comprehensive policies, community engagement, and contextualised and targeted interventions.**

Stakeholders must **“…collaborate to create a multi-sectoral public private partnership for inclusive digital environments that empower all youth including youth with disabilities and promote equitable socio-economic development.”**

Thank you

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