Infrastructure can increase access to education

When infrastructure is not accessible, functional and efficient, major disruptions are experienced throughout the ecosystem. These disruptions hinder development, causing economic deficit and perpetuating inequality and poor standards of living.

By Nangamso Matebese-Maponya

Impact of infrastructure on students

While collecting stories from women for my "Investing in Women Centric Transport" podcast, I was overwhelmed by responses from young female students in particular, and how poor transport systems affect their daily (study) lives. Transport availability and quality, travel time and cost have all proven to have a huge potential to influence their field of study and whether they even make it to the end of their studies.

One participant said, "I had to stay in the library until late to access internet and be able to complete my assignments. This meant I will take a 22h00 bus home, which took a route that will drop me far from home. I had to ask male friends and family to wait for me at the bus stop, so they could walk me home. I risked my life many times to get my degree. Some of my friends dropped out of their studies because of this safety issue."

Another glaringly horrifying story for me was witnessing students living in informal settlements and all kinds of unhealthy and unsafe dwellings, which made me ask myself a lot of questions about what we deem "access to education" to be. Whether we consider a conducive environment to be vital in providing access to education, and whether we see this as directly linked to availability of and access to infrastructure.

At the peak of Covid-19 lockdowns, we were also exposed to the plight and the state of poor infrastructure when students could not join online lectures (or maintain stable connection) because of poor or lack of internet connectivity in remote areas. High

o costs of data became another issue for some, and some did not even have devices to be able to access study material.

There is strong evidence that high-quality infrastructure facilitates better instruction, improves student outcomes, and reduces dropout rates, among other benefits. (World Bank Blogs, 2017)

2 www.futuresa.co.za

How to funders play a role?

Bursary providers have a major role to play in providing access to education and have been successfully doing so for the longest time. Can we perhaps elevate their good work by putting a spotlight on the role of infrastructure in accessing education?

Research done by World Wide Web Foundation in Bangladesh (www.webfoundation.org, 2021), highlighted the following as key areas to consider in making education accessible:

- Students need better access to infrastructure that allows them
 to have a stable internet connection. This includes electricity
 supply. Consideration should be given to not only the
 availability of the infrastructure but also the quality that can
 meet the growing demand for high bandwidth internet traffic.
- To make education accessible to all, educational approaches should consider each student's socio-cultural and socioeconomic circumstances, as it is not just a matter of technical availability of internet access for students to attend classes.
- The cost structure of mobile internet access should be addressed to support students who do not have unlimited access to the internet.

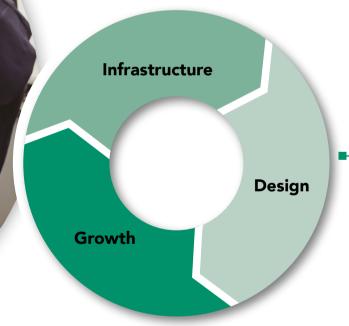
Proactive support is needed for students from the government, educational institutions, and private companies to ensure each student has access to quality education

While providing funding for tuition, and food and books gives so many students access to education and alleviates frustrations around basic needs, there is certainly a more significant role these funders can consider playing in accelerating access to education and increasing a talent pool for the corporate and business world. Some include the following:

- Partnering with Government, learning institutions and private sector to finance and/or deliver infrastructure to meet students' educational and social needs – student accommodation, alternative energy source, student transport systems etc.
- Providing students with IT devices, decent internet connectivity, uninterrupted power supply (UPS) and other interventions to minimise interruptions with their studies.

Programmes like the Student Housing Infrastructure Programme (SHIP) led by the DHET and NSFAS, Micro Grid and Embedded Energy Generation programmes and others, are some of the opportunities these institutions can participate in to accelerate access to infrastructure for students.

Though many infrastructure programmes are designed to promote a coordinated and centralised delivery approach, there are opportunities for interested parties (like corporates who provide bursaries) to participate in and reduce the burden on students' lives and institutions associated with access to education.



Parting shot

Student funders and bursary providers have played a significant role in providing access to education and given so many learners, particularly from disadvantaged backgrounds, a chance in life. This article calls on all those funders to think more strategically about their possible contribution in increasing access to quality and efficient infrastructure to students, increasing their chances of success in their studies, thereby contributing to a greater pool of well trained and skilled professionals for our economy.



Nangamso Matebese-Maponya is an infrastructure finance professional, with over 14 years of experience in development finance institutions in South Africa, who has participated and led several infrastructure projects in the continent, across different sectors. She hosts a podcast titled "Investing in Womencentric transport" focusing

on elevating the role of infrastructure access and efficient designs towards the growth of the society.

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