

Inclusive Education

School: Union College // Location: Zimbabwe // Project Leader: Delvin Takudzwa Marimo (Zimbabwe)

Background

Zimbabwe already has an alarming rate of unemployment and poverty. For people living with disabilities, their experience is much worse compared to others. Shockingly, according to the USAID in a 2018 study in the article Disability News, approximately 60-80million people are living with disabilities in Sub-Saharan Africa. In 2011, the world report on disability by The World Bank claimed that more than 90% of school age children with disabilities do not attend school at all. Zimbabwe's Ministry of Education Annual Statistics Report 2016 estimated that about 52% of children living with disabilities do not have access to education.

Few schools have the resources and infrastructure that accommodates students with disabilities and the cost to attend them is way above the average salary of a middle and working class parent. So many students are at a disadvantage and the government has not been supportive, which means only NGOs are working tirelessly to be inclusive.

Growing up with a friend who had her leg amputated at the age of 15 years due to cancer, made me learn a lot about how people with disabilities are disadvantaged in Zimbabwe. All prosthetics and medical equipment are imported from either China or the USA, so usually things like wheelchairs and forearm crutches are much more expensive. As a student who has always been interested in engineering, I was drawn to the biomedical engineering field because I wanted to design and build prosthetics that can be locally accessed by people in Zimbabwe. I knew such technology and knowledge would be found in US schools like Union College and that is why I was so passionate about studying here. In my search for knowledge about people with disabilities (PWD), I realized that the infrastructure in most schools and workplaces is not accommodative to people with disabilities. As someone who did building studies as a practical subject in high school, I know how to do bricklaying and most of the processes required when constructing buildings. This has led me to propose a project where I can improve the infrastructure in schools through construction of Blair toilets that can be easily accessed by students with disabilities.

The Problem

In most Sub-Saharan African countries, there are strong traditional beliefs on the causes of disability. Myths about this include: giving birth to a child with disabilities is a curse from the gods, disability is a sign of evil and witchcraft, and disability is a punishment for bad deeds. Sometimes, if a wife gives birth to a child with disabilities, the husband will divorce her because she is considered "bad luck". This has caused a lot of discrimination against PWD for centuries and most children with disabilities do not get the love and care they deserve.

After experiencing discrimination from family and society, schools are no different. Most schools in Chitungwiza, the town that I come from, do not have the proper infrastructure that can accommodate students with disabilities. I remember that in both my primary and high school we did not have any restrooms that accommodate PWD, and this posed a great struggle to some of my friends and classmates with disabilities. The situation is even worse in remote areas where more than 80% of schools still use pit latrines. Until this day, nothing has changed in these schools and the numbers of children with disabilities going to school are dwindling. This means that our communities are losing so much talent due to lack of inclusive education.

In a study conducted in 2016 by Dr. Sylod Chimhenga, not only were facilities a major barrier to inclusive education in Zimbabwe, but a lack of trained teachers were too, which impacts the distribution of resources like textbooks. The inability to attend school has created a challenge for most disabled people as they grow up to be unemployed and homeless, often resorting to begging in the streets as a means of survival. According to research by Tafadzwa Rugoho in 2014 in the Developing Countries Studies journal, more than 75% of people who are living and begging in the Capital City of Zimbabwe are disabled.

Objectives And Expected Impact

1st Objective: A majority of the schools in Zimbabwe are one story buildings, so the major facilities problem for PWD is access to restrooms. My overall goal is to build two Blair toilets with adjustable toilet safety rails on the toilet seats. I am going to build these two restrooms at Mururi Primary School which is located in Mashonaland West in rural Zimbabwe. Mururi Primary School currently has 4 pit latrines for a population of about 560 students including about 15 students with physical disabilities. It is more advantageous to build these types of toilets in rural Zimbabwe because most schools are underdeveloped

and they still use pit latrines which pose a greater challenge to PWD. Schools in rural Zimbabwe are usually run by the community, so any construction at the school is approved by parents' committee and less paperwork is involved. My grandparents live close to Mururi School and they are both on this parents' committee, which makes it easier to get approval and do the construction. Another advantage of building in rural Zimbabwe is the support from the community. Professional Builders, volunteers for manual labor and locally available material like sand, gravel stones and even bricks can be sourced from the community, making it less expensive compared to urban locations. Most schools in rural areas consist of a kindergarten, primary and secondary school usually separated by a fence. Therefore, with this project, I plan to help about 15-20 primary students with disabilities and also about 20 secondary school students each year. The community at large will also benefit because most community meetings with elderly people like my grandparents are held at this school.

2nd Objective: Most students with disabilities from my hometown in Chitungwiza attend either government or municipality schools because they are relatively affordable. Since these schools might require a lot of paperwork and meetings to do any type of construction, I am planning to just make renovations. Despite the challenges of getting approval, I plan to add grab bars to the already existing flushing toilets in these schools. Chitungwiza district has 15 governmental and municipality primary schools. With approximately 20 students with disabilities per school, I hope to renovate at least 1 toilet in 5 of the schools so that it can impact at least 100 students with disabilities per year.

For students who use wheelchairs, sometimes it is hard for them to sit up straight on the toilet seats, so when adding grab bars, I am going to include the addition of commode chairs. These commode chairs can be securely fixed or detachable depending on the school's preference. In schools where it will be difficult to make any renovations or reach an agreement, I plan to just donate these commode chairs so that at least students will still benefit from them.

3rd Objective: In Zimbabwean schools, it is a common practice to have mini-workshops which students or teachers can organize with approval from the headmaster. I remember in both primary and high school, we often had former students coming in to give motivational speeches. Workshops are an effective way to reach out to many students and teachers in schools with no major costs such as travelling, building rentals and expensive catering. My plan is to go into at least 10 out of the 15 schools in Chitungwiza creating awareness of PWD. I am going to partner with a friend of mine Mr. Courage Ziko who is a teacher by profession and is a person living with disabilities. Growing up, Mr Ziko experienced some discrimination, and he has always been an advocate ever since he became a teacher. Mr Ziko will help with connecting me with other professionals in the district and approaching schools where we plan to conduct our workshops. I plan to invite more professionals in this field who will give presentations in these workshops. I am trying to reach out to organizations like The Federation of Organizations of Disabled People in Zimbabwe (FODPZ) and Disability Voice Zimbabwe to get representation from them. The goal is to develop short presentations/lessons that will be shared during workshop meetings with students and teachers. Schools in Zimbabwe use the trimester system, so over the summer in June and July, schools will still be in session and that will be a perfect timing to do this project. As a result, this will impact around 150 adults and approximately 1000 students.

4th Objective: Stationery and other resources that contribute to an easy learning experience for students with disabilities are expensive. A single set of necessary stationery can cost up to \$50, and for most people in my community, that can be half of their monthly salaries. From the remaining Davis funds, I plan to buy textbooks and stationery that will be donated to students with disabilities. To keep these donations running, I plan to start a fundraising campaign. Adults in my community play soccer for fun almost every Sunday. From my area, about ten clubs exist. So I plan to organize with club coaches to host a tournament once in every academic semester so as to raise the donations for textbooks and stationery.

Project Timeline

Week 1-2 (June 26th - July 10th): Meeting with school headmasters in Chitungwiza during the first week to determine the toilets on site that we can modify. Construction of grab bars and fitting commode chairs begins during the second week. During the construction, Mr Ziko and I will start having 30-60min workshops with students and teachers creating awareness.

Week 3-6 (July 13th - July 28): Construction of Blair toilets and continuing with awareness workshops.

Week 7-8 (July 30th - Aug 6th): Completion of construction. Final week of awareness campaign.

Sustainability

We are going to build toilets that will stand for years. Recorded videos of the awareness project lessons will be uploaded to YouTube and can be accessed anytime.