MGPO438

Social Entrepreneurship and Innovation

SEI Social Enterprise Start-up Plan 60 Million Girls

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1. Systems Map (https://miro.com/app/board/o9J_kw6UyOk=/)

There are a number of root issues that together create a lack of access to quality education in the Global South. The **cycle of poverty** is described as a "set of factors in which poverty, once begun is likely to continue unless an external intervention takes place" (Breaking the Cycle of Poverty in Achieving the MDGs, n.d.). Effectively, the majority of impoverished person's daily income goes towards satisfying their daily consumption of goods and services to maintain their physical requirements and social conditions. The issue here is that little of that money is then saved up for investments towards their own human capital. In the long run, this investment could improve their chances of obtaining skilled and profitable employment opportunities.

Thus, unemployment or access to only low-paying, labor-intensive jobs degrade the health, security and living conditions of those in poverty, leading to vulnerable situations. For example, they lack the available assets to buy a new tin roof or pay for their son's new medication. This limits their physical and mental capacity, leaving them in a worse position than they started at.

This phenomenon can create barriers for accessibility to quality education in a number of different ways. Impoverished children might lack the resources and energy to travel to the closest quality educational institute. They might have no choice but to work to financially support their families or maybe they cannot afford to purchase the necessary school material. Financially

unstable families might not be able to provide nutritious meals to their children, causing them to suffer from malnutrition, slowing down their physical and mental development. These children are at a higher risk of engaging in alcoholism, drug abuse, and juvenile delinquency. Simply put, the cycle of poverty is a large scale and important issue that negatively impacts almost all dimensions of life, especially learning and acquiring access to quality education.

Parental unemployment has a negative impact on children's education as it destabilizes the economic resources of the family. Unemployment can lead to homelessness, forcing families to move to shelters, detaching them from their communities. Children might have to drop out of or switch to schools with inadequate infrastructure, hindering the completion of their education.

Despite progress in primary school enrollment rates and middle school, secondary and post-secondary rates remain low because parents are not likely to continue supporting their education. Families suffering from parental unemployment tend to undermine the real value of education (Fleury, 2015). In the rural area of Myanmar, parents are skeptical about if education can provide a better future for their children, given the current lack of financially adequate employment opportunities (Fleury, 2015). This culture has a strong effect on children becoming unskilled labourers, getting married early or even becoming involved in criminal activity.

Governments around the world have implemented censorship in their schools, which is an infringement on legal learning rights to students, according to the Commission on Intellectual Freedom (Brown, 1994). In China, new educational texts go through rigorous censorship before publishing. Even e-learning is heavily censored, where curriculums need to be related to Chinese culture.

Findings from the International Monetary Fund surveys suggest that corruption increases the cost of educational services (Gupta, 2000). Governments might provide free public education, but citizens find themselves paying unofficial, illegal fees or extra charges. Therefore, illegal payments impede parents from enrolling their children in school and explain a higher dropout rate in developing countries. Corruption also decreases the volume of publicly provided services. Theft of textbooks is common for leakage, and despite public expenditure, education supplies are under-delivered or overpriced. Corruption may lower the quality of education services given that teacher recruitment and promotion are bribed for within the government. Some governments continue to shrink the amount of quality education funding, due to a shift in priorities or by taking the money for personal use. Malaysian public universities are trying to

improve the sources of financing through alternative initiatives. But the diversification of funding is limited and for developing countries, becoming independent from the governments' budget is a real challenge.

In terms of bilateral and multilateral aid, researchers argue there is a culture of impunity, a form of corruption that entails inaccurate descriptions or realities and results in demonstrating the efficiency and gaining leverage in the market of donors and funds. The allocation of the United Nations' budget, for instance, is based on what the members of donor organizations want, not on real structural needs (Mandagi, 2017). Many countries receive huge amounts of money from Official Development Assistance (ODA) but they undermine proper impact measurements to assess progress. ODA most of the time entails 'white savior complex', thereby using donors' definitions of 'altruistic help' that lack empathetic design thinking and hinder the recipients' local economy and entrepreneurship.

Marginalized groups face systemic discrimination across all levels of society including education. These groups struggle to enter and stay in school when the curriculum, teachers, their families and the government discriminate against them. These groups are often victims of systemic poverty and without access to education, will remain trapped. For many, they view their future as bleak, because even if they do gain access to education, they believe they will continue to experience discrimination on the labour market, with lower-paying jobs.

Throughout history, education has been used as a tool for colonization and assimilation of indigenous people. The curricula disparaged their cultures and histories and the content was communicated in the colonizer's language. Many of these problems persist because limited efforts have been made to include indigenous people in the redesigning of education (if any redesign takes place at all). Therefore, indigenous students do not receive culturally relevant education (Consentino, 2019). There are also fewer schools built in areas away from urban centers, where there is a higher concentration of the indigenous population. Because of these barriers, the dropout rate is higher among this marginalized group. Children coming from other ethnic and cultural minorities can face similar discrimination, some are legally not allowed to go to school. Even if they can go, they can face segregation and discrimination. For instance, they are forced to sit in the back and are punished more often by teachers (Curtis, 2009).

In the developing world, 90% of children with disabilities do not go to school (UNICEF, 2012) because schools do not have the physical infrastructure and materials to meet their specific

needs. Thus, the curriculum is inappropriate for their needs or inaccessible. Students with severe disabilities require specialized and personalized support which, in schools that are underfunded and overcrowded, teachers are incapable of providing. Disabled children will also face stigma from their teachers, peers and even family. Overall, there is a lack of understanding and importance placed on their unique needs for education.

Girls will likely deal with cultural norms around gender roles. Cultural beliefs about gender roles times force girls to stay at home and do domestic work or get married rather than go to school. Moreover, girls are more likely to be victims of sexual violence. Rates of HIV/AIDS among women are increasing worldwide, especially in developing countries. 64% of youth in developing countries suffering from HIV/AIDS are women (UNICEF, 2015).

External disturbances in the form of natural disasters and conflict can have devastating effects on education. These are debilitating to the capacity of a nation-state and its citizens to carry out their ordinary functions. These disturbances arrest progress and bring people down to their survival instincts. As stated in Maslow's hierarchy of needs, the ability to learn facts and theories from different topics is one of our higher-order functions and can only take place once lower-order needs are met (Mcleod, 2018). For instance, access to quality education will not be a priority when survivors must fend for themselves after a major earthquake has destroyed most buildings in an area. The same can be said for violent conflict, as threats to personal safety will be prioritized over travel to educational centres because the government cannot ensure security and rule of law.

Additionally, when armed conflict or natural disasters take place, transportation infrastructure likely will suffer damage, inhibiting people from travelling to these education centres. Moreover, the physical education infrastructure can also be destroyed, meaning that there's no longer quality education that people can access. In conclusion, these external disturbances threaten the progress of our societies, forcing us to engage with lower-order functions.

Students, especially in rural areas, face difficulties getting to geographically secluded school due to poor transportation **infrastructure**. One aspect of this inadequate school transportation infrastructure is the lack of functioning roads. Most children in rural areas must walk long distances, often in improper conditions, to schools and, in many cases, travel additional distances if they want to obtain quality education (Vasconcellos, 1997). Children may

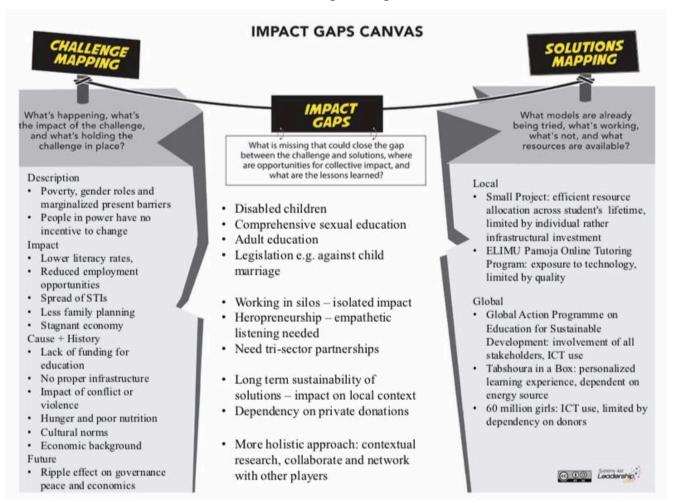
also face dangerous situations on their way to and from school, in the form of physical and emotional violence, theft and sexual harassment/assault.

Most developing countries do not prioritize transport systems for school children. For example, the Constitution of Brazil states that school transportation is just "a supplementary form of support" (Vasconcellos, 1997, p. 130), meaning that these investments in schools are not mandatory. Additionally, when students have school transportation most of the time, there are not enough school buses to transport all of the students.

In the rural regions of the developing south, it might be difficult to find a school that is well designed and equipped. Oftentimes, schools lack adequate infrastructure such as insufficient space per child, using curtains to separate classrooms, no construction methods for safety, inadequate teacher training, lack of teaching equipment and no electricity or internet connectivity. These consequences make teaching difficult and discourage teachers from showing up. "Teacher absenteeism is one of the most serious forms of corruption in education" (Patrinos, 2013), in the developing world teacher absenteeism ranges between 11-30%. Additionally, the lack of separate sanitary facilities for girls translates to absenteeism during menstruation. "Shame, stigma and misinformation may discourage girls from attending school while menstruating and prevent schools from teaching healthy attitudes about menstruation. Many girls stay home to avoid being teased" (Dineen, 2018). Not only that, girls who have started menstruation are asked to leave schools since facilities are incompetent for their needs (UNICEF, 2013).

Another problem that children face is not being provided by appropriate utilities in schools such as inadequate sanitary facilities and the lack of clean water for hygiene and drinking. This can result in serious diseases. As a result, children have difficulties focusing on schoolwork; especially if these individuals in question cannot afford medication. The lack of lighting or heating at schools or at home negatively impacts children's health. According to the UNDESA 2014 report, in places like Conakry, South Africa, many children are witnessed studying under streetlights or in bed with candlelight. Over 70,000 children in South Africa are admitted to hospitals due to inhaling kerosene from streetlights and almost 60% of these children have developed chemically induced pneumonia from the kerosene (UNDESA, 2014). Studying under candle fire leads to burn-related injuries. Finally, lack of heating at schools during the colder months increases the chances of students getting sick, and missing school.

2. Impact Gap



Challenge Mapping

Describe the challenge

According to UNESCO's 2017/18 Global Education Monitoring Report, 264 million children are denied access to education. Out of school children face obstacles like poverty, gender roles and place of birth that prevents them from getting into classrooms. Girls and marginalized groups are usually left behind. For example, in India, girls like Meena (Williams, 2013) must stop attending school because older boys sexually harass her on the way to school. They also have unsupportive parents, who ban them from attending school and marry them off at a young age to prevent from getting further sexually harassed and bringing shame onto their family. It could also be argued that policymakers and governments in developing countries have little incentive to create systemic change and ensure these vulnerable members of society have access to education since their own children most likely study abroad or in private schools and

are not impacted by this form of systemic injustice. Having no access to education results in becoming trapped in a cycle of poverty. Thus, substance abuse is more prevalent among the poor and those without education with roughly 77% of Brazilian street children drinking heavily (Uchtenhagen, 2011).

The lack of incentive from authoritative figures can be surprising because studies have continually shown that investing in girls' education is a lifeline to development. "The biggest buck for bank in development is girls' education" (Kim, 2018); World Bank has found that every year of secondary school education correlates to an 18% increase in a girl's future earning power. And this has multiplier effects; better-educated women tend to be healthier, participate in the formal employment sector, marry at a later age and birth fewer children who are raised healthier and better educated.

Impact and future of the challenge

The lack of accessibility to quality education in the Global South, especially for girls and women have short-term and long-term societal impacts. One such impact is decreased literacy rates, which limits one's capacity to learn from a variety of sources. Furthermore, reduced literacy rates impact the ability of individuals to gain productive employment opportunities and to fully participate in modern society.

Uneducated women tend not to incorporate family planning into their lives, resulting in increased fertility rates and are more likely to get STI's or be carriers. This is supported by the key findings of an Institute for Labour Economics (IZA) study, whereby educated women want fewer children and control birth better, provide better care at home, and thus increase the value of their children's human capital. (Kim, 2016) This is important because uneducated women having many children propagates the cycle of poverty, in the sense that they have to diffuse investments of care and resources amongst all these children, making it difficult for these children to acquire strong human capital and find meaningful employment.

Over a longer-term time frame, lack of access to quality education can create detrimental ripple effects on governance, peace and economics. If a nation does not provide access to quality education for its youth, they will be a disadvantageous position when they wish to join the workforce. Moreover, people without access to quality education or employment opportunities are more likely to engage in communal violence and self-destructive behaviour, which destroys the social fabric of communities. Lastly, this challenge will create an environment of long-term

economic stagnation. Furthermore, there will be a lack of innovation, resulting in investors choosing to invest in other places, tilting the playing field against this nation. Overall, the challenge of the lack of access to quality education creates a plethora of serious problems in the long run. Nevertheless, in 2015, the General Assembly has initiated 17 Sustainable Development Goals (SDGs) designed to achieve "a better and more sustainable future for all" (United Nations, n.d.) by 2030. Accessibility to quality primary and secondary education for boys and girls is one of the goals that the UN is trying to achieve.

Cause and history of the challenge

In developing countries, children's access to quality education is limited by multiple challenges. To begin with, governments might not have the money to invest in education, which results in lack of funding, hence comes the need for foreign aid to sustain students. The absence of funding will further the absenteeism of teachers or increase the presence of unqualified teachers in public schools. Teaching materials may not be adapted for children with disabilities and in turn, attendance lowers due to exclusion. In addition, there is a global teacher crisis, where the student-teacher ratio does not cover the number of children. Overcrowded classrooms decrease the chances of a qualitative learning environment. Likewise, teachers will not have enough learning material for guiding the class. As there is no budget for public infrastructure, there will not be transportation for children to arrive safely to school. In zones of conflict and violence, the dropout rate will progressively increase. In fact, young girls are 90% are more likely to be out of secondary school in vulnerable/conflict areas (Rueckert, 2019). Furthermore, in poorer communities, hunger and malnutrition impact brain development which affects the learning capacities of children.

Solutions Mapping

Local Solutions

Local has been defined as projects undertaken in Kenya. **ELIMU Pamoja Online Tutoring Program** is a Skype-based tutoring program that was established by McGill

University. It allows McGill students to tutor primary school children in Kianyaga, Kenya. On a voluntary basis, the students video call with an assigned child on Skype on a weekly basis. They are asked to help the children with their homework and help clarify unclear concepts.

Conversation and tutoring are done in English which allows the children to practice their conversational English. Though Kenya was colonized by the British, citizens can speak better

English than other East African countries. Additionally, children learn to use computers and gain exposure to new environments and people. They have no financial costs associated with the project, just requires internet connectivity and computers. A failure that can be pointed out is that many tutors have claimed that tutoring through Skype does not have the same effect of a face-to-face interaction.

The Small Project is an organization completely run by volunteers and seeks to support education in Kenya through the George Smalls Scholarship. The scholarship itself is funded entirely through donations made primarily by Canadians. The scholarship covers all costs associated with school, totaling approximately \$800 CAD annually (Education, 2018). Through an internal selection process based on three general criteria, the Small Project selects recipients for its scholarship and enrolls them in quality primary schools. They continue to support these students until the end of their secondary school education, after which they help with employment or university opportunities. The objective is to give a student and their family a chance to break free of the poverty cycle. In terms of what is working, they have no administrative costs, meaning that all donations made to their name go directly into the scholarship, representing an efficient resource allocation towards creating positive social impact. Moreover, they understand the full life cycle of students, and thus track and support their sponsored students all the way into university or the job market. In terms of what is not working, they do not seek to improve the Kenyan educational infrastructure in a significant way by investing in local underperforming school systems. Instead, they feed their students into the best boarding schools in Kenya. Secondly, the funds for the scholarships are only made available through private donations made by Canadian citizens. The continuation of these important scholarships should not depend solely on the kindness of strangers.

Global Solutions

Globally, we are looking at three organizations. The Global Action Programme on Education for Sustainable Development (GAP) was designed by UNESCO's post-2015 sustainable and educational agendas, including all stakeholders that facilitate and support teaching and learning to students and teachers. Education for Sustainable Development (ESD) intends to improve learning content, outcomes, pedagogy and learning environment. It focuses on designing interactive teaching material and the teaching content aims to empower learners to be "global citizens", by emphasizing sustainability at the core of teaching. The two main

objectives are to remodel the focus of education and learning, and to strengthen education in all agendas promoting sustainable development. The organization allows stakeholders to work together and showcases good practices/experiences for allowing future replication of achievements. The introduction of GAP initiative in Vietnam succeeded by first meeting with participants and teachers to understand their needs and conditions. Teachers in Vietnam received training on information and communications technology (ICT) skills and e-learning courses to learn as well as teach students about ESD (climate change, disaster preparedness and biodiversity conservation). The teachers' recommendations have been helpful for better implementation (UNESCO Office Hanoi, 2015).

Tabshoura in a Box is a small server that provides offline access to educational content in Arabic, English and French for up to 10 hours, implemented to help Syrian refugees gain access to education abroad. It provides offline access to online educational content, enables students to become more familiar with technology and learn at their own pace. The program worked with families to make them comfortable with girls using the internet. They introduced ICT directly into the classroom and partnered with NGOs to both expand their reach and provide resources like tablets. This program works to break down not only infrastructure barriers but also cultural barriers to girls having knowledge. For a larger classroom, implementing this program could be a challenge. Additionally, while the server works on solar power, for places with no access to electricity solar or otherwise, the program cannot be implemented.

60 million girls is a Montreal based public foundation dedicated to achieving gender equality through improving access to quality educational opportunities in the developing world. They partner with Canadian charities and MNCs to fund and bring the Mobile Learning Lab (MLL) to many different developing countries around the world. The target for each of their MLL projects is to have a minimum of 50% of girls present. In terms of what is working, the organization has less than 1% administrative costs, thus effectively all proceeds are invested into their programs. Secondly, the MLL projects result in many positive outcomes, including improved self-confidence, intrinsic motivation, peer learning effect, math and literacy rates. Moreover, attendance rates have skyrocketed because students are excited to use technology. What is not working, is that the organization's business model is not financially self-sustaining; the organization constantly has to invest in equipment experiencing social returns but neglects financial returns and long-term sustainability.

With the MDGs, the focus of educational improvement in developing countries has been about increasing enrolment. There also have been efforts in revamping the curriculum as GAP has done. The current focus and the future lie in incorporating quality of education into solutions. People are trying to give students access to a wide variety of topics and foster their development into global citizens. Technology has an exciting role to play in the process. It makes education more personalized and individualized. There is minimal cost to adjust and adapt once the technology has been developed and implemented. For underfunded and isolated schools with outdated curriculum, technology provides access to a variety of educational materials that students can use at their own pace. More collaborative solutions are likely to happen in the future, especially as the private sector has started broadening their definition of purpose beyond profit and considering all stakeholders not only shareholders. Sustainability has been an issue that has arisen to the forefront of the world. It is likely to be incorporated globally in education because its impact is so widespread and imminent.

Impact Gap Mapping

Despite the success of MDGs in improving education enrollment rates, many educational institutions deal with ineffective curriculums or ignore content that is culturally 'taboo'. For example, comprehensive sexual education can reduce rates of HIV and teen pregnancy which allows children to stay in school for longer. Currently, it is based around fear and lacks gender equity. More initiatives need to tackle sexual education from all sectors to get children educated. Current solutions also overlook the question of sanitation, which can result in increased absenteeism of students, teachers and even headmasters. The environment in which children learn should be properly taken care of to ensure quality and sustainability of future education.

Curricula need to address the diverse needs of students. Disabled students have specific needs and continually get left behind. The students typically need more specific support and it is difficult to track progress in the area because there is little data on disabled children's enrolment. Technology is only of the tools that can help provide a more personalized learning. *Gaps within the solutions*

Notably, legislation is missing from many of the solutions. Although the public sector is not as quick to act, it is still needed to achieve greater impact. For example, legislation needs to be made to forbid child marriage. Even if the minimum age is set to 18, younger ages may be married by religious law or parental authority which takes precedence over the national law. As

of 2013, 93 countries allowed girls under the age of 18 to get married with parental consent. (Girls Not Brides, n.d.). Proper curriculums need to be put in place for students with disabilities. They may be left behind by some initiatives because special attention and care is necessary to ensure accessibility.

NGOs around the world are working on the same issue but in a vacuum and end up building the same project. As stated in Damberger's TED talk (2011), two NGOs with similar intentions to bring water into Africa built the same water system twice for it to fail twice. This issue can be resolved through more collaboration among NGOs and social enterprises around the world. This issue can be defined as heropreneurship (Thorton, 2016) where groups' intention of efforts is missing alignment, instead of using empathetic listening, they use pity and instead of a hand up they give a hand out. Among the solutions, there is a lack of tri-sector partnerships in efforts towards improving education in developing countries. A lot of initiatives are isolated in working on the problem or only working with one other sector e.g. public and non-profit. Currently the private sector collaborates with nonprofits primarily through donating money or technology but less so in the creation and implementation of initiatives. Because this problem is so intricately connected across all three sectors, more collaboration is needed to create greater impact.

Organizations should also be aware of the long-term sustainability of their solutions and ensure that it does not end up harming or disincentivizing local businesses. A classic example of which is Haiti's reliance on and interference from foreign aid organizations resulting in political corruption, poverty, high unemployment and weak health and education systems (Patterson, 2018).

Key lessons learnt

From our research we have learnt that organizations making the most impactful and long-term changes are using a holistic approach. This includes empathetic listening, conducting sufficient contextual research, really understanding their target audience to create collective impact. Moreover, we believe that the biggest opportunities for impact is to work outside the silos; collaborate with other organizations, be open, learn from each other's successes & failures and maybe even create new partnerships. We also observe a lot of effort put into fixing education for the young, but not much for the old. This is a gap.

3. Theory of Change

RESOURCES	ACTIVITIES	OUTPUTS	OUTCOMES	IMPACT
MLL Components: RACHEL, BBOXX Financial Resources Human Resources (Volunteers, Time) Partnerships Stakeholders Access to internet	Creation and maintenance of partners Giving 2 grants annually Project Impact Assessment Deliver MLL: gender equity Collaboration with schools to acquire infrastructure Community-based engagement with MLL	Increase reach/sustainability of projects Reach target group of MLL Increased attendance rates Decreased drop-out rates Parental/ community support Education becomes a apriority at home Students' familiarity with tech Children gain autonomy Increased peer collaboration	Improvement of academic (literacy and maths) performance Enhance girls safety Decrease gender-based violence rates Improved intrinsic motivation to learn Increase students self-confidence Strong peer learning effect Personalized learning allows exploration of topics Completion/ Diploma Encourage Post Secondary education	Empower girls and women in the Global South Better access to employment opportunities Improve health and sexual disease awareness Less Child labour/soldier/prostitution Less women dependency on men Improve standards of living of community GDP growth in the long run
		Quantitative Indicators: Surveys; 90% school attendance rates ; number of relaunched projects; drop-out rates;	Quantitative/Qualitative Indicators: Surveys measuring self-confidence, intrinsic motivation; Academic performance tests (Literacy 31%, Maths 24%); Fernale students enrolled and attendance rates	Quantitative/ Qualitative Indicators: New Infrastructure; Increased/ Decrease employment; Lower rates of STDs and early pregancies; Women entering labor market (income); GDP growth= C+I+G (X-M)

Theory of change narrative: By implementing educational technology through the Mobile Learning Lab (MLL) in remote communities, children will be motivated to attend school, and improve their academic performance. By investing in girls' education through technology made possible by grants, 60 million girls' projects result in long term benefits for the community.

Resources

For this project, 60 million girls provides students with the Mobile Learning Lab (MLL), which consists of 30 tablets, headphones, a solar charging system, provided by BBOXX, and a rechargeable, offline server, called RACHEL-Plus. The RACHEL can hold up to 500 GB of open-source content. With MLL, students can get access to educational programs, such as Khan Academy Lite, Wikipedia Academic and Fantastic Phonics, that can be custom-loaded and modified by connecting RACHEL to the internet by downloading additional programs. On the ground resources include coordinators, security guards, school principals, village leaders, teachers, parents and local NGOs. 60 million girls have three primary donors and partners with World Possible, University of Alberta, Samsung, and BBOXX.

Activities

60 Million Girls select two organizations working to empower girls through education to whom they give grants each year. After the project, they conduct an impact assessment to see the impact of the project. They create and maintain partners and donors through networking. The condition for 60 million girls to distribute the MLL is that each classroom is made up of 50% girls. Before the MLL is set up in a school, there is community engagement work undertaken to ensure support of the program. The MLLs requires cooperation and collaboration with schools or community centers because they need an area for the activities to take place. Someone from the community is hired as a coordinator to supervise the students during the session over 8 months. Technological support is provided by giving a phone to communicate complaints which are then addressed in the city centers.

Behavioural changes

Following the implementation of the MLL, there are observed behavioural changes in the target group of schoolchildren. Firstly, that the attendance rates for the users of the MLL were significantly higher "by 90% on the days they were scheduled to have the MLL program" (Mobile Learning Lab Project Evaluation Report: Sierra Leone, 2018). This is a promising trend, as the MLL program is completely voluntary, meaning kids want to be there. After the pilot MLL program in Sierra Leone, the number of students enrolled in secondary and post-secondary education increased, especially female students. This illustrates a crucial behavioural change because the dropout rate decreased, especially for the key ages characterized by the barriers to education. With the MLL intervention, it became clear that children had gained parental and community support, evidenced by the community safeguarding the MLL from theft or mistreatment. The Sierra Leone evaluation report states that, "the strong engagement of the community, from parents' perception of the positive impact of the MLL, contributed to all five treatment communities relaunch[ing] the MLL program" ("Mobile Learning Lab Project Evaluation Report: Sierra Leone", 2018). Due to the MLL program, many students developed a greater level of autonomy. The more they used the tablets, the more they familiarized themselves with digital technology. Lastly, many of these students engaged in effective peer collaboration to solve problems.

To quantify these behavioural changes, we incorporated a number of quantitative indicators into our framework. To measure the change in attendance rates, we used the indicator

of school attendance rates for students with access and without access to the MLL. Similarly, we recorded the change in dropout rates with the indicator of pre-MLL and post-MLL dropout rates. When estimating the change in community support, the indicator of the number of relaunched projects was utilized. Lastly, the changes in student familiarity with technology and peer collaboration were measured through the use of a standardized survey.

Behavioural change assumptions

One assumption is that children will be willing and able to attend the afterschool MLL program. Another assumption is that since the MLL is an after-school voluntary activity, children participating genuinely want to learn. While attending the MLL program, students will gain proficiency with technology, preparing them for the modern world. The MLL will gain community and parental support, once the educational benefits and boosted grades of their children are observed is another key assumption.

Direct benefits

As the program provides access to vast offline educational material, the direct benefits of the MLL are increased literacy rates, improvements in academic performance and peer learning. After the pilot of 60 million girls, literacy rates and mathematics scores had augmented by 31% and 24% on average (Mobile Learning Lab Project Evaluation Report: Sierra Leone, 2018).

Direct benefits change assumptions

In this section, the assumptions linking the outputs to outcomes will be outlined. To begin with, the assumption that increased attendance rates translates into higher academic performance was made. Secondly, the MLL will tend to enhance motivation for learning because it is interactive, unique and private. Thirdly, children genuinely have a desire to learn, they just lack the correct tools, opportunities and incentives to do so. Through this desire to learn, these children also develop their soft-skills, primarily self-confidence and peer collaboration. Finally, RACHEL's wide array of educational content makes learning about personal or culturally taboo subjects accessible.

Well-Being changes and assumptions

60 million girls yields a variety of positive impacts and creates wellbeing change. Access to quality education helps empower girls and women in the global south. This would allow for greater access to employment opportunities because individuals who have improved their academic performance will be better able to enter the labor market, in an industry of their

choosing. Educated women can provide for themselves and their families, thus they are less dependent on men, which empowers them, and this beneficial cycle continues onto their children. Additionally, when students are free to use the MLL to learn about culturally taboo subjects such as sexual health and education, it improves their general awareness about the subject which would further prevent early pregnancies or transmission of STDs. Communities will experience improved standards of living due to increase in hygienic practices or the use of malaria nets for example. More education and employment can lead to increasing GDP growth in the long run. The economy will grow and develop if we assume that these educated individuals are incentivized to stay and contribute to the economy; avoid brain drain by continuing to stay and work there.

We used the following qualitative as well as quantitative indicators to measure these changes; the increase or decrease of unemployment rates, the rate of women entering the workforce, lower rates of STD and teenage pregnancies in local clinics/hospitals, building of new infrastructure such as toilets, increased number of children in schools and lastly, improvement in economic GDP growth indicators.

4. Measuring Social Impact

The difficulty of measuring social impact arises from multiple different sources. First the effect of education on an individual or a community takes time to be observable. There is also difficulty in measuring qualitative indicators and individual experiences. Increases in motivation or confidence are not obviously visible and therefore difficult to measure. We can only infer based on surveys or observations. Additionally, because of many different factors affecting this problem, it is difficult to quantify how much change is attributed to our specific project. 60 million girls has accounted for this by running controls in similar communities to gauge the MLL's specific impact. Each project is context-dependent, so the results achieved in one community may not be achievable in another area. Problems may arise in a specific area because of cultural or contextual differences.

The challenges with measurement are shown through one of the results from the pilot project in Sierra Leone. There was a slight decrease in self-confidence reported by students. The self-confidence remained above a baseline and other indicators improved but it is hard to figure out where that decrease came from or if it will continue to be an issue in the long term.

We still need to measure social impact to measure the effectiveness of a project. More broadly, it is necessary to see areas of improvement and learn about the flaws. Impact needs sustainability and sustainability needs measurement. Additionally, measurement enables us to track progress as well as keep us aware of our goals. When receiving external funding through impact investment or donors, rigorous measurement is necessary.

Outputs

For behavioural change, the indicators need to demonstrate the change. We would look at how many communities choose to keep and maintain the MLL after the initial 8 months to gauge community interest and acceptance. Community acceptance is key to ensuring sustainability. Secondly, we would look at the attendance rates of the MLL. Because the program is optional, attendance indicates student's interest and engagement. By attending through the school year, students will become more familiar with the tablet as well as be able to learn autonomously and with their peers. Drop out or attendance rates of the school could be used because it sees the program effect on in-school learning.

Outcomes

To understand the less observable outcomes we would look at survey results using a scale to measure their self-confidence, intrinsic motivation, and peer learning. Personal interpretation of scales may vary from student to student, but the overall sentiment of the students needs to be recorded. Outcomes can be measured through surveys that ask questions like "Do you feel you can solve a problem on your own?" or "Do you like to work on projects with friends?".

Academic improvement can be measured through testing, at the end of the program as well as any government or school tests. Increased number of female students enrolled in and attending secondary school will demonstrate that girls feel safe and confident enough to continue attending school.

Impact

The impact 60 million girls seeks is to empower girls and women in the Global South. This encompasses many effects such as that communities' standards of livings will increase, child prostitution decreases, women become less dependent on men and sexual and general health improve among women. Communities' standards of living can be measured through new infrastructure such as running water or electricity. On a larger scale, GDP growth can be used. MLL is a small program so the effect on a larger scale might be negligible until it's expanded

further. Women's independence can be measured financially through increased incomes and increased employment. Once women can support themselves financially, they will no longer be dependent on men. Sexual and general health improvement among women can be measured through lower rates of HIV and less teen pregnancies.

5. Sustainable Business Model



Currently, 60 million girls rely on grants and partnerships from Canadian charities to maintain their projects which is a barrier to expansion. Our goal is to create a financially self-sustaining project that can be implemented to reach the most vulnerable girls located in many

different contexts around the world, such as refugee camps. Essentially, we will be renting the tablets out to adults to pay for the annual operating costs in each region.

Key Partners: For our sustainable business model, we will collaborate with our already existing partners. For our Mobile Learning Lab, we will work with World Possible, as our RACHEL provider. We will continue to collaborate with our key donors that have ensured the success of our previous projects.

When it comes to new partnerships, we would use local solar panel suppliers to reduce the cost of shipping, switching away from BBOXX when we can. For tablets, we will switch to AmazonFire which has cheaper and more reliable landed cost. Finally, we want to look into local community organizations that aim to empower girls through education.

Key Activities: The first activity undertaken in our business model would be to contact schools or to be contacted by the schools to evaluate how to implement the MLL. Prior to launching the MLL and during the period of, we would do community engagement work to ensure support. We would then acquire the parts and set up the MLL. After, the children will use the MLL for a school year and the community has observed some of the more immediate effects. During this period, we would measure and get feedback from the students. Following the initial year, we consult the adults in the community on what they are interested to learn about. There would be promotions done leading up to the launch of the renting problem.

A customer would enter on a weekend and sign up on the sign-up sheet. They access the same content as children and see anything added based on the consultation. During the session, the coordinator would be around to answer questions. We could guarantee payment because there would be social pressure to pay to access and maintain a community resource. Cash is collected and stored in a safe that the community collectively protects and respects. Additionally, there would be an accountant to keep track of the cash collected and ensure there has been no theft. The proceeds from this would go to covering the operational costs and keep the MLL running throughout the year for children and adults.

Key Resources: Our physical key resources are the Mobile Learning Lab components and the classrooms, where the lessons can take place. When it comes to academic resources, we will download programs such as Khan Academy and FreeCodeCamp. To ensure that our project is running smoothly, we will depend on our human resources, such as our volunteers at 60 million

girls, the classroom coordinators, the security guards and lastly, our accountants. Financially, we will receive funding from our donors.

Value proposition: Remodeling of the MLL program to cater to adults' learning means we are allowing users to rent a tablet at an hourly rate, like cyber cafes, either every weekend or during the children's school hours which would be accommodating for stay at home mothers. The content in the tablets would include quality learning materials, job training and soft skills. By catering to both children and adults, we are providing quality education to both and empowering communities in the global south. By equipping individuals with the skills necessary to enter the workforce we are able to improve their quality of life, livelihoods, allow them to discover new hobbies, increase economic growth and essentially break the cycle of poverty.

Customer relationships: The empathetic design of 60 million girls' MLL program provides a personalized experience for its users, as it is an innovative solution. The program focuses on high-quality educational technology at a low price, and it is catered to the customers wants, needs and interests. Our local customers are voluntarily given the opportunity to rent the tablets, and we have seen participation rates increase. The lead users of MLL feel the benefits that the product offers which has translated into improved customer value and loyalty.

Channels: As stated above, our system will be cash-based. We will use word of mouth to increase awareness and as advertising because that can be used across different contexts such as rural villages and refugee camps. This way, we will be able to evaluate if these sessions are being valued because if not, attendance rates will drop. The program will also conduct community-based activities, give customers a chance to learn about and give feedback on the MLL. However, we will also be conducting monthly surveys for feedback on program satisfaction, to see how we can adapt the program to meet the community's needs.

Cost Structure: The expenses incurred to make the sustainable business model work consider the procurement of the MLL components or hardware, the salaries for staff and the maintenance, replacement and security costs (security safe/cash box). The cost breakdown scenario is based on the pilot activities in which the MLL components: RACHEL, BBOXX, tablets or other devices to connect, headphones and shipping for devices sum a total cost of 6,665 CDN. Switching to AmazonFire, will reduce shipping costs by half. Our personnel is composed of a coordinator (10 hours/week, 40 weeks), an accountant to manage the cash-based rentals of MLL (1 time per/month) and a security guard. The staff salaries will vary depending on the

living wages needed in different contexts. Using Sierra Leone salaries, the total would be 1620 CDN. The allocation for maintenance and replacement of tablets and batteries is 275 CDN every two years. The basic cashbox for securing the revenue from renting to adults costs 25 CDN.

Customer Segments: Our existing customer segment is composed of primary school children in the selected communities for the MLL implementation, with a focus on gender parity. Now, we will engage with a new customer segment, composed of the adults in the communities with existing MLLs. Long-term, we aim to engage with a greater variety of segments, including people in refugee camps.

Revenue Streams: The aim of the rental model is to generate enough revenue to cover the MLL's annual operating costs to ensure long-term project sustainability. We are looking to rent the tablets of the MLLs to local adults for roughly 5-10% of the minimum hourly wage in that given country for an hour of tablet use. The learning environment will be structured in the same original manner, with an emphasis on self-directed learning. The money will be collected before or after using the MLL's tablets. Donors will continue to be a source of revenue specially to cover costs that cannot be covered internally.

6. Impact Investment



Dear Shareholders,

60 million girls has had an exciting year of growth and change. We thank you for your continued support of our enterprise. Our dedication to the triple bottom line is unwavering. We continue to source our components locally whenever we can to reduce shipping. Girls around the world are staying in schools. Our business of adult education is constantly growing. As you know, 60% of profits from local programs stay in the community, to improve and enrich it. The other 40% is considered revenue.

This year we were able to expand our program to five new schools and expand the commercial aspect to 5 schools. These schools have been located in Kenya, India, Peru, and Nigeria. Because of our commercial expansion, revenue has increased by 5.2%, enabling the projects to cover their operating costs. Over the last year we have distributed dividend twice.

Students and adults continue to benefit from our programs, test scores and attendance have improved by 15% and 10% respectively. The rate of girls moving to secondary and post-secondary school have increased in communities in India and Brazil. Local adult literacy has increased while unemployment rates have decreased. We opened a window of opportunity to adults that rented the Mobile Learning Lab. More women have now taken up jobs and trained for the formal and informal sectors.

Students across the world have reported increases in motivation and self-confidence. They have explored new topics they never would have had the opportunity to before and see a new range of possibilities for themselves through further education. It has been wonderful to see this program grow over the past 20 years. In the future we are looking to work with more governments. Tri-sector partnerships are key to increasing our impact and reach. As always, we at 60 million girls will continue to invest in education because it is the key to building women's and girls' autonomy.

Sincerely,

President of 60 million girls

References

- 60 Million Girls Foundation. (2018). *Mobile Learning Lab Frequently Asked Questions (FAQ)*. Retrieved from https://60millionsdefilles.org/wp-content/uploads/2019/03/SHOWCASE-FAQ-Dec-2018-.pdf?fbclid=IwAR0hfQu4W60X_nIxV6V0YMm60vjYl0Vqbjt5Y8iW7ffmyIAe43CH-wU_tL4
- 60 Million girls Foundation. (2018). *Mobile Learning Lab Project Evaluation Report Sierra Leone*. Retrieved from https://60millionsdefilles.org/wp-content/uploads/2019/03/Project-Evaluation-Report.pdf
- 60 Million Girls Foundation. (2019). *Libraries Without Walls: Improving Access to Quality Education for Children and Youth in Malakal, South Sudan*. Retrieved from https://60millionsdefilles.org/en/our-projects/2019-south-sudan/
- Ahmad, A. R. et al. (2013). Funding Reforms in Malaysian Public Universities: Transitions towards Competitive Funding. *Australian Journal of Basic and Applied Sciences*. Vol. 7, No. 10, pp. 553-561. Retrieved from https://www.researchgate.net/profile/Ng_Kim-Soon2/publication/317335518_Funding_Reforms_in_Malaysian_Public_Universities_Transitions_towards_Competitive_Funding/links/5932e35145851553b6bc559d/Funding-Reforms-in-Malaysian-Public-Universities-Transitions-towards-Competitive-Funding.pdf
- Aleman, A. (2016). Education & Homelessness. *The Homeless Hub*. Retrieved from https://homelesshub.ca/blog/education-homelessness
- Anderson, M. (2015). Many disabled children in poorer countries left out of primary education. *The Guardian*. Retrieved from https://www.theguardian.com/global-development/2015/aug/18/disabled-children-poorer-countries-out-of-primary-education-south-africa-human-rights-watch-report
- Atolia, M., Li, B. G., Marto, R., & Melina, G. (2017). Investing in public infrastructure: Roads versus schools. *Vox.* Retrieved from https://voxeu.org/article/investing-roads-versus-schools
- Bleiker, C. (2017). UNESCO: 264 million children don't go to school. *DW*. Retrieved from https://www.dw.com/en/unesco-264-million-children-dont-go-to-school/a-41084932
- Brown, J. E. (Ed.). (1994). Preserving Intellectual Freedom: Fighting Censorship in Our Schools. Retrieved from, https://files.eric.ed.gov/fulltext/ED374463.pdf
- Chohan, B. I., Khan, R. M. (2010). Impact of Parental Support on the Academic Performance and Self Concept of the Student. *Journal of Research and reflections in Education*. Vol. 4, No. 1, pp.14-26. Retrieved from https://www.researchgate.net/publication/216035869_Impact_of_Parental_Support_on_the_Academic_Performance_and_Self_Concept_of_the_Student

- Cosentino, G. (2016). Indigenous peoples have a right to quality education. But so far, we've failed them. *World Economic Forum*. Retrieved from https://www.weforum.org/agenda/2016/08/indigenous-people-have-a-right-to-quality-education-but-so-far-we-ve-failed-them/
- Curtis, M. (2009). A world of discrimination: minorities, indigenous peoples and education. Retrieved from https://minorityrights.org/wp-content/uploads/old-site-downloads/download-655-A-world-of-discrimination.pdf
- Damberger, D. (2011). What happens when an NGO admits failure. *Ted.* Retrieved from https://www.ted.com/talks/david_damberger_what_happens_when_an_ngo_admits_failure/transcript
- Dineen, J. (2018). How Good Menstrual Hygiene Keeps Girls in School. *Education & Schools*. UNICEF USA. Retrieved from https://www.unicefusa.org/stories/how-good-menstrual-hygiene-keeps-girls-school/34632
- Fleury, V. (2015). Child labour and lack of quality education in rural communities in Myanmar. | *International Labour Organization*. Retrieved from, https://www.ilo.org/ipec/news/WCMS_379121/lang--en/index.htm
- Girls Not Brides. (n.d.). CHILD MARRIAGE AND THE LAW. Retrieved from https://www.girlsnotbrides.org/child-marriage-law/
- Global Education Monitoring Report Team. (2019). *Global education monitoring report 2019: gender report: Building bridges for gender equality*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000368753
- Government of Canada. (2017). Education in developing countries. Retrieved from https://www.international.gc.ca/world-monde/issues_developmentenjeux_developpement/human_rights-droits_homme/education.aspx?lang=eng.
- GPE Secretariat. (2016). Children with disabilities face the longest road to education. *GLOBAL PARTNERSHIP for EDUCATION*. Retrieved from https://www.globalpartnership.org/blog/children-disabilities-face-longest-road-education
- Gupta, S. et al. (2000). Corruption and The Provision of Health Care and Education Services. *International Monetary Fund Working Paper*. Retrieved from https://www.elibrary.imf.org/doc/IMF001/01391-9781451853926/01391-9781451853926/Other_formats/Source_PDF/01391-9781451899344.pdf?redirect=true
- ITU News. (2018). Meet the EQUALS in Tech Awards winners: Tabshoura in a Box. Retrieved from https://news.itu.int/meet-the-equals-in-tech-awards-winner-in-the-access-category-tabshoura-in-a-box/

- Kamal, M. et al. (2015). Child marriage in Bangladesh: Trends and Determinants. *Journal of Biosocial Science*. Cambridge University Press, Vol. 47, Issue 1, pp. 120-139. Retrieved from, https://www.cambridge.org/core/journals/journal-of-biosocial-science/article/child-marriage-in-bangladesh-trends-and-determinants/9DEF413D9383C907D00F4ABB97F4CBCE#
- Kim, J. (2016). Female education and its impact on fertility. IZA World of Labor.
- Kim, J. Y. (2019). To build a brighter future, invest in women and girls. *World Bank Blogs*. Retrieved from https://blogs.worldbank.org/voices/build-brighter-future-invest-women-and-girls
- Lamar University. (2019). Correlation Between Parents' Education Level and Children's Success.

 Retrieved from https://degree.lamar.edu/articles/undergraduate/parents-education-level-and-childrens-success.aspx
- Livingston, S. (2016). Classroom technologies narrow education gap in developing countries. *Brookings*. Retrieved from https://www.brookings.edu/blog/techtank/2016/08/23/classroom-technologies-narrow-education-gap-in-developing-countries/
- Malala Fund. (n.d.). Our work. Retrieved from https://www.malala.org/gulmakai-network
 Mandagi, E. (2017). The Market of Pain: Corruption & Fetishized Altruism in International Aid. *Critical investigations into Humanitarianism in Africa*. Retrieved from http://www.wrongkindofgreen.org/tag/white-savior-complex/
- Mcleod, S. (2018). Maslow's Hierarchy of Needs. Retrieved from https://www.simplypsychology.org/maslow.html
- Mooi-Reci, I., Bakker, B. (2015). Parental Unemployment: How Much and When Does it Matter for Children's Educational Attainment?. Retrieved from https://www.researchgate.net/publication/271770953_Parental_Unemployment_How_Much_and_When_Does_it_Matter_for_Children's_Educational_Attainment
- Obaid, T.A. (n.d.). Breaking the Cycle of Poverty in Achieving the MDGs: Investing in Reproductive Health and Rights. *UN Chronicle*. Retrieved from https://www.un.org/en/chronicle/article/breaking-cycle-poverty-achieving-mdgs-investing-reproductive-health-and-rights
- Papi-Thornton, D. (2016). Tackling Heropreneurship (SSIR). *Stanford Social Innovation Review*. Retrieved from https://ssir.org/articles/entry/tackling_heropreneurship
- Patrinos, H. A. (2013). "The Hidden Cost of Corruption: Teacher Absenteeism and Loss in Schools" on Education for Global Development. *World Bank Blogs*. Retrieved from https://blogs.worldbank.org/education/hidden-cost-corruption-teacher-absenteeism-and-loss-schools

- Patterson, M. (2018). Are N.G.O.s in Haiti doing more harm than good?. *America The Jesuit Review*. Retrieved from https://www.americamagazine.org/politics-society/2018/02/22/are-ngos-haiti-doing-more-harm-good
- Rueckert, Phineas. (2019). 10 Barriers to Education Around the World. *Global Citizen*. Retrieved from https://www.globalcitizen.org/en/content/10-barriers-to-education-around-the-world-2/
- Safe@School. (2013). Experiences of Marginalization. Retrieved from https://www.safeatschool.ca/professional-learning/youth-empowerment/many-voices-of-youth/barriers-to-youth-empowerment/experiences-of-marginalization
- Teixeira, J., Amoroso, J., & Gresham, J. (2017). Why education infrastructure matters for learning. *World Bank Blogs*. Retrieved from https://blogs.worldbank.org/education/why-education-infrastructure-matters-learning
- The Small Project. (2018). Education is the most powerful weapon you can use to change the world. Retrieved from http://www.thesmallproject.ca/our-initiatives/education/
- Uchtenhagen, A. (2011). Substance use problems in developing countries. *World Health Organization*. Retrieved from https://www.who.int/bulletin/volumes/82/9/editorial20904html/en/
- UNDESA. (2014). Electricity and education: The benefits, barriers, and recommendations for achieving the electrification of primary and secondary schools. In *Energy and Education*. Retrieved from https://sustainabledevelopment.un.org/content/documents/1608Electricity%20and%20Education.pdf
- UNESCO Office Hanoi. (2015). Working together for a more resilient and sustainable society: MOET, UNESCO and Samsung ESD initiative; final report, extended version. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000233681?posInSet=11&queryId=7db1172b-4960-4e71-b32b-ac4cafd4fa59
- UNESCO. (2019) Global Action Programme on Education for Sustainable Development. Retrieved from https://en.unesco.org/gap
- UNESCO. (2018, June 19). Why comprehensive sexuality education is important. Retrieved from https://en.unesco.org/news/why-comprehensive-sexuality-education-important
- UNESCO. (2019). What is Education for Sustainable Development?. Retrieved from https://en.unesco.org/themes/education-sustainable-development/what-is-esd
- UNICEF. (2012, July 11). Education. Retrieved from https://www.unicef.org/disabilities/index 65316.html.
- UNICEF. (2013). WASH in Schools Empowers Girls' Education: Proceedings of the Menstrual Hygiene Management in Schools Virtual Conference 2012. Retrieved from

- https://www.unicef.org/wash/schools/files/WASH_in_Schools_Empowers_Girls_Education_Proceedings_of_Virtual_MHM_conference.pdf
- UNICEF. (2015, September 9). HIV and AIDS. Retrieved from https://www.unicef.org/disabilities/index 65308.html
- United Nations. (2017) Recommendations on Education. *Department of Economic and Social Affairs Indigenous Peoples*. Retrieved from https://www.un.org/development/desa/indigenouspeoples/mandated-areas1/education/recs-education.html
- United Nations. (2019). Education For Indigenous Peoples. Retrieved from https://www.un.org/development/desa/indigenouspeoples/mandated-areas1/education.html.
- United Nations. (n.d.). About the Sustainable Development Goals. Sustainable Development Goals. Retrieved from https://www.un.org/sustainabledevelopment/sustainable-development-goals/
- Vasconcellos, E. (1997). Rural transport and access to education in developing countries: policy issues. *Journal of Transport Geography*, Vol. 5, Issue 2, pp. 127-135.
- Webster-Stratton, Carolyn et al. (2016). Troubled Families-Problem Children: Working with Parents: A Collaborative Process. Retrieved from http://ijos.club/go/read.php?id=0471944483