#### FreeTechLib at Pink STREAM

Chapel Hill, North Carolina, United States May 16<sup>th</sup> – August 1<sup>st</sup>, 2021

University of North Carolina at Chapel Hill

Project leader: Fariha Rahman, UNC Team member: Merve Rida Bayraktar, Pink STREAM Founder

#### **Background and Goals**

Many displaced or refugee girls and women face barriers in both pursuing and continuing education.¹ This population's ability to acquire education has further been exacerbated by the ongoing COVID-19 pandemic.¹ According to the Malala Fund, roughly half of all refugee girls in secondary school will not be able to continue schooling post-pandemic.² Therefore, our proposed project is to establish FreeTechLib at Pink Stream (FTLPS), a free technology library that will enable Pink STREAM, an organization working toward educating and empowering K-8 girls in STREAM (Science, Technology, Robotics, Engineering, Arts, and Math), to make their classes more accessible to refugee girls who may be unable to participate due to lack of access to the technology.

Since 2019, Pink STREAM has offered free courses and workshops in a variety of topics, including 3D printing, electronics, robotics, and app design to youth who have access to the necessary technology to participate.<sup>3</sup> Similar to technology libraries at many universities that are utilized by enrolled students, FTLPS will use the \$10,000 to purchase a combination of tablets and laptops to loan for a designated period of time to refugee girls interested in Pink STREAM classes. The type and number of devices that will be purchased will be finalized once the needs of the target population are identified.

Through the establishment of FTLPS, we aim to expand the accessibility of Pink STREAM's services to the local refugee community, particularly refugee girls, as they are often marginalized in education and other systems due to lack of access to resources that many established residences might take for granted. Furthermore, for refugee girls to become socially and financially independent in the future, STEM education is crucial provided STEM jobs are on-demand, have high employment rates, highest salaries, and are projected to be increasing in the future. In 2018, nearly 2.4 million STEM jobs went unfilled, and as a growing field, the need is increasing every day. Therefore, if we are awarded the funding, it will be utilized by Pink STREAM to establish FTLPS and loan the devices to students enrolled in their courses who need access to the devices. As the project leader, Fariha, is a volunteer interpreter at the Refugee Community Partnership, a leading non-profit in Carrboro, North Carolina serving refugee families, she will further act as liaison with the non-profit so that they can help recruit students from our target population. In the end, we intend for this project to help refugee girls gain access to courses and workshops that will motivate them to pursue paths in STREAM.

#### **Project Description**

Working with the refugee population has helped the project leader observe how refugee children rely on volunteers to help them use the technology in order to participate in extracurricular endeavors in addition to their academic work. Furthermore, the nonprofit Pink STREAM has also noticed the lack of accessibility to technology that has impacted their students' participation in their current courses and workshops. The limited accessibility to technology as well as the children and parents' limited technological literacy create challenges in learning. Providing supplementary course or workshop instruction in addition to the technological devices would help mitigate the exacerbated limitations with technology use and literacy that our target population is facing.

Pink SREAM has partnered with other technological entities to acquire devices for students to use. However, as a budding non-profit focused on advancing opportunities for youth, specifically girls, using technology, it is imperative that Pink STREAM has the autonomy to loan devices readily rather than rely on partners. Therefore, if awarded the funding, it will exclusively be used to establish Pink STREAM's technology library, or FTLPS, which will then function to loan devices to students, initially our target population of refugee girls, as needed.

Davis Projects for Peace seeks to support projects that "...build understanding and break down barriers which cause conflict." FTLPS aligns with this way of peace-building, as our project will promote peace by helping bridge the digital divide and attaining educational equity, especially locally in NC, by

making technological education more accessible to an underserved population. This project will not only break down the barrier of lack of technology education, but will also promote children's understanding of future opportunities available to them. Furthermore, this project will contribute to empowering women, specifically girls, which has often been cited as a way to establish peace and stability according to the World Bank.<sup>6</sup> Lastly, this project will further Pink STREAM's mission, as they believe that education is crucial and that inspiration is the source of education. Therefore, increasing the accessibility of Pink STREAM's programs that are designed to educate, inspire and empower, will help promote peace by increasing literacy and accessibility to technology for all regardless of their background.

## Phase 1: Team Formation, May 16th-June 1st

- Meetings between project leader, Pink STREAM founders, and Refugee Community Partnership leaders to finalize project plan, evaluation tools, itemized budget, and storage for FreeTechLib.

## Phase 2: FreeTechLib at Pink STREAM Preparation, June 1st- June 20th

- Purchase devices based on itemized budget for FreeTechLib.
- Devices distributed by Refugee Community Partnership based on curated database that identifies refugee girls who will need access to the technology devices in order to participate in Pink STREAM courses.

## Phase 3: Implementation, June 20th-July 25th

- Pilot FTLPS by having participants utilize the devices to participate in Pink STREAM courses.
- Establish database using Air Table to record participant information.
- Administer feedback forms digitally to participants after completion of their Pink STREAM courses that would align with the end of their device loan period.

#### Phase 4: Analysis and Presentation, July 25th-August 1st

- Analyze the data collected through the feedback forms.
- Create data visual representing outcome pilot to incorporate onto Pink STREAM's website.

# **Expectations, Sustainability, and Growth Potential**

This project will entail two expected outcomes that will be measured: individuals served and quality of the program. We'll keep track of all the demographics and number of individuals served using Air Table, while administering feedback forms to users to receive feedback of their experience in order to determine the quality of the program.

Apart from the Refugee Community Partnership, Pink STREAM is looking to connect with the Sudanese Youth Community, which is another refugee aid organization that will be able to use FTLPS's devices. Furthermore, adopting the format of a library rather than donating devices enables the devices to be reused by other users of Pink STREAM's services, including the broader refugee community and other underserved populations. Hence, not only does the format of the project ensure its sustainability, but also ensures that it will make a consistent positive impact in the community by being managed by an established non-profit organization like Pink STREAM.

### References

- Refugee Women in Science: Overcoming obstacles to realize dreams. USA for UNHCR. https://www.unrefugees.org/news/refugee-women-in-science-overcoming-obstacles-to-realize-dreams/.
- 2. *Malala Fund releases report on girls' education and COVID-19.* Malala Fund. https://malala.org/newsroom/archive/malala-fund-releases-report-girls-education-covid-19.
- 3. About Us. Pink STREAM. https://www.pinkstream.org/about-us.
- 4. The state of STEM education told through 16 stats. iD Tech. https://www.idtech.com/blog/stem-education
  - statistics#:~:text=The%20state%20of%20STEM%20education%20told%20through%2016%20stats&text=If%20we%27ve%20said%20it,to%20be%20filled%20by%202025.
- 5. About Us. Refugee Community Partnership. https://refugeecommunitypartnership.org/who-we-are/
- 6. Sancho-Crespo, C. (28 March 2018). *Can gender equality prevent violent conflict*. World Bank Group. https://blogs.worldbank.org/dev4peace/can-gender-equality-prevent-violent-conflict.