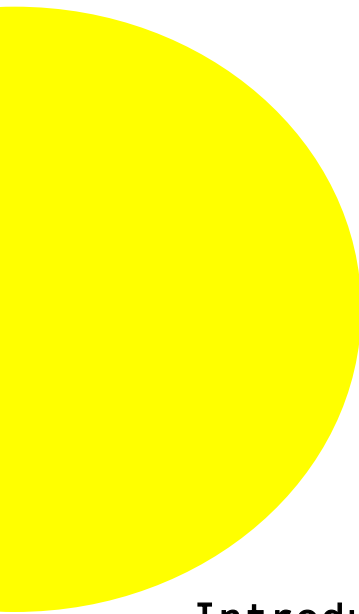




TB' AQ' [MAM¹: seed]

Introduction

TB' AQ' is an educational program, that teaches indigenous children of Guatemala's Northern Highlands Open Source computing, such as Linux and computer languages such as Python. This is aimed at children ages 12-18. This age group is especially vulnerable to poverty due to the lack of education options. Often, the only option they have left is migrating either to the United States or Mexico. To provide them with a tool to lift them out of poverty and support their local communities with a steady income, TB' AQ' aims at educating These children and teenagers with sufficient computing skills so they can compete in the job market. TB' AQ' is also aiding with the job search after a successful completion of the course work.

Background

In Guatemala, free education is provided in form of six years of elementary school, plus three years of basic education. Children who want to graduate with a diploma, must pay for their graduation year. This is unattainable for many indigenous children. Therefore, many exit school without a diploma and hope of further education.

The job market for those without a diploma consists mostly out of agricultural work. An agricultural laborer earns on average

¹ Mam is one of 22 Mayan languages that is still spoken in Guatemala

\$10.20² for 14 hours of work. Even with the smuggling costs of \$13,000 per person in 2021, the higher wages and opportunities, attract many young Guatemalans to leave their home and seek the dangerous trip to the United States or Mexico. Leaving behind their families and communities and creating an influx of illegal immigrants to the United States and Mexico whose systems are overwhelmed with the number of migrants.

Concept

What: Provide a school with 10 computers with the cost of \$100 each per set up. This can be accomplished by relying on Raspberry Pi. The Raspberry Pi Foundation is a UK-based charity that works to put the power of computing and digital making into the hands of people all over the world. Raspberry 400 computers, which include a keyboard cost \$70 per computer. Monitors can be acquired used for \$30. Electricity shall be provided through either solar panels or a wind turbine. One Raspberry Pi can be powered through a Wind turbine from KOSMOS Verlag, which are available for 39.99Euros³. Even though bigger wind turbines, as used on RVs, are preferred, these provide an economical option.

When: The program is set to start in spring of 2023.

Where: Housing for the school shall be provided through community connections in Sibinal, San Marcos, Guatemala to guarantee high community acceptance.

Who: Volunteers, e.g. through the German “Weltwärts” Program provide lessons in open source computing in Raspberry PI OS, a LINUX system, and the programming language Python. The target group is children and teenagers between 12-18 years old.

² <https://2009-2017.state.gov/j/drl/rls/hrrpt/humanrightsreport/index.htm?year=2015&dldid=253017#wrapper>

³ <https://www.kosmos.de/experimentierkaesten/physik-elektronik/11011/windrad>

Why: To provide an alternate educational program to the expensive public education. This shall aid young Guatemalans in attaining careers outside of agriculture or migration to the United States or Mexico.