CENTRE FOR YOUTH AND DEVELOPMENT

Inspiring, Empowering, Innovating and Influencing

Improving Access to ICT in Malawi Secondary Schools

Progress so far!!!

Who are the Players

CYD	Centre for Youth and Development responsible for implementation of the project in Malawi
The Turing Trust	The Scottish Partner responsible for overall project management including, collection of computers in Scotland, shipping computers to Malawi and development of an e-education resource
The Scottish Government Riaghaltas na h-Alba	The financer amounting to £60,000 for three years

CYD

What are we doing?

- Improving Access to ICT in Malawian Secondary Schools Project aims at improving ICT education in rural Malawi.
- The project is targeting all Districts in the Northern Region (Mzimba including Mzuzu, Nkhatabay, Likoma, Rumphi, Karonga and Chitipa)
- The project targets 200 secondary schools (Both private and public Schools) over three years in the northern Malawi by providing schools with computer hardware and relevant software
- Demonstrating a sustainable model for ICT access in off-grid communities through the SolarBerry pilot.

The Problem

- Malawian students lack access to ICT facilities in classrooms resulting in an unmet demand for ICT skills in the Malawian workforce where only 14% of secondary school graduates are suitably qualified.
- Consequently ICT education is currently taught without adequate resources.
- Without ICT skills a large proportion of rural Malawian students face problems in tertiary education.
- Computers are extremely expensive to purchase in Malawi partly due to the landlocked nature of the country, increasing transportation costs but also because there are relatively few Malawian institutions able to afford ICT equipment, reducing the market size and increasing supplier power to increase prices.
- This is holding back the Malawian economy from developing its ICT economy and taking part in the African ICT economy.

The Problem cont….

- The April 2015 Needs Assessment conducted by CYD further revealed that;
  - 70% of schools that participated in the study did not have any computers
  - Fortunate schools with computers had an average of 4 computers against an average of 300 students.
  - All schools in off grid rural communities reporting having no computers
  - Study revealed that only 30% of girls were interested in computer studies subject.
  - All schools surveyed had an average of 30% of the computers in non working condition.
  - Community members from rural schools surveyed revealed that they typically had no access to ICTs

What informed the Project

- The project is informed by;
  - Malawi ICT4D policy section 1.2.1 which cites that there is a demand for ICT skills in the Malawian workforce which is presently unmet
  - Vision 2020 statement which notes that "by the year 2020, Malawi will be a technologically driven middle-income economy.
  - Technical Entrepreneurship Vocational Education and Training (TEVET) policy, that stresses a match between academic and workforce skills.
  - UNESCO report which reveals that only 14% of secondary school students are accessing ICT Education.
  - April 2015 Needs Assessment conducted by Centre for Youth and Development with Technical support from Turing Trust and Malaptop

The Computer Specs

- For schools – Lenovo ThinkCenter Desktops with 4GB RAM, i5 processing power and 250GB secondary storage

  - Lenovo ThinkPad Laptops with 4GB RAM, i5 processing power and 300 GB HDD

  - Dell optiplex Desktops with 1-2 GB RAM, 2Ghz processing power and 80 GB secondary storage

- For solar berry - Raspberry Pi.
  - Raspberry Pi is a low cost, credit-card sized computer that plugs into a computer monitor or TV, and uses a standard keyboard and mouse. It is a capable little device that enables people of all ages to explore computing, and to learn how to program in languages like Scratch and Python.

How can a school benefit from this Project

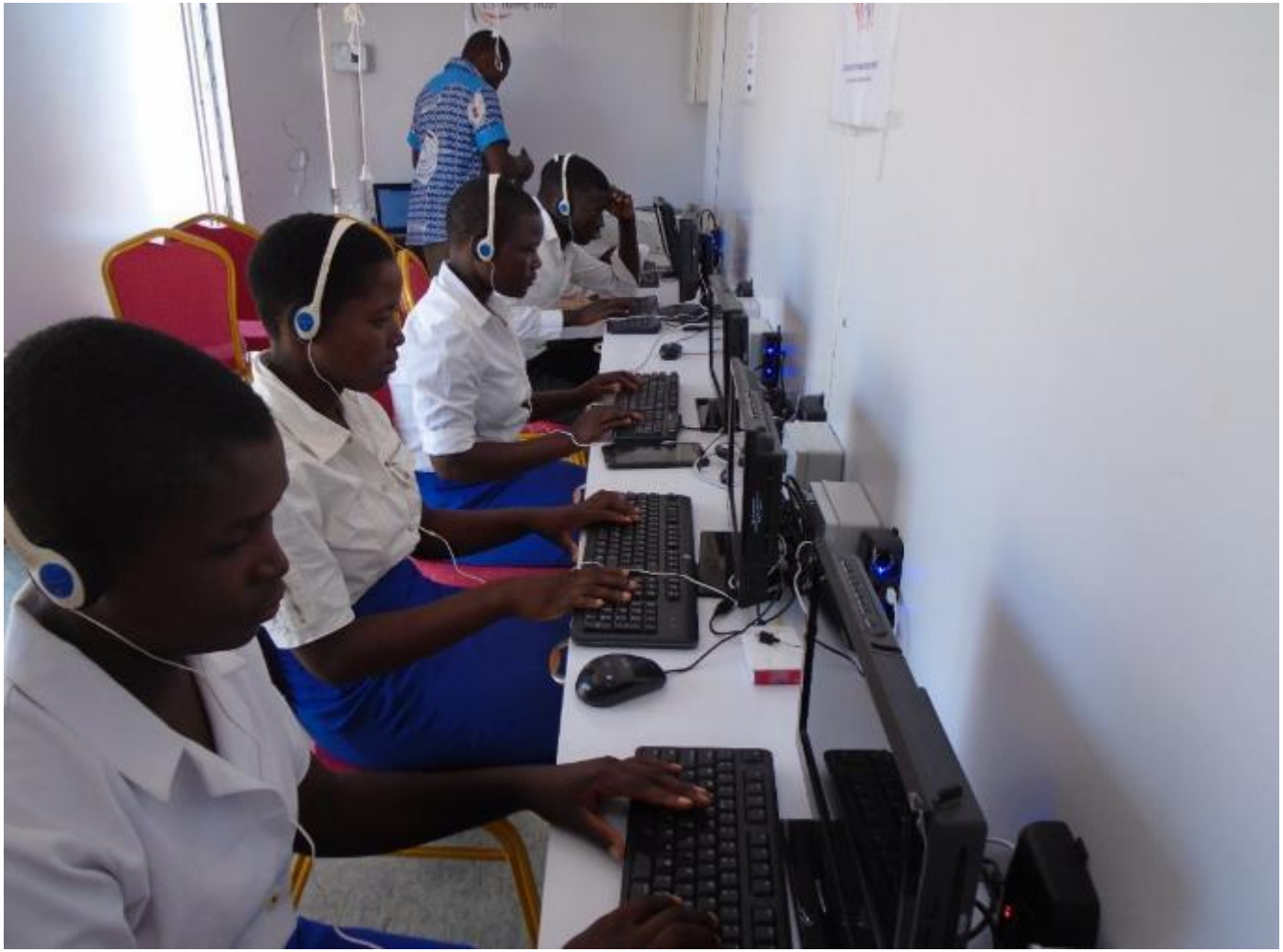
- Any school (both private and Government) can apply.
- School should be connected to Electricity Supply
- School should have a spare room to solely be used as a computer lab.
- Computer Maintenance Contract:
  - All schools that benefit from this project enters into a computer Maintenance and Support contract. The contract stipulates that schools should pay MK8000 or K12,500 per computer per year depending on the type of preferred computers.
  - This Computer Contract stipulates that computers are provided on a lease-to-own programme whereby CYD retain control of the PCs throughout the project duration and is responsible for maintenance.
  - For a school to participate in this project, it should demonstrate financial stability and adequate building security, to ensure this project is able to support its target populations.
- Main reasons for using this model are:
  - To ensure adequate maintenance and security of PCs - the schools will be within their rights to demand fully working ICT equipment.
  - To ensure the project's sustainability beyond the Scottish Government funding.

Progress so far

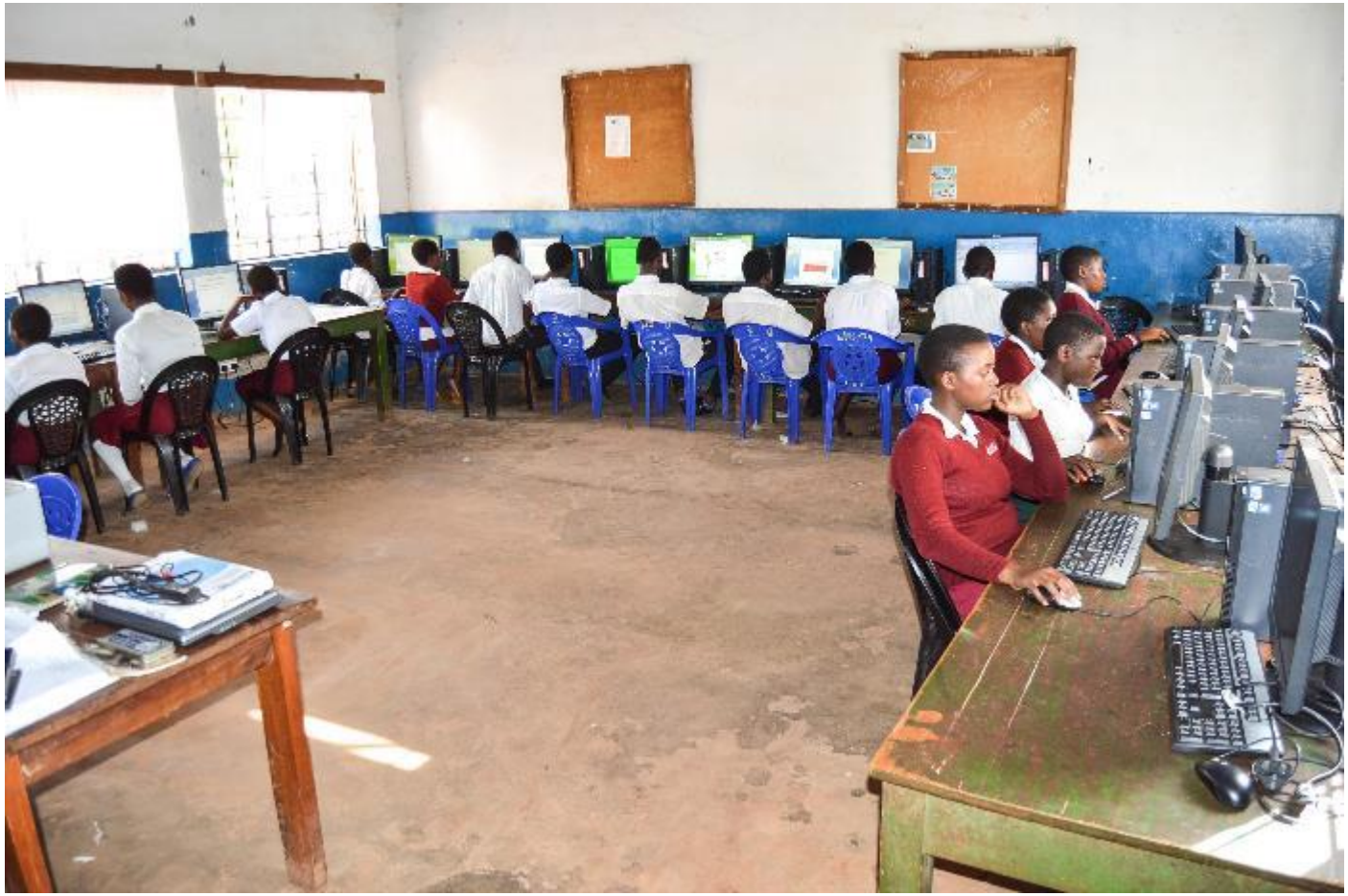
- Distributed 820 computers to 41 secondary schools benefiting over 10500 students across Northern Education Division
- Installed Local Area Network (LAN) and Electronic Library called RACHEL in 8 secondary schools
- .Introduced and piloting use of Kolibri application in 2 secondary schools, viz: Chibavi CDSS and Marymount Catholic Secondary School
- Solar Berry completed and handed over to Choma Community. SolarBerry is a solar-powered computer lab which uses low-energy Raspberry Pi computers. Designed for off-grid communities and housed in a repurposed shipping container, the SolarBerry uses the excess energy it generates to recharge small electrical goods, like phones.

Group photo during Solar Berry handover ceremony to Choma community

Students using computers in the Solar berry



Computer lab at Lunjika Secondary School



Moving forward

- Processing another shipment of 1500 computers from Scotland due to arrive in Malawi in March 2019. Duty waiver already approved by MRA.
- Distribution of computers to at least 30 secondary schools
- Conducting ICT teacher training of secondary school teachers targeting 41 secondary schools.
- Development of a local context e-education resource. Currently we install Rachel which is an educational resource that includes wikipedia, khan academy and many other free online educational resources including animations and videos.
- Introduction of Kolibri application to 8 more secondary schools within Northern Education Division

Challenges

- Most schools do not have qualified teachers to offer computer studies
- Tendency by education office to rotate teachers
- Lack of proper infrastructure to serve as computer labs in most schools especially community day secondary schools
- Lack of interest from some school administrators
- Misuse of equipment
- No electricity in most schools
- Schools struggle to honor annual maintenance fees

Getting in Touch with us

- Partnerships from other NGOs
  - CYD is accepting Partnership from other NGOs for collaboration on the Project, where the partner supports schools with related interventions not included in the project. Interested organizations can contact us on jamesgondwe@cydmalawi.org
- Schools express interest by:
  - Visiting CYD offices located at plot 304, next to SOS school in Katoto, Mzuzu city.
  - Calling Vigilant Mtambo on +265 (0) 881 283 653
  - Emailing us on info@cydmalawi.org or vigimbovigilant@cydmalawi.org
  - Contact us through our Facebook page www.facebook.com/cydmalawi or through our Twitter page www.twitter.com/cydmalawi
- Applications are received on a rolling basis