CHANGING CHILDREN'S LIVES IN GHANA

EIFL and the Ghana Library Authority work together to bring ICT classes to under resourced schools

Excited children greet the mobile library. Photo provided by Volta Regional Library. "Every week, parents move their children from other schools, which are not benefitting from the mobile library project, to my school. They want their children to have this opportunity to learn about technology and pass their exams."

- FRANCIS PEPRA BOANSI, HEADMASTER OF KWASO PRESBYTERIAN JUNIOR HIGH SCHOOL IN ASHANTI REGION.

From 2015 to 2019 EIFL supported a mobile library project that helped over 3,200 children attending poor and rural schools in four regions of Ghana to pass the crucial Basic Education Certificate Exam, which determines progress to secondary school.

"The hands-on computer classes helped me pass the ICT exam!" Anna, the daughter of farmers in Ghana's Volta Region, was one of thousands of children who passed the Basic Education Certificate Exam (B.E.C.E.) as a result of a project supported by EIFL.

Failing the B.E.C.E., which is the crucial exam that determines progress to secondary school, would have been devastating. "It would have been the end of my education. I would have just been at home because to repeat the exam is expensive," said Anna.

ICT (Information and Communication Technology) is one of eight compulsory subjects in the B.E.C.E. However, many schools in poor and rural areas of Ghana do not have computers or internet connections. As a result, children learn ICT in the abstract. Without practical experience – sometimes without ever having seen or touched a computer – thousands of children fail every year, and are taken out of school by parents who cannot afford school uniforms and fees.

Librarians at Volta Regional Library, which is one of 10 regional libraries managed by the Ghana Library Authority (GhLA), came up with an innovative idea to improve the B.E.C.E. pass rate in their community. The regional library is based in the town of Ho, which is the administrative capital of Volta Region and the market centre for nearby villages where families farm with livestock, fish, fruit and vegetables. Their idea was to equip a mobile library with low-power laptop computers, solar panels and modem internet, and to travel to under resourced junior high schools in Ho municipality to conduct hands-on computer classes. In 2012, the EIFL Public Library Innovation Programme (EIFL-PLIP) awarded Volta Regional Library a small grant for a yearlong pilot project to test their idea in five schools.

"The ICT classes organized for us by the mobile library service contributed so much to my success in the B.E.C.E. I wish that they acquire more computers so that more juniors can get practice, and perform better in the exams," said Zantor, a student at Ziavi Lume Methodist Junior High School in Volta Region.

# FUNDRAISING TO EXPAND THE PROJECT

The pilot project was so successful that we launched a fundraising campaign for it through the online fundraising platform, GlobalGiving UK. In 2015 our campaign attracted major funding from the technology company, Nokia, enabling us to scale up the project to include mobile libraries in three more regions – Ashanti, Upper East and Western – with the potential to reach over 1,800 children in more than 20 schools annually.

Each of the three new regional libraries received 15 laptop computers and solar panels to charge them; a modem for the internet; a canopy, desks and chairs for large outdoor classes; a projector and screen, and a printer to print out notes for the children to take home. We were also able to buy more computers and additional equipment for Volta Regional Library. Working with Accra-based social enterprise, TechAIDE, we installed the equipment in the mobile libraries. TechAIDE also preloaded the laptops with content related to school subjects, like geography, mathematics, science and English, e-books, as well as practice exam questions and other useful and fun learning tools.

The three libraries consulted with their regional education offices, and identified 15 under resourced schools (five in each region) that would receive classes. Librarians from the three regions visited Volta Regional Library to learn how to prepare their mobile libraries for the classes; how to use solar power; how to download software updates and troubleshoot technical problems, and to see the hands-on computer classes in action. We organized a joint workshop for librarians and ICT teachers from the 15 selected schools at which librarians from Volta Region conducted training in how to manage large ICT classes using a limited number of laptops, how to use the preloaded educational content, and shared insights into teaching children ICT.

"When I heard that my school was to be one of the selected ones, that gave us great joy. This project is going to improve ICT learning. It will ease the burden of our teachers, and for the children who are struggling to comprehend computers in the abstract," said James Tenga, headmaster of Yakoti Junior High School in Upper East Region. Celebrations marked the launch of the hands-on computer classes in the three new regions in November 2015.

# THE BEGINNING OF AN INCREDIBLE JOURNEY

Over four years, from 2015 to 2019, the mobile libraries in Ashanti, Western, Volta and Upper East regions travelled thousands of kilometres, and conducted thousands of classes in 20 schools, reaching an average of 3.000 children a vear – almost double the 1,800 they had planned to reach. They visited each school an average of three times a month during school terms, conducting two practical computer skills classes during each visit. When classes fell behind schedule, schools asked libraries to continue the classes over weekends and during school holidays - and they did. The librarians and teachers worked with students in grades 1, 2 and 3, but paid special attention to Grade 3, the year students sit for the B.E.C.E. In each class. three to four children - sometimes more shared a laptop. Careful management was needed to ensure that everyone had a turn to use the keyboard and mouse and to go online.

Along the way, there were challenges. The roads were bumpy, rutted and occasionally flooded. Sometimes the mobile libraries broke down. Early in 2019, GhLA recalled all the vans for refurbishment.

"Some parents and schools offered to pay for the services of a taxi to bring the laptops and the internet. Sometimes the librarians used their own cars, or another library vehicle. Some schools came to the library during free periods and over weekends so they would not miss classes when we couldn't come," said Yaa Agyemang Opare-Adu, Head of Programmes and Partnerships at the GhLA.

Often, electricity at the schools was not working, and so the librarians and teachers were thankful to have the solar panels. When internet connections were poor, the preloaded educational material came in handy. The librarians found different ways of using the laptops – for example, Volta Regional Library included 30-minute sessions in which children read aloud from the laptops to improve their English comprehension skills so that they would better understand the B.E.C.E. questions.

# EXCITEMENT ABOUT THE EXAM RESULTS

Every year in June Grade 3 students sat for the B.E.C.E. This was a huge moment for the students – but also for EIFL and the regional libraries, because the exam results were also a test of the effectiveness of the hands-on computer classes. So every year, we joined the students in their anxious wait for exam results.

When they came, they were remarkable. Year on year, there was a dramatic increase in the pass rate in the ICT exam in the schools where the mobile libraries offered classes. In 2014/15, before the expanded project started, the average pass rate in the subject ICT at B.E.C.E. level in the selected schools was just 45%. In 2016, it increased to 65%; in 2017 to 81%; in 2018 it was 85% and in 2019 it was 84%.

"I can proudly say that in 2018 ICT was the subject with the highest grades in the B.E.C.E. The project has transformed the children to become computer literates!" said Veronica McCarthy, the Head Teacher at Aboadze Catholic Junior High School in Western Region.

"When we can practise, the examination becomes very easy because we always remember what we practise! The library's classes have also helped us students to do online research – and to acquire more information about what we are taught in class," said Mary, a student from Western Region.

Cliff from Ashanti Region, achieved a Grade 1 pass for his ICT exam in 2018. He is now a student at Adu Gyamfi Senior High School, where he is concentrating on the subject General Science – his dream is to become a medical doctor. Cliff's family cannot afford a home computer, and the hands-on computer classes have had a great impact on his life. During the gap between basic school and secondary school, he was able to get a job at an internet café. "I could be productive in my holidays, help others – and earn some money," he said.

#### A NATION-WIDE SERVICE IS BORN

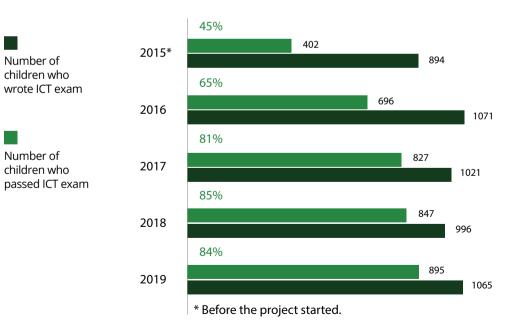
Evidence of the impact of the project, collected by the four regional libraries, and advocacy by GhLA, convinced the Ghana Investment Fund for Electronic Communications (GIFEC), a government agency, to equip the remaining six mobile regional libraries operated by the GhLA with laptop computers. GIFEC's support makes it possible for the GhLA to transform the project into a sustainable service that will be offered in 10 regions: the four regions that took part in the EIFL project – Ashanti, Upper East, Volta and Western – and six more, Brong-Ahafo, Central, Eastern, Greater Accra, Northern and Upper West. From early 2020, 10 ICT-equipped mobile libraries will go on the road.

"EIFL has helped to build the foundation for extension of practical computer skills classes in under resourced schools across our country. We could not have achieved this without you. Thank you!" said Hayford Siaw, Chief Executive Officer of the GhLA. Thank you to the Bill and Melinda Gates Foundation Global Libraries Program and our donors through GlobalGiving, for supporting our project.

### HANDS-ON COMPUTER CLASSES PROJECT AT A GLANCE – 2015 – 2019



#### Children who passed ICT in the Basic Education Certificate Exam



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