

Institution: Reed College
Participants: Emmanuel Enemchukwu '16 and Zhe Li '16
Country: Nigeria
Title: FGA Suleja Digital Academic Project
Dates: May 30 to August 2, 2014

Background

Nigeria has been afflicted by civil and social strife, and evidence shows that the education of people from age 13 to early adulthood is disproportionately affected by these conflicts. This situation has complicated the dynamics of education in the country, resulting in gaps in students' education and a decline in their mastery of schoolwork. On a long-term, the situation negatively impacts their ability to learn age-appropriate life skills that will help them become self-sufficient and productive members of their society. Moving aside from the aforementioned issues, there is a more personal factor to learning, which is that students have different learning styles. Many schools in Nigeria are not well prepared to tackle this challenge, as they do not have enough resources to resolve the problem of supplementing different learning styles. Without these much-needed resources to aid different learning styles, those with a slower learning pace or other forms of learning disabilities struggle to catch up. Evidence also shows that students who learn at a slower rate are more likely to drop out of school. Given that the present educational model has not lived up to the social dynamics of the Nigerian youth demographic, it is important to rethink the present educational model.

We define peace, with regards to the secondary school students, as the presence of social stability and an infrastructural platform for students to optimize their academic and growth potentials. The project is to provide supplementary academic resources through digital devices for this target-group of students. Ultimately, our goal is to promote peace by fostering learning and circumventing the aforementioned demographic challenges. An improved educational outcome will unquestionably lay the foundation for a stronger citizenry and a stable and peaceful governing body.

Project Description

The location of our project is in Federal Government Academy (FGA) Suleja, a secondary school that teaches about 20 subjects on a Seniors Secondary School level. FGA Suleja is a school established in the northern part of the country by the Central Government of Nigeria to nurture talented students from across the country. We chose this school as our project location because of the support we have from the school's faculty, our level of familiarity with the community members, and their educational philosophy. FGA Suleja has a computer lab that enables us to implement our project. Unfortunately, these computer infrastructures are not used to their optimum. By implementing our project, we hope to maximize the use of computers by the school's community, particularly in the students' self-learning process. We also hope to create a model that would be copied in other schools.

We will provide a digital database for students to use as a supplementary learning resource.

The four main components of the project are:

1. Gathering academic materials based on the school's academic syllabi.
2. Curating the materials with the help of the school faculty for intellectual soundness and cultural adaptability, with a focus on learning differences.
3. Organizing workshops to raise awareness about digital learning.
4. Sustaining the project by establishing a student club that continues to organize the workshops and maintain the database.

To begin, the faculty members will provide us the syllabi in the following academic divisions: Natural Sciences, Vocational Sciences, Social Sciences, Arts and Languages. Subjects will be selected based on factors such as failure rates, availability of in-class equipment, and the amount of practice needed outside of classroom to attain sufficiency. We will then search for materials from massive open online course (MOOC) sites based on the course syllabi. Most of these materials will be downloaded from

free sites while a few others that are not free will be purchased. Next, teachers will be consulted to insure the cultural relevance and the political orientations of the materials placing importance on appropriateness to the local context.

Awareness and sensitization is a very important aspect of our project. We are not only in the business of providing materials; we are also interested in changing mindsets and attitudes. Presently, computers are perceived as luxury instead of as resources that can facilitate learning. Historically, academic apparatuses have not been made available through computers, and this is a possible explanation for the apathy towards digital learning. Other possible explanations include the absence of reliable Internet broadband and the lack of familiarity of the schoolteachers with digital education. We plan to recruit a group of students who will work with us to build the database and organize workshops designed to foster awareness about digital learning in general and our project at school in particular. We will lobby for a student club that will maintain and sustain the resources we have put in place and learn specific skill-sets through their extra-curricular involvement in the club.

Selecting educational materials without infringing any copyright laws is important to this project. Some of the academic materials we will use for the project will be purchased from their original publishers. We will also obtain the legal permissions to distribute these materials to the computers across the school. Our research has confirmed that downloading and installing these materials on the computers in our host school can be done without breaching any copyright laws. These academic materials will then be provided offline in all the school computers so that students can use them to supplement their formal classroom learning. Providing the materials offline is of critical importance because of the unreliability and exorbitant cost of Internet in the region.

This project promotes peace by immediately benefiting the students' academic success. For example, language learning will benefit from using audio-visual files to improve students' fluency. We also believe that it will be helpful for students in chemistry courses to work individually with computers rather than in an environment where they are crowded around a teacher without sufficient equipment. With our project, students with learning disabilities could work at their own pace and practice the concepts with customized video lessons. This form of learning allows students to personalize the classroom experience and achieve higher levels of success.

Through **FGA Suleja Digital Academic Project**, we expect to see improvement in students' academic performances. The student club will measure the outcome by assessing academic performance over time. Improved student scores and advanced computer literacy will potentially raise further awareness outside of the school about the merits of a digital education platform model. In the long term, such a model will assist students in achieving personal and academic success that can carry over into their ability to become productive citizens of Nigeria.

Project Partners

Emmanuel Enemchukwu is studying economics. He is passionate about development, specifically, in Africa. His decision to carry out a Davis project buds off another project called MaahaEducation.com, a website he is trying to develop. MaahaEducation.com was presented during the 2013 Reed Start-Up Weekend and also at the 2013 Clinton Global Initiative University where it got the award for Innovation in Education. The idea behind MaahaEducation.com is that it will be a platform (mobile phones and computers), through which supplementary and interactive study materials will be provided for high school students in Anglophone West Africa. Its strategy is to provide these materials through primarily the mobile phones, which are the most available devices in Sub-Saharan Africa.

Zhe is a sophomore studying anthropology from China. He is interested in education and development, especially about the Chinese government's involvement in West Africa. His study in United States, both in high school and at Reed College, has profoundly shaped his character and intellectual interests. He has been involved in various activities ranging from grassroots activism to the ROTC (Reserve Officers' Training Corps). These experiences made him a conscious individual sensitive to cultural and socioeconomic differences.