Ghana School Library Initiative:

Engineers Without Borders Princeton University

INTRODUCTION AND BACKGROUND

The 2010-2011 academic year marked the culmination of the Ghana School Library Initiative (GSLI) that began two years ago. And it was an extremely successful year for the project. In 2008, a group of Princeton students recognized that English literacy and digital literacy were two of the most pressing issues facing the nation of Ghana and formulated a multifaceted development project to address these obstacles. Working with Evangelical Presbyterian (EP) Basic, a primary school in the industrial town of Ashaiman, Ghana, they proposed a digital library facility to be built on an unoccupied plot of the school grounds to function as both a school and community building. During the January 2008 assessment trip, team members studied popular Ghanaian construction materials such as laterite blocks, Pozzoghana concrete, and louvre windows. During a follow-up assessment trip in August of 2008, team members networked with local NGOs and worked closely with EP Basic to identify specific needs and mutual abilities. During the summer 2009 implementation trip, the travel team returned to complete the concrete foundation and superstructure.

This past summer, we completed the construction of the rest of the library, including the block walls, truss roof, and electrical system, and outfitted of the *Achieving Greater Heights Community Library* facility with over 7,000 books, 37 computers, fans, and lighting. Furthermore, we trained EP Basic teachers and librarians in new educational modules that utilize library resources, as well as in the operation and maintenance of the library facilities we built together. While we understand that long-lasting educational improvements in the community will be a multigenerational endeavor, we believe that our project will make an immediate and substantial impact on education in Ashaiman.

TRIP DESCRIPTION

During this implementation trip, our goal was to completely finish all structural and educational aspects of our Ghana School Library Initiative project. We are excited to report that we achieved all of the goals we set for the trip, with very few obstacles and substantial community involvement and support. Because the foundation, concrete columns, and ringbeam were already in place when we arrived, we spent our two months organizing the construction of the landcrete walls and other masonry tasks, a timber truss roof with modern roofing panels with increased noise and heat insulation, and an electrical system to support the 37 One Laptop Per

Child (OLPC) netbooks that we deployed as well as interior and exterior lighting and fans. The library was finished with plastered and painted walls, a red-plaster floor, and high quality electrical fixtures. We were also able to move in the shelves and furniture for the library and provide a digital catalog for the books. Much of the early portion of the trip was spent cataloging and placing stickers on the books, and then entering their information into our database system. In terms of the educational component of our project, we did a significant amount of training with both students and teachers on the proper operation, maintenance, and repair of the OLPCs. The same was done for the proper operation, maintenance, and repair of the library system and structure. These classes spanned 2-3 weeks.

THE COMMUNITY

The community we partnered with for this project is located in the Middle East region of Ashaiman, a slum outside of the major industrial city of Tema. Specifically, we partnered with the Evangelical Presbyterian Basic School (E.P. Basic), which serves around 500 students from local and neighboring communities. The area surrounding the school suffers from characteristic problems in developing urban areas, such as those related to waste management, pollution, and infrastructure. Because of its vicinity to a major city, the area does have access to electricity and clean water. However, we noticed a significant lack in the availability of educational resources. For a population of over 250,000 individuals, there was not

a single library. Education is certainly necessary for sustainable development in today's increasingly technical society.

During our time at the E.P. Basic School, there were several key community members who we had significant interactions with when discussing and planning all decisions related to the construction and operation of the library. These individuals included Ben Atsu, head of the School Board, Church Elder, and host father for the travel team; Rev. Owen Datsa, pastor of the EP church; Benony Asiamoasoh, headmaster of the school; and David Ankugah, bursar of the school. In terms of the sense of ownership, we feel that the E.P. Basic School has taken great ownership of the library since the conclusion of the implementation trip. In the MOU, the school agreed to form a library board to govern the library. The school board has taken this responsibility and is organizing the maintenance of the library as well as the financial support for the structure and librarian. Library hours were also specified in the MOU and the library is open to the general community for set hours each day. WE continue to be in contact to make sure the community it being well served and that the library will continue to operate to its full potential.

LESSONS LEARNED

There were a number of extremely valuable lessons that we learned while on ground in Ghana. First and foremost, flexibility is a major attribute that an engineer must have when working on a project, especially in a foreign country. It is extremely important not to make assumptions based on US practices and cultural norms and to adapt to the differences that exist in a foreign culture. I feel we struck a good balance between respecting local knowledge and methods while demanding the high quality that we knew our subcontractors could provide. Additionally, we learned a little more about what kind of small and large decisions go into a construction project. It is not merely four walls and a roof; there are a multitude of other choices that must be made for a project to function to its full potential. Finally, we really found that the kind of cultural exchange we were involved in had long-reaching effects for the community members and ourselves. It is so important for international development workers to form a bond with the community and show a sense of dedication and care. We were not simply there to erect an edifice, but instead to connect on a human level with the community, our workers, and the country of Ghana. We are especially excited about our planned monitoring trip as it will give us an opportunity to fully demonstrate our dedication to the Ashaiman community.