

Opportunities through Operating Systems
Guatemala
University of Chicago
Emily Chen, Sam Pollock, Kelly Wolenberg
www.otosproject.org, www.otosprojectblog.wordpress.com

Our project goals included the establishment of the hardware and software necessary for running a computer lab in Nuevo Progreso, San Marcos, Guatemala, as well as providing any necessary support and guidance so that the computer lab would be sustained into the foreseeable future. We also sought to incorporate English instruction into our lessons.

In addition to the Davis grant, we fundraised for our project by sending out letters to family members and friends, and by applying to the CCI Innovation and Entrepreneurship Competition at the University of Chicago. These efforts are discussed in greater detail in our budget.

Throughout the course of our project, we encountered unanticipated events, many of which proved to be beneficial in nature. On our arrival we learned that we would not need to pay for room and board at the Hospital de la Familia (HDLF) compound, as HDLF was absorbing the cost. (HDLF is responsible for building the school, Colegio San José (CSJ), which was to receive the computers.) The principal of the school, Erik Bladimiro Cruz, had also completely prepared one of his classrooms for the computer lab, saving us weeks of work. As expected, there were no desks available for setting up the computers and an insufficient number of outlets; however, due to the unexpected presence of five craftsmen on the HDLF payroll, all of whom have children at CSJ, the construction of the desks and installation of outlets took mere days. In addition, Sister Veronica Xochitl Gonzalez Ortiz, the nun who oversees HDLF affairs in Guatemala, had already selected a computer teacher, Dulce Maria Bravo Merida, greatly reducing our time and effort in transferring the project to our Guatemalan partners. Finally, due to familial connections with teachers at the school, we were able to quickly locate and purchase computers from a seller in Nuevo Progreso, Byron Aníbal Ramírez Morales. A large part of the success of our project was due to personal connections. We had committed to significant preparation, including a ten-day visit to the project site a year before attempting to establish the computer lab. This allowed us to begin building relationships with the individuals who would be essential to the success of our project.

The few things that did not go as planned were a consequence of insufficient preparation. The first major hurdle that we encountered was transferring funds from our Bank of America account to a Guatemalan account. We discovered that a great deal of information about both accounts was required to make the transfer, as well as vocal confirmation with a Bank of America employee. For smaller amounts we were able to easily use ATM's. Another unexpected development was our discovery of the infeasibility, and undesirability, of the installation of internet in the school. We were aware that inclement weather disrupts satellite internet signal. However, Nuevo Progreso receives so much rainfall virtually every day that even special equipment would be unable to overcome the "rain-fade effect" and strong lightning storms would pose a danger of destroying the equipment. Furthermore, the nuns at HDLF, the president of HDLF, and several teachers at CSJ felt that establishing internet in the school would be too difficult and would not provide much academic benefit in the context of CSJ. After much discussion, we decided to focus our time and resources on elsewhere.

A total of 148 students in Colegio San José benefited from our project by receiving English lessons and instruction in the proper use of a computer, keyboard, and software. Based on a survey we conducted of all CSJ students, 58% of students had never used a computer before our program. Additionally, 60 students from the nearby public school, Colegio Centroamérica, received daily English classes following the request of a CSJ teacher midway through our project. Fifteen adults employed by HDLF also received English lessons four days a week. In the future, 30 new students each year will be enrolled in CSJ and so will benefit from the presence of the computer lab. We also expect that the hospital staff and other Nuevo Progreso citizens will be permitted to use the computers to learn typing and basic computer skills, and to take advantage of the encyclopedia and translation programs. While some computer classes are offered in the town, the cost is too high for the majority of citizens.

The long-term impact of our project is three-fold. First, the presence of the computer lab has enabled most students of Colegio San Jose to acquire a basic understanding of the parts of a computer, how to navigate the desktop, and basic typing skills. Even these simple skills imparted over our stay here will have a direct impact on students' employment and higher education prospects. This impact will be sustained and expanded upon by the new computer teacher who has already taken over the classes.

Second, our teaching English classes will allow the students to receive a grade in foreign language on their national education record, which will also improve their employment and higher education prospects. This impact will be sustained and expanded upon by future teams that will be sent by our Chicago-based organization Opportunities through Operating Systems (OtOS) to continue English classes in the Nuevo Progreso schools. OtOS has already begun looking for participants to fill next year's team.

Third, we believe that the establishment of the computer lab and our brief teaching of English classes not only provide the students with practical skills, but also show them previously unconsidered possibilities for their future. During a brief exchange, Byron, the man who sold us the computers and who was among the few University-educated Guatemalans from Nuevo Progreso, explained that University is not very expensive. Many students do not attend because they have neither the desire nor the expectation of higher education. He was able to attend a computer-engineering school because he was willing to tolerate weeks away from his family and humiliating flatbed truck-rides through the rain into the city. However, in his opinion, this ambition for higher education is rare among rural Guatemalans. We hope that the presence of a modern-computer lab in the school and our imparting the ability to use these computers for schoolwork will show many of our students that they can make a choice to attend higher education.

Peace, as defined by our project, is the ability to control the course of one's own life. A corollary to this is the ability to fulfill the basic wants and needs that are universal among human beings: receiving enough food and water to survive comfortably, living in a clean and safe environment, and having the chance at success, as defined by the local community. Without a feeling of control over the course of one's own life, gangs, violence, and war may appear to be the only opportunities to fulfill these basic wants and needs. Our project will contribute to peace in both the short and long-term because it improves the education of a body of people and gives them greater control over the course of their lives, by providing skills and expanding horizons.

This project has certainly changed the way we think about world cultures and our place in them. It has also changed the way we understand how to conduct business. We have gained the experience of communicating and collaborating in a different language, with different definitions of success and how it should be achieved. We have realized that the most important part of any project is working alongside community members to define a goal, find the best course of reaching it, and continue striving until that goal is achieved.

"The most important part of any aid project is neither money, nor material goods, but people. The goal of the project is to help people, and it will only be successful (or worthy, for that matter) if the people you are trying to help are helping you." -Sam Pollock

"The greatest impact we made was not in establishing computer or English classes, but in imparting intellectual curiosity upon our students." -Kelly Wolenberg

[Insert quote from Emily Chen]



Meeting with teachers and administrators of Colegio San José in July 2011 to discuss class schedules and lesson plans for English and Computer classes. (Photo taken by Emily Chen.)



Fourth grade students practice their typing skills on MecaNet, a computer program that utilizes a Spanish-language keyboard. (Photo taken by Kelly Wolenberg.)



Sam teaching an English grammar class to third grade students in Colegio San José. (Photo taken by Kelly Wolenberg.)