The goal of this project was to build a solar-powered computer learning center that integrated the technology, theories of change, and pedagogical practices from the Hole-in-the-Wall, Education for All, and One Laptop Per Child initiatives. (The story of how these programs inspired me can be read in the project’s proposal.) In short, I sought to create a student-governed space that (a) would promote both autonomous learning and collective motivation, and (b) could serve as an alternative model of education for the developing world.

Throughout the Spring, I worked with the CEO and CTO of Aleutia, a design and manufacturing firm of computers that use only 20 watts of power, to custom-engineer a solar-powered “school in a box.” I also met with Mr. Fekadu Beyene Ayana, a counselor at the Embassy of Ethiopia in Washington, DC, to learn more about the education system of Ethiopia and shape the objectives of this project. Before he was appointed to the embassy, Mr. Fekadu was the dean of a teachers college in his home country and he continues to work on issues related to educational planning and development. He put me in touch with the Minister of Education in Ethiopia, whose office promised full support and helped to arrange lodging and transportation during our stay in the country. These early partnerships were critical to our success: the Embassy, for example, facilitated an otherwise byzantine import process; Aleutia provided front-end technical support when we installed the open-source educational operating system Edubuntu.

We were in Ethiopia for five weeks, each of which had a specific focus. In the first week, we met with a number of government officials, including Mr. Berhanemeskel Tenna, chief advisor to the Minister of Education; Dr. Adhana Hailer Adhana, State Minister of Higher Education; Mr. Merga Fayisa, Head of Oromia Education Bureau; and Dr. Admassu Tsegaye, President of Awassa University. The purpose of these meetings was to understand the challenges and opportunities of implementing a project of our scope and to secure official government support. This last point is a delicate one: every agency has their own agenda that they wanted us to help advance. Sometimes, they were incongruent with our objective, and we had to be strategic about the establishment of formal relationships.

During this first week, we also toured local villages to identify the exact location for the computer learning center, met with directors of schools and parent-teacher associations, and talked with children about the unique needs and opportunities in rural communities that surround the capital city.

In our second week, we hired a local construction crew to build the computer learning center on the campus of Sinai School in the town of Kaliti. Sinai was founded 10 years ago by three then-university students as one of the first schools in the area. Over the last decade, the founding directors —  Yohannes Desta, Seble Kassaye, and Saba Kassaye —  have built and managed a campus that annually enrolls 750 children in grades K-8. We immediately fell in love with the students, formed a bond with the staff, and forged a partnership. The opportunity to build, evaluate, and test this prototype learning center with such a large number of children across such a wide range of ages proved to be ideal. The construction manager, Getachew Adugna, is the father of two daughters who attend Sinai; his vested interest in the project ensured its success.

During the construction phase and into the third week, we organized focus groups with the students at Sinai to expose them to, and see how they would interact with, the computers and educational software. We also collected data about their level of technological literacy, academic achievement, and post-school ambitions to serve as a baseline against which to compare the immediate impact of the learning center.

The grand opening of the Davis Computer Learning Center, named after the project’s generous and visionary benefactor, occurred in week 4. During this time, we also organized workshops for students and staff to learn about hundreds of educational programs loaded on the Linux-based computers. In week 5, we continued to evaluate and analyze the effects of the computer learning center and established a management transition plan with the school directors and graduate students at a local teachers college.
All early indicators suggest that this project has been an incredible success. Staff at Sinai School report that students now arrive to campus three hours before classes begin to use the computers in the learning center. We were initially concerned about access — with only a few complete machines, how might hundreds of students between the ages of 5 and 15 years-old interact in the center? It has been fascinating and wonderful to learn that an organic self-regulating order governs the student-directed space. Boys tend to group together around one computer, and girls around another. But they interact with the computers in small groups composed of students from multiple grades. Usually, there is one student who “drives” the computer, with others providing directions. These roles are fluid; after one game or series of activities is complete, the next person in the group gets to control the keyboard and mouse. When everyone in the group has had a turn, another group of students replaces them in front of the computer. It is the most pure and powerful example of constructivist and collaborative learning I have ever witnessed. Since we returned to the United States, we have been told that news of the Davis Computer Learning Center has helped to increase enrollment at Sinai, earned the school a commendation from the government for being an innovative facility, and has inspired students to regularly announce their plans to attend college and become computer engineers or programmers.

We intend to grow Ethiopia ConnectED into a non-profit development organization that builds more of these computer learning centers throughout Africa, Asia, and South America. Our first priority, however, is to deliver more computers to Sinai and continue to evaluate its impact on student achievement and motivation.

Lauren Alfrey, a doctoral student of sociology at the University of California–Santa Barbara, was my brilliant and invaluable partner with this project. An additional $5,000 was secured through private donations to help pay for her travel. The two of us — with me, focused on logistics and implementation; her, focused on evaluation and community impact — made for a dynamic, nimble, and effective team. I highly encourage future fellows of the Davis Projects for Peace program to work with a partner on their projects.

II.

I define peace as the triumph of collaboration over competition — it is realized when communities cultivate capital to achieve collective interests, rather than to satisfy the immediate needs or desires of a privileged few. This requires a deliberate commitment to foster the humanist philosophy of ubuntu, which Archbishop Desmond Tutu defines as the active affirmation of others. “Proper self-assurance,” he says, “comes from knowing that one belongs to a greater whole.” The challenge for us all, Nelson Mandela explains, is “to enable the community around you to be able to improve.” Here, then, is our best definition of and promise for peace:

\[ \text{umuntu ngumuntu ngabantu} \quad \text{— a person is a person through (other) persons.} \]

In terms of how this project contributes to peace, I share a testimonial from a parent of one of the students at Sinai School: “I don’t have words to express how grateful we are — what this project does for this community. You are not from our country, we don’t speak the same language; we’re not even of the same race. And yet you did more with us and for us in five weeks than the government has done in five years. Every child in this school, as well as their siblings and us parents and our neighbors, are forever inspired by the spirit of generosity you shared with us through this project. Anything is possible. Thank you.”

This quote touches on the most valuable lesson I learned from this project, which is the strength and impact of community-based development. I used to romanticize large-scale partnerships with federal governments and INGOs because of the potential to achieve large-scale change. But politics and bureaucracy threatened to dilute, if not compromise, the mission of and vision for Ethiopia ConnectED. Some of my early contacts in these organizations seemed to prefer to strategize and self-congratulate rather than implement. This challenged me to re-focus my efforts: I went straight to the neighborhoods that I desired to help, rather than rely on supra-agencies to facilitate a relationship. I was immediately and warmly embraced, and I soon found that at a hyper-local level, I could be more nimble, responsive, and effective. Thus some unsolicited advice for fellows of the Davis Projects for Peace program in coming years: wade with respect and optimism into the waters of change; you can accomplish nearly anything if you don’t mind who gets (or takes) credit for your efforts; and, above all, do something. Our collective peace depends on it.