Case Studies from a Community-Focused Engineering Program with Projects in Haiti and Nicaragua

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Abstract - Engineers Without Borders - USA at the Illinois Institute of Technology is an extracurricular, student-led engineering program that has conducted service-oriented engineering development projects in Haiti and Nicaragua that strive to meet the basic infrastructure needs of our partner communities. Projects have ranged from water-distribution, solar electrification, and small and large-scale structures. By participating in the program, students gain real-world experience applying technical skills to a project as well as significant leadership and project management experience. They also gain insights into cultural communication and grow a passion for service learning. The purpose of this paper is to share the challenges we have faced as well as our best practices and governance structure in order to allow other programs to learn from our experience developing relationships with our university, engaging with multiple international partners, and involving a variety of disciplines and skill-levels in our program.

Index Terms – community based projects, Engineers Without Borders, program management, student-led projects, university engineering programs

INTRODUCTION

The Engineers Without Borders - USA, Illinois Institute of Technology Chapter (EWB-USA, IIT) is an extra-curricular, academic enrichment program, which recruits students from all disciplines with a focus on the field of engineering. The EWB-USA, IIT Chapter began in 2005 after a group of students started a project in Haiti with a U.S. based Non-Government Organization (NGO) that had a local office and projects in Haiti. EWB-USA, IIT was identified as an organization that would support students’ interest in international development and sustainable engineering projects.

Since its inception, EWB-USA, IIT has been widely supported as a valued service-learning program for students, especially as undergraduates. The program receives funding from the IIT Armour College of Engineering, the IIT College of Science, and the IIT Student Activity Fund in
addition to special funding from various grants including the Illinois Water Environment Association, the American Society of Civil Engineers, the EWB-USA Chicago Professional Chapter, and EWB-USA chapter grants.

The program has engaged over 1,000 students over the past nine years with a core group of approximately forty students attending events on a regular basis each year. EWB-USA, IIT puts an emphasis on student leadership and currently offers nine Executive Board positions as well as four project committee leadership positions. The program includes an opportunity for international travel to our partner community once a year for approximately four to six students and two to three professional mentors in addition to opportunities to participate in local service events.

The EWB-USA, IIT program is well respected among faculty, staff, and students at IIT for having a culture of leadership-building, education, and a strong commitment to the communities with whom we work. Our reputation is important to the success of the program since a key component to our projects is the development of partnerships. To date, these partnerships have included significant contributions from many faculty members and alumni of IIT, a co-managed project with the Chicago Professional Chapter of EWB-USA, strong working relationships with partner NGOs, both in Haiti and in Nicaragua, and funding from a variety of outside organizations including the Illinois Water Environment Association, the American Society of Civil Engineers, and the kCura Corporation, among others. Our reputation is also supported by the quality of our recruitment process, the structure of our leadership transition period, and the close relationship we maintain with our program mentors.

This paper is a description of our program’s best practices as well as the challenges we have faced in conducting engineering projects in Haiti and Nicaragua over the past nine years.

**BACKGROUND**

The EWB development model is focused on community-driven projects. As such, the process for chapters to be awarded a new program is a matching process that ensures a community that is expressing interest in a certain type of project is matched with a chapter that has skills in that area. The process always starts with a community internally expressing need for some infrastructure project. Then, a local NGO with report writing skills fills out the required paperwork and submits to EWB-USA for review. This paperwork includes background on the proposed project, community and NGO support and capacity, proposed timeline, description of the beneficiaries, the community’s agreement to contributing to the project, project impacts, and travel logistics. EWB-USA reviews the paperwork, focusing on community organization and involvement, program ownership, mission and vision, scope of work, open access, long-term commitment, and financial independence and sustainability. Ultimately, it is the community’s project, so EWB-USA requires that the community provide labor and financial contributions to help make the project a success. If approved, EWB-USA lists the project on its site. The chapter must then apply using a separate document, which includes information such as professional mentor experience, chapter preparation, cultural training, health and safety preparation, and language skills. In special circumstances, the chapter can apply for a new program with the community. This is not common, but is allowed and is done when special connections are had between chapter members and the local NGO or community members prior to starting an official program.
All of our programs follow EWB-USA principles of sustainable development and reporting requirements. Principles of sustainable development are engrained in every step of the project process and focused on community-driven development. For reporting requirements, there are several steps to project implementation, which each have a document associated with it. This keeps the chapters accountable for what they are doing and makes sure that there is a check of work by professional staff members at every step of the project process. The steps include: assessment, alternatives analysis, preliminary design, implementation, monitoring, and program closeout. All project trips (assessment, implementation, and monitoring) have a pre- and post-trip form associated with them as well as a required health and safety plan. EWB also recently released their “Planning, Monitoring, Evaluation, and Learning Program” which requires extra documents to be submitted including a project partnership agreement, program impact monitoring report, and implementation agreement.

By following and applying these principles, our program ensures that all work being done meets criteria including the requirement of substantial community and partner involvement in all projects and the use of a proper design-thinking framework in order to ensure that the projects we develop sustainably meet the needs of the communities with which we work. This process also gives our members experience using professional planning processes, making budgets and proposals, creating timelines, and conducting impact analysis. It also ensures that as students we are given significant professional resources and assistance in verifying the sustainability of our final designs.

What sets the EWB-USA, IIT program apart from other EWB-USA chapters and university-engineering programs is our emphasis on the involvement of a diverse set of students from a variety of disciplines. The program’s membership includes traditional, transfer, and exchange program undergraduate and graduate students from the following departments: Civil, Architectural, and Environmental Engineering; Social Sciences; Chemical and Biological Engineering; Computer Science; Mechanical, Materials, and Aerospace Engineering; and Business. Figure 1 and 2 show this diversity in terms of project membership using attendance data from the Fall 2014 semester. Our international projects utilize the variety of skills available in this inter-disciplinary environment. In the experience of our students, this is also the kind of environment most sought by recruiters. EWB-USA, IIT students often obtain competitive internships in their industries and scholarships because of their ability to illustrate application of their skills in a project setting and ability to work well in multidisciplinary teams.
The Haiti program started officially in 2008 in La Victoire, Haiti. This program had its origins in the work of another student organization at IIT. The students in this organization worked on a solar school electrification and a water supply and distribution project in Pignon, Haiti under the umbrella of Haiti Outreach, an in-country NGO. In 2008 the EWB student chapter and the student organization working under Haiti Outreach decided to consolidate into one EWB student chapter due to their similar focus on international development efforts. The La Victoire water supply and distribution project started though the official EWB process by a joint application with Haiti Outreach. EWB approved the partnership in 2008. Then from 2008 to 2012, EWB-USA, IIT students worked on a program in Haiti in partnership with Haiti Outreach. As a part of this program students traveled on two site assessment trips to meet community members and gather data for design of the water supply and distribution project. Starting in
2010, they also worked on a solar-powered school electrification project. Students designed systems to meet the demonstrated need and held events to raise funds for the project. Despite their efforts, in 2012 the students had to close out the Haiti program due to various challenges with the NGO and local community government, which is explained further in the case study section.

In 2012, IIT was awarded a program in San Claudio, Nicaragua. The San Claudio Program began with an application from the NGO partner, Friends New England. EWB reviewed their application and approved it. Then the application was listed on the EWB website and the IIT chapter applied to be partnered with the community. Finally, EWB approved the partnership. The IIT chapter had strengths in Civil Engineering and a professional mentor well skilled in this area so it was well suited to take on the program. The San Claudio program consists of a vehicular bridge project that seeks to provide year-round accessibility and a safer means of travel for the community during the rainy season. The bridge will provide civilians year round access to school, medical clinics, markets and other basic necessities while providing safer means of traveling. The students at IIT have been working on this program with the U.S.-based NGO Friends New England (FriendsNE) and Leon, Nicaragua based non-profit the San Isidro Association. They have gone on two site assessment trips for this program, and are currently in the design stage of the bridge project. Figure 3 shows the timeline and progress of the Haiti and Nicaragua projects.

![Program and Projects Timeline](image)

**FIGURE 3**
**PROGRAM AND PROJECTS TIMELINE**

**OUTCOMES**

The practices contributing to the overarching impact of our chapter and outcomes of participating in our program can be seen on various levels: university, academic, leadership development, professional growth, international work, and trip planning.

*University Level*

Our program has developed best practices for engaging university faculty and staff in various roles. Two faculty members in the CAEE department currently serve as our faculty advisors. Our
chapter utilizes our faculty advisors not only as a requirement due to our status as a student organization, but also to build our network with area professionals and professional organizations. The current organization president also holds monthly meetings with each faculty advisor to update the progress of our projects and discuss upcoming events and chapter needs. In the past, faculty and staff members have also travelled with our teams to our partner communities, presented in chapter meetings, held technical workshops, and invited student members to present to their organizations and classes. The quality of the program’s engagement of faculty and staff has had a strong positive correlation with our program outcomes.

Involvement on project teams, leadership positions, and organizational operations increase student interaction with IIT faculty, staff, and administration. This serves to directly improve the effectiveness of our organization and projects. University support is crucial to any student run club, but especially important when dealing with complex issues such as interaction with international communities, NGOs, technical design, and project funding.

Academic

Through participation in EWB-USA, IIT students have increased opportunities outside of the classroom setting to improve upon skill sets that are important to their futures. Creating transformative learning experiences for our members is core to the mission of our organization, and something we work hard to achieve. While we do work in the context of a project in another country, most students do not get the chance to travel. Despite this, the benefits of involvement for students’ academic growth and professional development are numerous.

By doing work relevant to their majors, students are able to utilize what they are learning in an academic setting on a real project. This extension of skills beyond the classroom can increase student excitement about the potential impact they can make within their field of choice and can also positively reinforce material learned in the classroom. For engineering majors, this is through involvement with the Technical Team on our projects, which is the sub team committee that does the core design work.

On the Haiti water project, students worked on design of a suspension bridge for a water pipe, a chlorination unit, a spring box design, and a storage tank. On the Nicaragua bridge project, students have done work on an existing bridge design analysis and alternative bridge design participating in such tasks as GPS mapping, topographic surveying, and analysis of a hydrological study. For majors such as Political Science, Psychology, and the newly formed Social and Economic Development Policy, there are opportunities in the form of the Planning, Monitoring, Evaluation, and Learning (PMEL) process development (known broadly outside of EWB-USA as monitoring and evaluation), community baseline survey development, and community engagement.

For a graphical depiction of the majors and years of our current student project team members (excludes general body members), please see Figure 1 and Figure 2 in the above section.

Leadership Development

Our program also maintains a well-regarded reputation because of our program’s membership and mentorship practices. The structure of our leadership terms greatly contributes to the quality of our program’s leadership. Elections are held at the end of the spring semester each year and
the new leadership team attends at least one executive board meeting with the outgoing leadership team prior to taking on their positions. The new student leadership team does not fully transition until the fall semester, which allows for a full three month transition period over summer break. We have found that this transition period is greatly beneficial to the continuity of the program and the projects on which we work. Finally, our program has found it advantageous to have consistent and engaged professional mentors and faculty advisors when transitioning a new student leadership team. Our mentors and advisors serve to carry knowledge through to a new cohort of program leaders and to ensure that the program carries on after they graduate.

As a student organization, EWB-IIT has an executive board consisting of a President, Vice-President, Director of Projects, Treasurer, Secretary, Internal Fundraising Chair, External Fundraising Chair, and Webmaster. On the project team, we have the following sub team committee leads: Technical Lead; Planning, Monitoring, Evaluation, and Learning Lead; Secretary; Grants Coordinator; and Blog Lead. There is often a degree of overlap between executive board members and committee leads.

Students get the opportunity to attend EWB-USA affiliated and external conferences. Through these conferences, our members get the opportunity to network with like-minded students around the country. They also are often asked to participate in conferences by sitting on panels, giving poster presentations, or facilitating a session. These networking and presentation opportunities help our members to develop communication skills necessary to become leaders in their fields.

**Professional Growth**

EWB-USA, IIT benefits from a strong relationship with the Chicago Professional Chapter of EWB-USA (EWB-USA, CPC), which includes numerous alumni of IIT. The EWB-USA, CPC invites members from our student leadership to present at one of their monthly meetings once a year and provides a ready-made network of professionals for our student members to benefit from in a variety of ways. These professionals attend and present at our events, provide us with funding for upcoming trips, and serve as mentors and sources of technical assistance. Our chapter members also benefit from attending EWB-USA, CPC meetings on a regular basis and networking with professionals. This relationship has been maintained since the beginning of our chapter and enables our students to benefit from carpool to conferences, recommendations and leads on job openings, and the experience of an organization much like our own.

Through activities that highlight community development and international awareness, students are able to broaden their perception of the world around them. In an ever-increasing global world, the knowledge of and interaction with different cultures is important. Companies at student career fairs often look for this important quality, and through EWB-USA involvement our students have an increased competitive edge in the job market. Companies also appreciate the leadership skills our members have gained as well as their depth of project experience.

Several EWB-IIT members have decided to pursue international development (ID) affiliated fields as a career. Examples are joining the Peace Corps, pursuing a PhD in Environmental Engineering with an ID research focus, and attending graduate school for a Masters in Development Practice. Those who do not pursue ID as a career often pursue it as an activity outside of work through involvement in an EWB-USA professional chapter.
International Work

International travel is a major component of our projects. We have conducted two site assessment trips to Nicaragua, and two site assessment trips to Haiti during the operation of our chapter thus far. On these trips students have gained many newfound experiences and lessons. An important emphasis of every trip we take is cultural exchange. Travel team members are encouraged to learn at least greetings and common words in the language of the country where we work and to bring with them small gifts that represent where we come from.

A unique aspect of our program is where we stay in country. Our teams have never spent a night in a hotel or resort and whenever possible we stay with the families in the communities where we work. By staying where we work we truly get to learn about the culture and experience the hardships that we are striving to lessen.

A well-maintained, working relationship with our program’s NGO partners is an important factor in increasing our students’ knowledge of international work. In order to maintain a strong relationship and allow students to learn as much as possible, student members have travelled to our NGOs headquarters and hosted a representative from our partner NGO on the IIT campus. This relationship is maintained by frequent email communication and conference calls at least once a month during a project’s life cycle. This allows our students to learn more about the impact of sustainable engineering projects, different career paths, and the nature of partnerships.

Trip Planning

After doing four site assessment trips, our chapter has created a set of best practices, which can be transferred to other trips within our chapter, or to assist other student chapters to avoid common trip planning obstacles. As international work is unpredictable, there will always be unexpected situations that arise, but effective trip planning can remove many of these.

Through EWB-USA, the trip planning process begins many months before departure. A formal document must be submitted for approval including locations of all sites to be visited, an itinerary, and explanation of work to be done on site. The itinerary is done through collaboration with the in-country partner, as they are responsible for organizing specific travel arrangements. Also included in the process is submitting a Health and Safety Plan. This nearly hundred-page document encompasses any sort of danger the team could encounter during travel. While the documentation process is lengthy, it forces a student chapter to plan more thoroughly than they may have done independently.

Creating a properly balanced team is the most crucial element to an effective trip. We have an application process followed by a selection process performed by upper-level student members and our professional mentors. For any trip, two members must be First Aid and CPR certified, and a translator fluent in the native language of the area is required. We also work to make the skills on our team reflect the type of work to be conducted on the trip. For example, on a site assessment trip, we have a mixture of technical team members and those working on non-technical aspects. As a student chapter, we must balance ages as well for transition purposes. Pre-trip cultural lessons are conducted before departure. Some students have never visited another country before, let alone a developing country, so this is crucial to minimize culture shock. Pre-trip training on technical instrumentation and survey techniques is conducted as well.

International projects are expensive and require our students to constantly be engaged in fundraising efforts both to cover travel expenses and for project implementation. Our chapter
raises funds both internally (from IIT and EWB-USA) and externally. Typically trips in-country cost between $8,000-$10,000 for a team of five students and two mentors. This cost is largely covered through the combination of an allocation from our Student Activity Fund, grants from the IIT Armour College of Engineering and the Chicago Professional Chapter of EWB-USA, and small contributions from travelling team members. Other miscellaneous program costs are covered through a combination of small fundraising efforts on and off campus along with grants and sponsorships from companies and professionals. Some examples range from small scale efforts such as bagel sales to large scale efforts such as a Gala. Grants are applied for to professional organizations focused on engineering in the Chicagoland area and externally, such as ASCE.

When in country, the team works very hard to accomplish all planned tasks. Students get experience performing technical tests such as surveying, soil testing, water quality testing, existing structure analysis, and GPS mapping. Students also develop a depth of cultural understanding through interaction with community members.

**CASE STUDIES FROM SERVICE-LEARNING PROJECTS**

*Program Closeout in Haiti*

While every program does end in program closeout there are circumstances that force chapters to end relationships with communities earlier than expected. This was the case for the Haiti program, which had many difficulties with communication, working relationship with the NGO, Haiti Outreach, and community trust leading to the program closeout decision. The program had two projects, a water supply and distribution project and a school electrification project. For four years, the project team at EWB-IIT had been working diligently through the challenges that came with the program while simultaneously trying to keep close communication with Haiti Outreach to gather any other data that was needed or relevant to the projects. There were two site assessment trips conducted during the duration of the program as well. While it was difficult, the program close out process helped our students garner a depth of understanding of the complexity of not only community development work, but that of engineering projects in general. We have presented our lessons learned internally and externally to our chapter through presentations, meetings, and conferences. We now present them here for the benefit of others.

A critical reason for closing the program was that the project team did not have the support of Haiti Outreach to communicate with the community. As EWB is an organization committed to community driven development, it is important to be able to communicate with our community as much as possible. However, in the Haiti program it was unclear whether or not our work and plans were communicated to the actual community members because we did not have direct communication with the community. Previously, bi-weekly phone calls were conducted with a local Haitian employee of Haiti Outreach, but they had subsequently discouraged all communication with him for reasons unknown to us. Due to our lack of direct communication with the community, we were unaware of their expectations for the project and whether or not they had a clear idea of the problem they were trying to solve. Furthermore, we were unsure whether the scope of the project had been communicated effectively to the community. Initially, the Mayor of the partner community approached Haiti Outreach with the desire for this project to take place. Sometime after that point, Haiti Outreach significantly changed the scope of the
project. We did not know if the changes reflected the community members’ desires or input.

Another issue related to communication was that we did not know the community’s level of commitment regarding financial contributions and the overall maintenance of the project. The local and national authorities had not demonstrated consistent support for this project. We found out that the school director of the solar project had stolen the dues collected by the community to maintain the system. The local and national authorities did not step in and directly confront the school director about the irresponsibility of his actions when requested numerous times. Haiti Outreach also did not notify us within a timely manner about the stolen funds. This exemplified the communication issues we experienced. In addition, they did not communicate changes in their internal structure that directly affected the project team. This resulted in periods of no communication, partial communication, and also compromised our access to critical information about important issues, as well as the expectations of our role in the project. In an attempt to improve the working environment, our chapter initiated a Memorandum of Understanding (MOU) with the Haiti Outreach, which outlined the terms under which we could continue to work with them. We had originally developed a MOU with the community and Haiti Outreach in country on a site assessment trip. We sent over this copy via email, which they initially agreed to. However this document was never signed and the problems persisted. Finally, a major change in our working relationship was due to Haiti Outreach adding an engineer to their staff, which made our services less needed.

Beyond the project, a major concern for us as a student chapter was the sustainability of our organization. Maintaining student member’s interest and drive is difficult when so much of our work was focused on communication issues with our partners. After the Haiti Outreach notified us about the suspension of the La Victoire secondary school project, as well as the indefinite hold on the water project, it became clear to us that it would be increasingly challenging to maintain an active and interested student membership. Without a project making progress, providing transformative experiences, and engaging our students, our chapter would lose momentum, dedication from members, and possibly come to a point where the chapter’s existence would be in jeopardy.

To guide our decision to pull out of the program further, we developed a document with a set of qualities that an ideal EWB program would have and compared our program to this. We then had to submit an additional program closeout document and have a conference call with EWB-USA. After the documentation was approved, the program was officially closed.

Most of the difficulties we faced during this period circled around communication. An element tied to this was the lack of proper guidance our chapter had. We did not have a strong professional mentor team at this point, and were struggling to get an organization of older professionals to give us the attention we needed to be effective. Having a professional mentor team on our Nicaragua project has greatly improved our capacity as the professionals often have greater insights and knowledge and leverage as professional members. An additional barrier to the project was the changing nature of our NGO partner. While our services were less needed with an engineer on staff, we did not realize this until it was too late. More communication and a properly signed MOU are crucial to mitigate this. Finally, the influence of community corruption was one that was outside our field of control but one that is a notable cause of project failure worldwide as well.

Overall, while the decision process to close the program seems straightforward, it was an exceptionally emotionally draining one for the students, particularly the ones who had been in country and met the people who the project would affect. Despite the difficulties, students were
able to articulate challenges and learn from them effectively. While this learning has not been quantitatively evaluated, the results of this learning can be seen through the improved quality of the program in Nicaragua, which has greatly benefited from the obstacles faced in Haiti. We have stressed the importance of regular communication with our NGO partner and community members, and have developed a professional mentor team for guidance. We hope that the lessons learned here and the hardships faced by EWB-IIT through this process will help others facing similar circumstances and guide chapters towards best practices in student chapter communication with third parties.

Challenges and Successes in Engaging Multiple Partners - San Claudio, Nicaragua

Since October 2012, EWB-USA, IIT has been working with a rural community in San Claudio, Nicaragua on a vehicular bridge project. The community requested the expertise of EWB-USA via an application from Boston-based NGO, Friends New England (FriendsNE) which had completed several projects of varying scope within the state of Leon, Nicaragua. Our chapter has travelled on two assessment trips to the community of San Claudio accompanied by our NGO partners FriendsNE and its local affiliate non-profit, the San Isidro Association.

During our first assessment trip our team met several times with representatives from the local municipality including the mayor and the municipal engineer. The mayor pledged his support for the bridge project and indicated his thankfulness for our assistance in the technical design and future implementation of the project. During one of these meetings our team was surprised to discover that a previous design for a full-scale vehicular bridge had already been completed several years earlier. The municipal engineer communicated to our team that the design had been completed because the municipality is committed to building this bridge, but it was too expensive for them. They hoped that our team would be able to design something more affordable (and, we assume that they also hoped that we will help with these costs.) Had our team attempted to contact the municipality prior to our assessment trip we could have saved time and resources by utilizing the existing data to inform our site assessment. In the future, our team will focus on engaging all stakeholders in a project prior to first travel through increased utilization of a communication plan. EWB-USA requires that all projects are a partnership with local community partners, but to my knowledge there is no specific communication protocol for chapters to utilize. This may be a helpful document for EWB-USA to make available to chapters or for our team to develop independently.

The next two semesters our technical team focused on conducting an alternative analysis of the vehicular bridge design and other appropriate designs for the area. We were also able to bring in a new partner from the Rotary Club of Leon, Nicaragua - a local engineer. This engineer not only gave us valuable insights into local construction practices but also, as a Rotarian, gave us an avenue to research a Rotary Global Grant and connect with U.S. Rotary Club Chapters to begin a discussion about funding for the bridge. Because of this relationship, we have connected to an additional three U.S.-based Rotary partners.

On our second assessment trip we engaged with our partners at the Municipality, at the local NGOs, at the Rotary Club of Leon, and in the community itself. Our technical team was able to send with the traveling team four copies of a Spanish-translated binder detailing five alternative bridge designs and their relative costs. Utilizing this tool we were able to focus our conversations and relationships with multiple partners and create meaningful dialogue despite language and knowledge barriers. We were also able to leave these binders with our partners in country.
Because of our great success in creating an open dialogue with multiple partners, our traveling team uncovered a potential problem in the current design plans. Our community partners and the local Rotarian engineer walked our team downstream and showed us how the channel of the river is blocked, causing flooding that will worsen over time. This could have rendered whichever design we would have implemented useless in a relatively short period of time. However, this potential pitfall has also introduced a new challenge.

Since our team is ill equipped to handle the complexities of channel work, we must trust our partners at the municipality to complete the necessary improvements prior to our presentation of a final bridge design. The municipality has pledged their support for the project, but the channel work will be a relevant test of their commitment. Over the past months the EWB-USA, IIT team has been engaging with all of our in-country partners to spur on the municipality to complete the work in a timely manner. This has been a significant challenge for our students but has been viewed as a real-world example of the complexities of international development work as well as the many delays and unexpected costs common in engineering projects.

Overall, our team believes that our ability to engage with multiple partners, both locally and in-country, will result in the completion of projects that are sustainable and supported by the local communities in which we work and offer an enriching academic experience for undergraduate and graduate students from all disciplines at the Illinois Institute of Technology.

THE FUTURE

The Engineers Without Borders, USA – Illinois Institute of Technology Student Chapter shares the vision of EWB-USA of a “world in which the communities we serve have the capacity to sustainably meet their basic human needs.”¹ In addition to and in support of that vision we seek to develop partnerships at IIT and in Chicago that enable other groups in our university network to get involved in the communities where we work. We know that our program only has the capacity to do a small portion of the work needed, but as a university we have the capacity to do so much more. That is why our vision includes engaging multiple groups and growing within our own community. With the help of other organizations at IIT and in Chicago we are able to sustainably meet even more of the needs of the communities in which we work and to spread our passion for service-learning and global giving.

REFERENCES