

Learn by Giving: Construction Service Project Portal

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In December 2019, two California Polytechnic State University (Cal Poly) students built a house in Chiang Mai, Thailand, with the nonprofit organization, Global Village. This experience not only embodied the Cal Poly motto of Learn by Doing, but went further, that the students Learned by Giving. Following the impactful, hands on service learning experience, the students dedicated their senior project to aiding future students in finding similar endeavors to do, learn, and give. After struggling to find adequate opportunities and the information necessary for participation, the pair chose to develop a website listing regularly available opportunities and pertinent information needed to participate, all in one place. The website is intended to help future students find similar service opportunities and evaluate the benefits and requirements of each. The site serves as a portal, listing and linking trusted nonprofit organizations, useful tips, and important funding information for hands on, service learning, volunteer opportunities. By simplifying the search process and sharing previous experiences, the website provides future students with the necessary information to evaluate, engage in, and give through construction related service projects located locally, nationally, and internationally.

Key Words: Website, Volunteer, Service Learning, Global Village, Construction

Introduction

In December 2019, two California Polytechnic State University (Cal Poly) students built a house in Chiang Mai, Thailand, with the nonprofit organization, Global Village. This experience not only embodied the Cal Poly motto of Learn by Doing, but went further, that the students Learned by Giving. Following the impactful, hands on service learning experience, Avery Spector and Meredith Beckman dedicated their senior project to aiding future students in finding similar endeavors to do, learn, and give. After struggling to find adequate opportunities and the information necessary for participation, the pair chose to develop a website listing regularly available opportunities and pertinent information needed to participate, all in one place. The website is intended to help future students find similar service opportunities and evaluate the benefits and requirements of each. The site serves as a portal, listing and linking trusted nonprofit organizations, useful tips, and important funding information for hands on, service learning, volunteer opportunities. By simplifying the search process and sharing previous experiences, the website provides future students with the necessary information to evaluate, engage in, and give through construction related service projects located locally, nationally, and internationally.

Background

After meeting in a Fundamentals of Construction Management course during the Winter quarter of their freshman year, Avery Spector and Meredith Beckman became close friends and respected colleagues. Through their collaborative work as executive board members of the Associated Students

of Construction Management, the pair worked together with ease. As they began brainstorming ideas for their senior projects, Spector and Beckman focused on the “Learn by Doing” motto. Together, they hoped to conduct a hands-on senior project.

Spector was introduced to Global Village, the international branch of Habitat for Humanity, by a former Cal Poly Construction Management student. Global Village is a non-profit organization that operates in over 70 countries. The group provides housing to qualified families in poverty. In addition, Global Village supports the new homeowners with economic education and mentorship to ensure that the family continues to improve its wellbeing.



Figure 1a. Chiang Mai, Thailand on map



Figure 1b. Chiang Mai Rice Fields

Upon the completion of their applications, Spector and Beckman were offered the opportunity to build a home in Chiang Mai, Thailand. After fundraising for the project, the pair traveled to Chiang Mai (see figure 1a & 2a) in December 2019. Throughout their two weeks in Thailand, the women worked with a multi-cultural team, as well as, the future homeowners. The grueling, rewarding, and educational experience exceeded all expectations (see figure 2a & 2b).



Figure 2a. The Project Mid-day on Day 1



Figure 2b. Bamboo Stake Used to Signify Top of Slab for Slab on Grade Pour

After years of gaining knowledge, resources, and a reputable education at Cal Poly, San Luis Obispo, Spector and Beckman wanted to give back using skills specific to their education. With a shared love of travel, taking part in a project abroad became an attractive option. While researching service projects, they became more informed about the disruption that international service projects can cause. Together they decided that if they were to embark on a project abroad, it had to follow these guidelines:

- The culture of the country and people must be respected and left undisturbed by volunteer's presence.
- Fees collected by the organization must be used in an impactful way that benefits the beneficiaries.
- The organization must promote the long-term success of its beneficiaries.

Spector and Beckman reported that their project with Global Village in Thailand satisfied the previously stated criteria. The pair deemed this project a success because an impoverished family received a home while upholding these values.

Through their own experience, Spector and Beckman gained insight that allowed them to become better advocates for responsible service projects. Information regarding their project in Chiang Mai can be found in the "About" section of the website. The duo included this information as an example and guide for students who visit the website. The website was created to promote service involvement amongst construction management students. By compiling pertinent information regarding service-based construction projects within one website, the creators expected that future students would be more inclined to partake in trusted service projects.

Purpose

When reflecting on the amazing experience, Spector and Beckman recalled the challenges they faced when searching for construction service-based projects. To alleviate those challenges for future students the pair decided to compile a website of available opportunities for their senior project. The pair developed the website highlighting vetted opportunities and streamlining important and meaningful information for future students. Within the website, viewers can read about the women's project to Chiang Mai, various construction service opportunities, and funding expectations and options. Spector and Beckman published the website with the intention of it being featured on the Cal Poly Construction Management Senior Project information page. This website encourages construction management students to use their skillset and engage in service based "Learn by Doing" projects.

Process

Upon returning from their project, Spector and Beckman began working on the website in January 2020. They began by conducting literature reviews of similar projects, talking with Global Village alumni, and extensively researching nonprofits organizations. Throughout this research, they decided to compile projects as being "Central Coast," "National," and "International."

The information selected for the website was carefully vetted. As Spector and Beckman are now graduates of the construction management department, it was important that the database need not be updated. Together they searched for programs and organizations that were well established and consistently had projects. A short summary and URL link were included with each promoted

organization. In addition, occasional contact information or previous student involvement was included.

A financial information page was added thereafter. Because project expenses are subject to change, the finances of past projects were used. The costs of Spector and Beckman's own project was used as a general reference for similar projects.

The website was published by Spector and Beckman and turned over to the Construction Management department.

Website Structure

Spector and Beckman built the service project website using WiX. This easy to use website builder enabled the students to create a visually appealing, simple database. Spector and Beckman created five pages within the website: Home, About, Central Coast, National, International, and Funding. They ensured that the website was easy to navigate and easy to access on all device types (see Figure 3a & 3b).

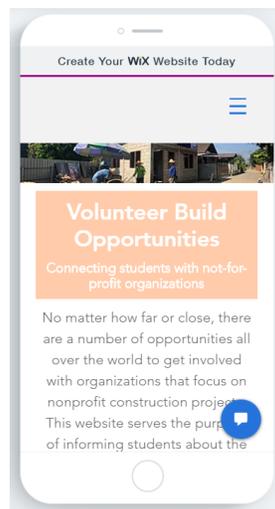


Figure 3a. The Website on a Mobile Device

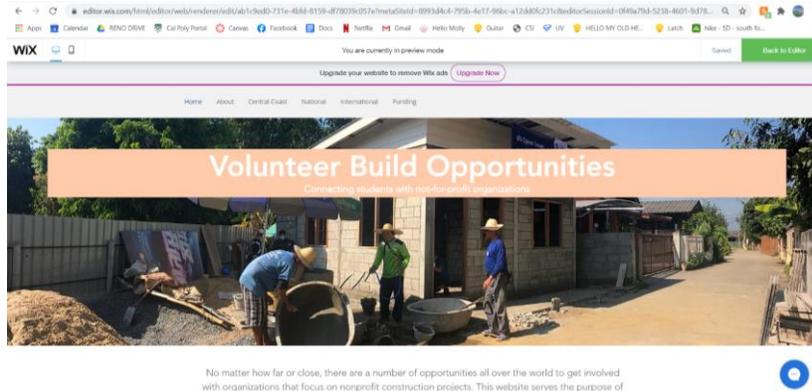


Figure 3b. The Website on a Laptop

Home

Spector and Beckman chose to feature a picture from their own project for the website's opening page. This decision was made to show viewers that they had personal experience, as well as excite viewers with the possibility of experiencing a similar project. The text within the Home page was written to briefly describe the goal of the website.

About

To give viewers a more in-depth background of the website's goals, the About page was created. This section recounts the driving factors that led to Spector and Beckman's interest in construction service projects. The creators embedded a link to the subpage titled "Our Project."

Our Project

Within this part of the website, Spector and Beckman shared their journey to Chiang Mai, Thailand. The purpose of this page was to engage viewers in a personal experience. The pair aimed to quickly engage viewers by sharing photos featuring the jobsite, the beneficiaries, and themselves. The photos were divided into two sections: Jobsite Photos and Exploration Photos (see figure 4a & 4b).

The pair's intention with the text was to appeal to viewer's pathos. They describe the project and its beneficiaries, the Khueanphet family. Memories with the family and teammates are described, giving viewers a better understanding of the experience.

Jobsite Photos



Tala Khueanphet and our local GV leader, Parn.



Avery forming exterior walls.



Day 6 at the jobsite.



Meredith prepping mortar.

Figure 4a. A Screenshot of the Website's Jobsite Photos

Exploration Photos



Our team traveled to an elephant sanctuary to pet and feed rescued elephants. No riding!



Young monks paying their morning respects to the shrine on the hill.



The White Buddha in Paj.



Delicious and vibrant food.

Figure 4b. A Screenshot of the Website's Exploration Photos

Central Coast

Beckman and Spector started their research by reaching out to nonprofit organizations in San Luis Obispo and the Central Coast area. Within the “Central Coast” tab, viewers can learn about various organizations, follow direct links to their websites, and contact group leaders (see figure 5b). The organizations listed on the “Central Coast” tab include Operation Tiny Home, SLO Botanical Garden, People’s Self-Help Housing, Garden House, Growing Grounds, and The Ranch – SLO. Many of these organizations have relationships with Cal Poly and have worked with Construction Management students in the past.

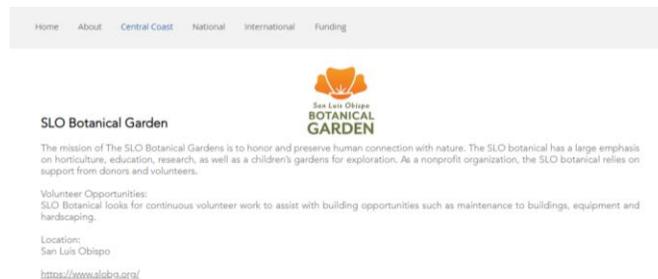


Figure 5. A Screenshot from the Website's “Central Coast” Page

National

Within the “National” section of the paper, viewers will find construction service opportunities located throughout the United States. This section of the website provides a great opportunity for students who want to explore a new place but are unable to make the financial commitment of an international project (see figure 6). The “National” section includes Rebuilding Together San Diego, Construction for Change, Habitat for Humanity, and Great Northern Services. These organizations have ongoing projects across America. Additionally, the American Red Cross, a disaster relief organization, is listed.

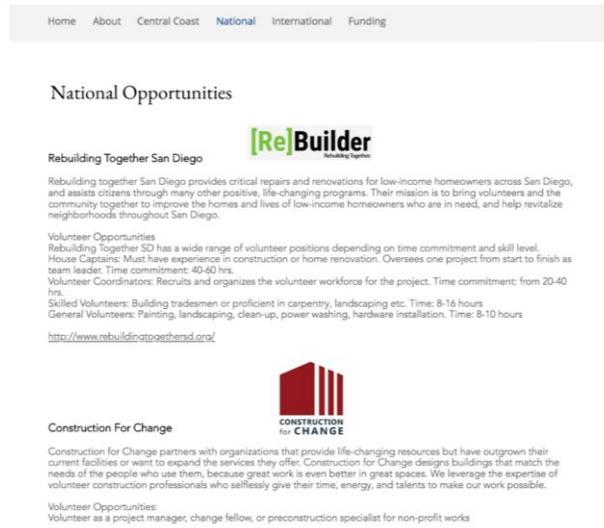


Figure 6. A Screenshot from the “National” Page

International

The international section of the website provides information regarding projects similar to Global Village. Because students are eager to travel abroad, the internet is cluttered with over-priced service opportunities. Spector and Beckman carefully researched these organizations to ensure that all fees and donations were being put to good use. After identifying what made their own project successful, the pair chose four similar organizations to list on the website.

The international organizations include Journeyman International, Habitat for Humanity: Global Village, Engineers without Borders, Build Abroad, and Give a Day Global. Engineers without Borders is a large organization of professionals and students that spans across the United States (see

figure 7). Cal Poly has a student chapter that has gained national recognition for its success and “Learn by Doing” spirit.

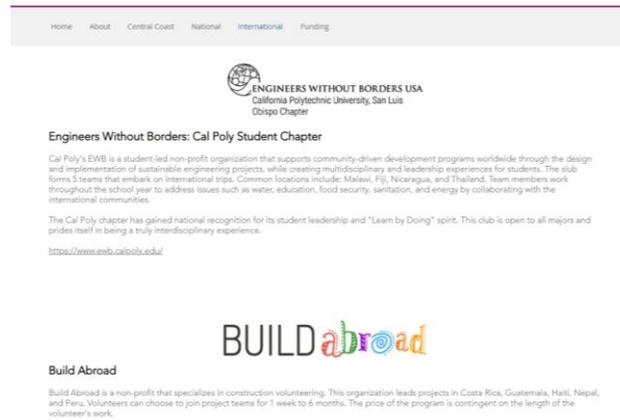


Figure 7. Screenshot of the Engineers without Borders information.

Funding

In order to help students financially plan for a construction service project, the “Funding” page was created. The information provided on this page gives future students insight regarding project costs for Central Coast, National, and International projects. Two specific examples are given for international projects (see figure 8). Cost information is given for project materials, travel expenses, food, and lodging.

In addition to the costs associated with construction service projects, opportunities for funding and grants are listed. Each year Cal Poly offers multiple opportunities for students to apply for senior project funding and grants. Some past opportunities include the Hasslein Fund, Foundation for Interdisciplinary Studies, CMAC Senior Project grants, and endowments from the Office of the Provost.

Another way to raise funds for a construction service project is to contact industry members who support Cal Poly (see figure 8). Companies who have graciously aided the Construction Management department on past endeavors are listed on the website. On past projects, these donations have been in the form of funding, materials, and time.

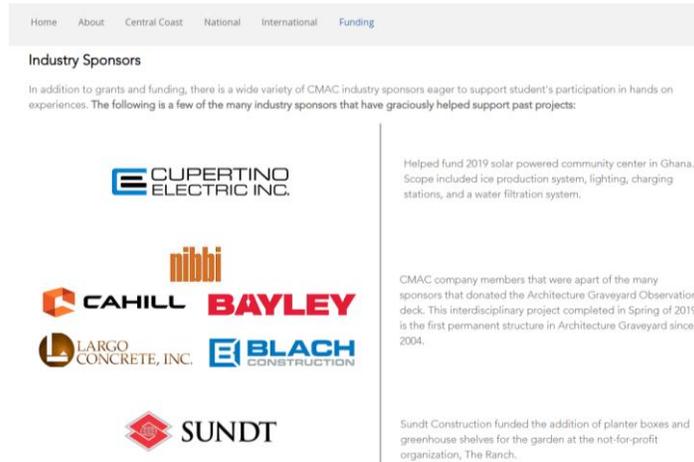


Figure 8. Screenshot of Industry Sponsors

Conclusion

Through service opportunities, Construction Management students are able apply their education and “Learn by Doing.” Local, national, and international organizations need enthusiastic volunteers to complete their missions. Spector and Beckman’s website aids both the student and the organization. The information provided on the website encourages students to take part by simplifying the search process. In return, organizations become connected with volunteers who have construction knowledge. The website promotes stewardship, learning, and community.

Avery Spector and Meredith Beckman’s senior project website is located at <https://volunteerbuild.wixsite.com/seniorproject>.