



Connecting the Mind to What Matters

EFFECTIVE & INNOVATIVE PRACTICES AWARD APPLICATION

Program Statement

Professionals Without Borders (PWOB*), founded at Seattle University, is a Facilities-based group who engages in and leads students on sustainable service projects to help people in need. We connect the minds of students to what matters. The service projects include providing safe drinking water and good sanitation, students and staff work hand-in-hand with the local residents to improve the lives of many people both locally and globally. The program allows students to perform projects with skilled trades people, while gaining an experience that transform lives forever.



Charter Team – 2007 Zambia (Four Staff and three students)

The measurable impact of this program and these projects is already staggering. For example, a hospital has a large potable water system, communities in several countries have improved water systems, and a rebuilt washed out roadway now supports travel to and from a rural medical clinic. Domestically, PWOB has provided emergency response to flooded areas in Lewis County, restored bathrooms for a homeless shelter in Tacoma and made numerous household repairs at L'Arche, a community devoted to providing housing on Capitol Hill for people with disabilities.



Mark Murray, Lead Carpenter at L'arche House in Seattle

The staff members of PWOB work 100% as volunteers and use vacation time for their time away from work. There are no paid employees working for PWOB.

*PWOB is not a national organization. It was formed at Seattle University, and to our knowledge there is no other organization with that name.

Narrative of the PWOB Program

1. Institutional Benefits

The university has discovered two primary benefits from this program.

First, the Facilities staff has become much more motivated at their jobs. This is primarily because they have a way to utilize their skills for humanitarian projects. They also become engaged with students, understanding better the impact of their day-to-day jobs. When employees see familiar students on campus, it raises their intrinsic motivation because they feel part of the university's mission.



Installation of a one mile water system in Nicaragua – Three SU Plumbers and Four Students

The second institutional benefit is for the students. The service projects have had a transformational effect on the students. When they engage in meaningful projects it has a profound and lasting impact. Over 70% of the students who go through our program go into volunteer, unpaid, service after graduation.



Cal Ihler, Associate Director of Facilities works with students on the construction of the waterwheel pump deployed on the Zambezi River



Deploying the Waterwheel Pump on the Zambezi River

2. Characteristics that make this program or practice innovative.

This is innovative because university facilities staff serve through PWOB to bridge the gap from education to implementation. Typically University programs are academic or student development based. In this case, this is a staff oriented program where staff and even some faculty with specific skills are matched with a project. These university employees are called program directors. Student volunteers work with advisors to propose a project and the directors to develop and then implement that plan. In some cases the projects are done in collaboration with other students groups, like Engineers Without Borders, or the Engineering or Fine Arts academic departments.

This innovation also raises the awareness of the facilities department across the university and brings them into the mainstream of the university mission.

3. How can this practice be used by others.

The basics are very simple and require a leader among the staff who can organize people and resources. The program directors then use the existing university programs to prepare the students. For example for international travel you follow existing procedures for your Study Abroad department. At Seattle University, the Education Abroad office assists with many of the pre-project logistics, such as medical and liability releases, insurance, and general training for the students. PWOB also conducts additional training and project preparations prior to international projects, including safety training for both the construction and travel aspect of the trip. Most students, and even some faculty, don't need to have a particular skill set to participate. The facilities staff project directors make sure that they recruit the proper skilled trade staff needed for the project. It is best to start the organization with local projects, such as doing improvements at a local homeless shelter.

Once the formation of the group is established, they form a simple charter that helps other departments understand the mission and vision of the group. The charter states that PWOB is a service group meant to complement other student programs, or to simply have students participate in programs identified by the facilities staff. It is best to form a simple club style of organization so that you can elect officers (staff members) who can rotate the responsibilities.

The name Professionals Without Borders is trademarked, however it is intended to be used for free with permission so that we can track the chapters. One university in Oregon is now working on a charter to form a group. Of course SU has developed much of the material, such as templates for project planning and development, and is available to any university for free.

4. Demonstration of Management Involvement and Commitment

This unique program has solid support from every college and at all levels of university management on campus, all the way up to the president. Why? Because our program is effective at **connecting the mind to what matters**. Our program has directly impacted marginalized people in the world, but more importantly it educates students about how they can make a difference. It's not just that we are doing good work for the poor, it's that we have a unique multiplying affect, in that once students learn how to serve, they continue to serve, even after graduation. Presently the Director of Facilities is both the President of the Organization and the co-founder. The university commitment comes takes many forms, including the administrative support, such as the Advancement Department providing a directed donations account so that we can collect tax deductible contributions.

The Deans and department heads from Academic Colleges regularly contact our group to help them with project implementation, or to seek consultation. The strongest ties have been with Humanities and Engineering, however we also draw students from departments like Athletics, Recreation Sports, Business, Fine Arts and Nursing.

Fund raising is done almost exclusively by students. Some small grants have been awarded to our group for the implementation of projects. Fiduciary responsibility originally was in the Facilities department;

however as the popularity of the program increased that responsibility shifted to our Global Engagement department. Even then it has facilities-based leadership, which is specified in the charter.

5. Documentation of results, analysis, customer feedback and resulting benchmarks

Of the 107 people who have participated to date, 39 have been staff/faculty and 68 have been students. Twelve students have received academic credit for their work, including one Masters Degree project. Of the students, 45 (70%) have gone into volunteer service immediately after graduating, either abroad, AmeriCorps, Habitat for Humanity, or other similar organizations. The balance have found jobs or went to grad school immediately after graduation. The work we have done is benefiting the *daily* lives of well over 25,840 people per year; permanent solutions like building a medical clinic in Zambia that serves 14,000 people a remote rural area, or installing a utility grade water system for a community of 4000 in rural Nicaragua.

A small example of the projects completed since our start in 2007:

- Quadrupling the water available and improving water pressure for a hospital in rural Zambia. The hospital routinely ran out of water in the afternoon. The increase in available water **allowed the hospital to open a natal unit and operating theater**. In December 2012 the hospital was upgraded in the regional healthcare system, now serving over 35,000 people.



Facilities Team with the "Right Stuff"



Future Plumbers of Zambia

Projects completed since our start in 2007 (continued):

- Installation of a gray water irrigation system for an orphanage in Belize.
- Completion of a medical clinic and nurses quarters in the remote community of Chipembele, Zambia, serving 14,000 people
- Installation of a rainwater catchment system at Liberty Children's Home in Belize.
- Installation of a security system to protect the children and assets at Liberty Children's Home orphanage.
- Completion of infrastructure project at the orphanage Casa Padre Wasson in Jinotepe, Nicaragua.
- Installation and repairs of several solar installations in various locations in Zambia
- Installation of a brick security fence at the Chipembele clinic in rural Zambia.
- Completion of two buildings to be used as K-7 schools in very remote rural locations in Zambia
- Refurbishment of an Ablution Block (toilets, showers, washing sinks) serving 300 students at the Munali School for Deaf and Blind in Lusaka, Zambia.



Deaf Students at the Munali School for the Deaf and Blind - Zambia

This year we have two recently graduated students who have moved back to Zambia indefinitely to continue their service to people in need.



Students Matthew Lane, Madison Goverde and Renee Vandermause working with Clan Leader Cletus Mumba on the Chipembele Clinic, Zambia

This program has also led to other academic spin offs based on the connections and organizational ties we have developed:

- The Graduate Nursing Program is now leading a group of five to ten nursing students to Zambia, Africa for their practical experience.
- Student teachers are now doing their internship at a girls high school in a remote area of Zambia.
- Volunteers are moving to Africa to work for development organizations after graduation
 - In the last year, these volunteers have written and were awarded numerous grants totaling more than \$200k, after graduation.
- Engineering project implementation for Senior Design, including:
 - Implementation of a waterwheel on the Zambezi River to pump water. (pictured above)
 - Electrical generator implementation, including building wind turbines and hand cranked generators, ***made completely from local parts.***



Hand Cranked Generator capable of charging a cell phone – made entirely of locally available parts.

- Designing and implementation in Summer 2013 of a waterwheel generator.
- The engineering projects have resulted in 3 technical publications and the magazine
- PWOB has also participated in International Task Forces with Engineers without Borders and the Institute of Electrical and Electronic Engineers (IEEE), to develop long term solutions for areas with power well off the grid.

We feel that our contribution to the mission, service immersion and academics has been solid, especially for an unpaid volunteer group. Student Immersion includes a cultural component. Work in the morning, and then spend time with peers in the afternoon and evenings.



Student Renee Vandermause and Zambian, Kay Nabda, at the Lwindii Dance Festival, where the SU students performed with the native Zambians.

More Information

1. Waterwheel Pump – five years later, the locals took the proof of concept and developed it into an efficient means of reliably pumping water. These people created a micro business to sell three more to communities on the Zambezi River.
<http://youtu.be/KtDb4F9F22E>
2. PWOB 2011 – Overview of the Projects
<http://youtu.be/FDqDf2Q834k>
3. Student Testimonial
<http://youtu.be/rXRTV2841iE>