The Marianist charisms at VASJ enabled Nick to "recognize the dignity of all people."

NICK RADDELL, VASJ '01

Creating healthy cooking for Nicaragua & Honduras

Although seven years have passed, VASJ alumn Nick Raddell remembers vividly his service trip to South America. It was the summer of 2003 and Nick had just completed his sophomore year of college at the University of Dayton. Nick and several other members of the engineering service program ETHOS (Engineers in Technical Humanitarian Opportunities of Service-Learning) traveled on a seven week trip to South America, with stops in Nicaragua and Honduras. The mission of the ETHOS group is to find opportunities around the world where engineering students can help solve issues dealing with sustainable engineering practices.

Nick's trip to Nicaragua and Honduras focused on issues dealing with cooking and stove technology. Third World countries like Nicaragua and Honduras commonly do not have advanced cooking technology and often use very basic stoves made of patch-worked clay and large open flames. Some even use basic campfires to prepare their meals. Both can cause a lot of problems. "Mothers are usually the primary cookers in these countries and breathe in the fumes and smoke from the open flames all day. Women can get really sick and even die early from breathing in smoke all day every day for their entire lives," Nick said. Another potential problem with the open-flamed campfire cooking is the risk of kids falling into the fire and getting burned.

These primitive stoves and campfires are very inefficient and require a lot of firewood for burning. Mothers and their children must go and gather a lot of firewood, possibly carrying very heavy loads and causing large amounts of strain on the body. In addition to the physical labor it takes to gather the necessary firewood, the inefficient stoves also require the cutting down of large amounts of trees. Not only does this cause environmental concerns as tree resources are depleted, there are the very practical concerns of safety and well-being that are compromised when too many trees are cut down. When countries like Nicaragua and Honduras receive large amounts of rain, it is the trees and the roots in the ground that prevent the creation of mudslides. "I remember the first day I was in Honduras and I read the newspaper. It said six people had died the night before because the rain had caused a mudslide." Reading the newspaper article reaffirmed to Nick and his classmates the importance of their trip. "It made it more practical in a sense that we weren't

Continued on page 6

Continued from page 5

just going there to serve people because it was a good thing to do. We were addressing a real concern and a real problem," Nick explained.

A nongovernmental organization (NGO) in Nicaragua, "Prolinia Branch" designed what they called an eco stove made out of local materials that were easy to find. The eco stoves were much more efficient than the campfire method and were also designed with a chimney to funnel smoke out of the house and a griddle-like top to enclose the flames. More efficient stoves result in less firewood needed and less smoke generated, both of which are extremely important for the safety and well-being of Nicaraguans. The eco stoves were sold with the profits being used to assist in spreading awareness about the dangers of using the open-flame stoves for cooking.

"Learn as much as you can and contribute as much as you can."

The mission of Nick's ETHOS group was to learn the process of making and using the eco stoves and testing their efficiency levels. "Everyone was really excited that we were there and were very welcoming. They wanted to know what we had to share."

The ETHOS group spent about three weeks working in Nicaragua testing and improving the efficiency levels of the stoves before they headed to Honduras for three more weeks. The mission in Honduras was to spread the knowledge gained in the eco stove practices of the Nicaraguans.

While the ETHOS group maintained a busy work schedule during the week, they were able to use the weekends and last few days of the trip to really explore the country. "We saw an active volcano, took a trip to the beach, went to several different market places and even saw some ancient Mayan ruins." Nick's motto for the trip was to "learn as much as you can and contribute as much as you can." It is safe to say, Nick and the entire ETHOS group were successful at both.

The awareness of different cultures was one of the most valuable experiences Nick gained from the trip. "There's a lot to be exposed to and a lot of good things to appreciate about different cultures that you never even knew existed."

During his high school years at VASJ, Nick was involved with the soccer team and the National Honors Society (NHS). It was his experience with the Marianist traditions and the family atmosphere at VASJ that led Nick to study at the University of Dayton. "The Marianist charisms learned at VASJ enabled me to embrace service projects and recognize the dignity of all people."

Nick is currently a project engineer at Swagelok in Solon, Ohio where he handles issues dealing with product design and manufacturing.

Nick enjoyed visiting VASJ earlier this month.