The University of Iowa

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Be remarkable

Remarkable crossings

Where once hung nothing more than two crude braids of twigs and reeds—one a walking surface, the other a handrail—now runs a span of planks laid along durable cables, complete with a wire barrier protecting travelers from the waters below.

Five University of Iowa civil and environmental engineering students—Irund (Sergio) A-wan, Avery Bang, Jenna Kusmierek, Tara Olds, and Ryan Wallace, collectively known as Continental Crossings—designed and helped construct the footbridge near the rural community of Yavina, Peru.

The 15-meter span, in a country thousands of miles from The University of Iowa, means the world to the people who will cross it as part of their daily routine.

Schoolchildren in the area, who already have to walk two

hours to school, are relieved to no longer navigate the tricky old walkway. Those not tall enough to reach the guide braid were forced to crawl along the lower braid—a risky proposition, as the crossing had claimed at least two lives in recent years.

The project took shape thanks in part to Olds's inquiries about engineering firms that did work in developing countries. She established contact with Ken Frantz, founder of Bridges to Prosperity, a nonprofit organization that empowers poor communities abroad by building footbridges. The Continental Crossings team embraced an available opportunity in Peru.

The students discussed the project with College of Engineering faculty, including P. Barry Butler, dean of the college and professor of mechanical and industrial engineering.

"The Continental Crossings team demonstrated the engineering skills necessary to conceive, plan, and execute a project with many challenging aspects," Butler says. "In addition, they chose a project that highlights the important role of engineers in making the world a better place."

In November 2006, with Bridges to Prosperity and the College of Engineering supporting them, the students conducted on-site topographical, hydrological, and soil surveys, and visited members of the community.

The students returned home, designed the structure, and raised $18,000 to cover building materials and travel costs for a return to Peru.

During last spring's construction phase, they helped Peruvian laborers haul bags of cement and wooden planks to the bridge site, pour concrete, and lay planks across the bridge's cables.

The Continental Crossings team saw a year of work come to fruition on June 7, 2007, as the bridge was christened with a jubilant ceremony. Children lined the bridge, jumping up and down with shouts of joy, and adults joined the celebratory bliss. They weren't the only people swimming in satisfaction.

"I believe the ramifications of this project will certainly propagate throughout our lives in more ways than we can even imagine," says Kusmierek, who is now pursuing a master's degree in architecture in Denver, Colo. "We made it happen."

Continental Crossings
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