

Engineering students developing people By Caitlin Crawshaw



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For the students behind the University of Alberta chapter of Engineers Without Borders (EWB), international development isn't about putting a TV in every home – in fact, they maintain that the so-called "developed world" really isn't.

"We're all developing people," explains Rachel Maser, a fourth-year mechanical engineering student who serves as the U of A chapter's vice-president (communications).

"Canadian society is developing; it's changing. We're not fully developed. So when you say 'underdeveloped countries' and 'developing countries' – well, we're all developing."

Maser believes in EWB's focus on "human development," which isn't solely geared to economic development, and directly involves the people who stand to benefit from the group's projects. The idea, says Maser, is to build peoples' ability to increase their skills and access to technology "so they can better affect change."

The technological solutions EWB employs are cheap to build and easy to maintain, like a human-powered treadle pump, which looks a lot like a Stairmaster with a hose attached to it. By stepping on the pedals, a farmer can move water from a stream to his field in order to irrigate his field cheaply. Another device employed by the group,

called a multi-functional platform, has a number of agricultural processing implements mounted on it, all powered by a single diesel engine. Equipment of this kind is designed to help ease the workload of time-impoverished people, particularly women, as well as allow communities to rent it out for extra money.

Founded in 2000, EWB Canada is a student-driven organization with 23 chapters at Canadian universities. Since 2001, the U of A chapter has provided avenues for students to participate in development projects overseas, to conduct outreach at local schools and to learn about international development.

Maser herself is gearing up for a long-term placement in Zambia this February. In mid-January she will be flying to Toronto for a month-long EWB orientation before making her way to the African country to help develop low-cost irrigation solutions for farmers.

Current U of A chapter president Danny Howard was placed in Ghana last summer for a short-term placement. The experience offered many lessons for the mechanical engineering student.

"One of the greatest realizations I had when I was in Ghana was that people are people everywhere, and there really are more similarities than differences. Any of the people I met I could have placed in my life in Canada as well," he said. "My Ghanaian sister definitely could have been someone in my high school class in northern Alberta."

Howard, who plans to pursue a career in international development after graduating, adds that the work is an education in how the world fits together. "Something that people are missing is a realization of how connected the world is, and how much impact we have on other peoples' lives just by living the way we do in the Western world."

Howard and Maser – who lived in Zimbabwe as an adolescent – agree that one of Africa's greatest lessons for them was the understanding that money can help improve quality of life, but it doesn't buy happiness.

"There's a lot of happiness in Africa. I think they have stronger family units, stronger communities. When you are in an

impoverished situation, people come together," she said. "People come together in communities when faced with adversity."

And as similar as we are, there are many ways of achieving happiness, Howard notes.

"And I think that a lot of Ghanaians are very happy, and they don't have a lot of what we have, but they do have community. Just traveling and living and working with people, you realize there are a lot of different ways to live. I think we can get wrapped up in one ideal when we only live in Canada, and always strive for that one, when maybe there are different ways to live and to be really happy."