

## Mac engineers learn -- by saving a Sphinx

By Paul Legall

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It looks like a New Age consciousness-raising group.

About 30 to 40 fresh-faced young men and women form a large circle about 10 metres across.

Joel Hilchey, an engineering physics student, shouts out a series of instructions to get the group working together to

solve a practical problem. A Sphinx, a Buddha-like figure from Greek mythology, is slowly sinking into a bed of quicksand. "You have to raise the Sphinx and lift him and hold him in mid-air," Hilchey says.



Rob Borzychowski, playing the role of Sphinx, is lifted out of "quicksand" during an Engineers Without Borders problem-solving exercise at McMaster University. The goal is to train students for humanitarian work.

The only equipment they have are several lengths of rope. But the rescuers can't walk into the circle to attach them to the sinking Sphinx because they'll be gobbled up in the mire, too. They're also warned not to drop or damage the Sphinx during the operation. The task seems so daunting a woman suggests "levitation," rather than ropes. Hilchey quickly nixes that idea.

In about 20 minutes, however, the participants -- members of the McMaster University chapter of Engineers Without Borders (EWB) -- have formed a massive spiderweb-like sling which they jimmy and slip under the Sphinx without venturing from the edge of the circle. They all lean back and pull on the ropes in a collective heave. The beleaguered deity shoots up like a jack-in-the-box and hovers for several seconds.

Mission accomplished.

It was only one of a number of team-building exercises that were played out at the McMaster campus on the weekend. As members of EWB Canada, which was formed in 2000, the participants were learning problem-solving skills they could use as overseas volunteers some day.

Last year, 55 Canadians with EWB Canada, which has chapters in every Canadian university, went overseas to work in impoverished countries.

Louis Dorval, a McGill graduate in mechanical engineering, has spent most of the past five years on foreign projects and shared his experiences with the group on the weekend. He was recently promoted to director of EWB for West Africa.

He has been involved in projects in Ghana, Burkina Faso and the Philippines. In Ghana, he's working on a treadle pump project to help farmers irrigate their plots during the dry season. With steps similar to a Stairmaster, the device is people-powered and can pump water about 100 metres. It enables farmers to get an extra crop each year and improve their standard of living.

Although Dorval subsists on a meagre salary, he has no immediate plans to trade places with colleagues who stayed in Canada and are pursuing conventional careers.

"They have a different commitment. They have the condo and the car. I don't have that, but I have a commitment, too," he said.

At the end of the Sphinx-hoisting exercise, the engineering students squatted down in a big circle on the floor and talked about how they can make a difference in the world.

One woman, who described herself as a vegetarian, mused about how life choices affect people in the rest of the world. She used no technical jargon and she could have been talking about karma at a YWCA yoga class. What happened to the hard-living, beer-guzzling engineer of old?

"We're trying to break the stereotype," Hilchey said.