MichiganTech

*Civil and Environmental Engineering Department*

PRESS RELEASE

MARCH 2006

# Press Release: International Sustainable Engineering Initiative

**Mission: In the upcoming decades, engineers will play a critical role in the eradication of poverty and hunger and facilitation of sustainable development, appropriate technology, beneficial infrastructure, and social change. Our mission is to promote international sustainable development engineering by creating knowledge through research and nurturing and educating young people to value and implement this vision of a better world.**

## Michigan Technological University Announces the Creation of the International Sustainable Engineering Initiative

Learn more about this program at www.cee.mtu.edu/sustainable_engineering.
A newsletter that describes the initiative in greater detail is available at the site by clicking on "*news*".
Contact Dr. James Mihelcic at (906) 487-2324 or jm41@mtu.edu

Master's International Student, John Simpson, standing on a water supply reservoir in Honduras

Imagine a world where all have access to sanitation and potable water, where all children are able to learn in well built classrooms, where families no longer suffer from disease, starvation and poverty. That's what civil and environmental engineering students are working toward at Michigan Tech, through the International Sustainable Engineering Initiative.

Michigan Tech's civil & environmental engineering program administers capstone design projects for seniors, which allow students to obtain university credit for working on engineering projects in the developing world. In five years, 105 students have partnered with communities in Bolivia and the Dominican Republic to design projects addressing storm water drainage, on-site sanitary waste systems, site planning, building analysis and other feasibility studies. While they are in the field collecting data for their design projects, they also participate in construction of previous International Senior Design projects.

At the graduate level, the Master's International Program partners with the U.S. Peace Corps to allow students to perform in-depth study of sustainable development in an international context. Students obtain graduate credit for training, service, and research while working abroad as engineers in the U.S. Peace Corps. To date, Master's International engineering students have served and performed research in 16 countries. Fourteen students have graduated from the program and 39 students are currently enrolled.

International Senior Design students building a classroom in Bolivia

Other activities include: support of a student chapter of Engineers without Borders; a Mondialogo Worldwide Engineering Award for development of sustainable construction materials, an international student exchange program that focuses on meeting the growing demands on urban water resources systems, and a 3-year student-run enterprise program that has partnered with the Keweenaw Bay Indian Community and a community in Nicaragua.

Students and faculty are not only engineering appropriate solutions to problems in the developing world. They are also assisting educators, researchers, and students involved in global engineering issues by publishing their research and providing access to reports and technical briefs on the website (***click on "student reports, technical briefs, publications, and presentations"***). These reports provide detailed information on water supply & treatment, wastewater treatment, public health, solid waste management, and construction in the developing world.

Participating faculty include: Linda Phillips, James Mihelcic, Kurt Paterson, Alex Mayer, John Gierke, Tom Van Dam, Brian Barkdoll, and David Watkins.