Education improves global stability
Studying abroad changes lives

University of Minnesota
Climate change may be the greatest learning challenge that humans have ever faced. If only there was a way to use technology to bring together the collective wisdom of the world to solve it…

Cue Earthducation, the brainchild of faculty in the learning technologies program. Aaron Doering, the Bonnie Westby Huebner Endowed Chair in Education and Technology, has explored the Arctic Circle for more than 10 years with GoNorth, a program of adventure learning expeditions with links to K–12 classrooms. Last year he and Charlie Miller, both associate professors in the Department of Curriculum and Instruction, decided to start a similar program with a different focus: sustainability. They created an ambitious plan to travel to climate hotspots—areas that are vulnerable to and affected by global warming—on each of the seven continents.

“We want to provide a window to the world on how these places are adapting to a changing environment,” Doering says. Their first expedition took them to Burkina Faso, a small, landlocked West African country about the size of Colorado. With limited access to fresh water—it’s capital city suffers from regular shortages—Burkina Faso is exposed to fluctuations in precipitation and temperature extremes.

For three weeks in January, Doering, Miller, continent expert and learning technology doctoral student Romaric Zongo, and videographer/media specialist Justin Evidon traveled the country by motorcycle. (The list of statistics for the trip includes, “Motorcycles wrecked: 2. Teeth loosened: 2.”) They visited 17 villages and conducted 35 interviews with elders and leaders who spoke to them about their experiences with environmental degradation and their attempts to adapt as the climate changes.

Zongo, a Burkina Faso native who moved to Minnesota in 2000, had connections nearly everywhere in the country. Where he didn’t, his wife, who had worked for the Peace Corps there, did. Zongo arranged interviews, organized the trip, and interpreted.

“There were some interviews where he had to speak three different languages,” Miller says.

A Discovery Grant from the University’s Institute on the Environment is funding the global trips. But Earthducation is about learning from travel, not just travel. For that purpose, the college’s LT Media Lab has developed a robust online forum with real-time updates from the expeditions, along with videos of interviews recorded in-country and supporting curriculum. Cassie Scharber, assistant professor of learning technologies and co-director of the lab, is also a co-principal investigator for Earthducation. She handles logistics from the Minnesota base camp and leads curriculum development for K–12 teachers and students. The curriculum includes lessons that teachers can use to introduce cultural or environmental themes or to discuss what the investigators are learning on the expeditions.

Earthducation uses the curriculum and its site to pursue its goal of expanding the conversation about climate change around the world. Anyone—student or not—who has access to the Web can post a video with his or her thoughts about climate change on the site: lt.umn.edu/earthducation.

Zongo says that through the site, expeditions will have an impact not only around the world, but also in the countries they visit. “Many people will watch the interviews we recorded who would not have known anything about the country, and that is good for Burkina Faso,” he says. “But the impact in the U.S. is that seeing how other people live is good for us. We don’t know what we have until we compare it with what someone else has.”