7-2008

Engineering Change: Sustainable Development And Experiential Learning With The Duke Chapter Of Engineers Without Borders

David Schaad

Abstracts of presentations given in session 8 of the 2008 UCOWR Conference.

8.2

Engineering Change: Sustainable Development And Experiential Learning With The Duke Chapter Of Engineers Without Borders

Dr. David Schaad
Dept. of Civil and Environmental Engineering
Duke University
Box 90287
Durham NC 27708-0287
(919) 660-5174
dschaad@duke.edu

Engineering Change: Sustainable Development And Experiential Learning With The Duke Chapter Of Engineers Without Borders

Launched in 2005, the Duke Chapter of Engineers Without Borders has participated in projects in Indonesia, Uganda, Peru, Bolivia and a planned project in Honduras. Leveraging some of the funding opportunities provided by the newly established DukeEngage program, Duke-EWB has provided students the chance to build a water distribution system in the Andes, rainwater harvesting cisterns in East Africa, and exposed students to water reconstruction issues following the 2004 SE Asia Tsunami. As part of this paper, these case studies are examined with respect to experiential learning in the context of addressing identified water resources issues in the developing world. Lessons learned are examined with respect to water resources education and training future engineers, scientists and policy makers in the multidisciplinary issues facing the global water crisis. Additionally, suggestions for connecting the field experiences with academic courses is explored within the context of immersive learning.