

Environmental Science Outreach for Undergraduate Students in Cambodia: A Case Study

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In an interdisciplinary effort between geochemists, geophysicists, engineers, microbiologists and environmental scientists, we have designed a number of short course modules which were run at the Royal University of Phnom Penh, Cambodia in 2015 and 2016. Such activities provide mutual knowledge exchange benefits; for example the Cambodian students gain an international perspective on environmental science and training; and the international team gains on-the-ground insight into local environmental challenges and opportunities.

This talk will provide an overview of the activities involved in the short courses – such as a “Build a Better Aquifer” competition, designing and testing sand filters in bottles, DNA extraction from a banana, sideswipe future scenarios of climate change, project management and team building exercises, interactive smart phone quizzes as well as more traditional lectures. The modules covered research skills (including project planning & management, reporting and evaluation, problem solving), water remediation, hydrogeology, sub-surface microbiology, and geophysical techniques. The specific topics were collaboratively selected to be of interest and relevance to the target audience, and could be adapted to other audiences for other outreach activities. This talk will also share some lessons learned from our experiences which may be more widely applied.

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