



**USAID**  
FROM THE AMERICAN PEOPLE

USAID  
Higher Education  
Solutions Network

# William & Mary Students Share the Power of Data with Students in Nepal

*A Spotlight on Sara Rock and Carleigh Snead, College of William and Mary*

## Innovators Connecting to Accelerate Global Development

### The Story

The William & Mary students working at AidData create geocoded maps and data with the goal of helping communities, governments and organizations improve the targeting and coordination of development assistance. Through the AidData Summer Fellows program, students applied the geocoding training they gained as undergraduates to a developing country context. In the summer of 2013, 11 students traveled to countries such as Nepal and Uganda to train universities and civil society organizations on how they can use geocoded data to catalyze more effective programs and policy decisions.

Summer Fellows Sara Rock and Carleigh Snead spent three summer months at the University of Kathmandu in Nepal. While there, they trained faculty and students on how to use the AidData methodology to geocode – identifying the subnational locations of aid projects – and then use this data to produce compelling maps and analyses. By the end of their stay, Sara and Carleigh wanted the students and faculty of Kathmandu University to have the tools they needed to effectively use geocoded data and visualizations in their studies and research.

Upon arrival, Sara and her colleague were optimistic.

“There is a lot of enthusiasm here at Kathmandu University for the type of methodology and services we have to offer...now comes the hard part of planning out the summer curriculum!” said Sara.



Two boys from a rural village in Lamjung, Nepal admire a mural painted on a school building by fellow classmates as part of a workshop led by artists Danaé Brissonnet and Katie Green. While Danaé and Katie led a mural workshop for students, AidData Summer Fellows, Carleigh Snead and Sara Rock, teamed up with Peace Innovation Lab to introduce data literacy and GIS software to the students, some of whom had never used computers before. Peace Innovation Lab is a creative space for young students in rural communities to design, prototype and implement interesting projects and models that contribute to local peace building and grassroots innovation efforts.

*Photo courtesy of Carleigh Snead.*



"Still, even after only a few days, I can see how having a Fellow embedded in a host country is helpful to facilitating the use of AidData's research for these institutions. There's definitely a lot of potential for this summer in Kathmandu."

Despite their warm welcome and their host university's enthusiasm, Sara and Carleigh were confronted with a major challenge: finding out a way to effectively unpack technical jargon and introduce new software tools to a general audience. "It's one thing for me to know the material, and quite another to present it in a way that others can grasp," said Sara in a recent conversation. "There was a lot of trial and error."

But then something clicked.

"In a blank Excel sheet, I created categories of simple information. I listed name, favorite color, hometown, latitude and longitude. I had the faculty fill in the fields and find their hometown coordinates using a database called geonames.org. After only a few minutes, we had a simple table of information and their hometown coordinates. With a few simple operations, the faculty's hometowns displayed across the country of Nepal. I was able to show that each dot on the map not only corresponded with the latitude and longitude of their hometown, but was also linked with the nominal information such as name, hometown and favorite color."

During her three months of teaching geocoding and geospatial analysis at the University of Kathmandu, Sara became familiar with the problems that often impede the flow of knowledge about both existing and past development programs. She observed how aid work is made more complicated by insufficient technology and a lack of knowledge sharing. However, Sara also saw the value that geocoded aid information could bring to communities and the importance of empowering citizens with the skills to understand and leverage the data to advocate for effective aid projects. "As we traveled through the villages, we saw the results of well-intentioned but poorly-designed projects. We saw recently built schools with no teachers standing empty. We saw hospitals with no staff. We understood the value of designing truly sustainable development projects."

Beyond their training program at the university, Sara and Carleigh worked with Peace Innovation Lab, an NGO that has developed a computer lab in Lamjung, Nepal. Sara and Carleigh worked with students in Lamjung to enable them to combine this technology and geospatial thinking to answer basic questions, such as: "If I get sick, where is the nearest hospital?" Or: "What's the best market to sell my particular produce?"

The AidData Program equips people and organizations that seek to improve the quality of international aid with the tools and skills to meaningfully enact change. In the end, the Nepal experience was rewarding for Sara, and hopefully equally rewarding for her host institution. "Our goal was to equip them to be true innovators when it comes to the mapping and use of data," Sara said.

AidData does just that.

**For more information**

[www.usaid.gov/hesn](http://www.usaid.gov/hesn)