

Making a Difference, Half a World Away

Alum Forrest Lanning puts his Cal Poly degree to work in Afghanistan and Indonesia

By Matt Lazier



Forrest Lanning, while hiking in the hills near Banda Aceh, Indonesia.

All photos courtesy Forrest Lanning

A massive earthquake strikes seismically unstable Afghanistan, and thousands of children are killed when their school buildings crumble around them.

Officials with the U.S. government worry this scenario could become reality.

Cal Poly grad Forrest Lanning has devoted himself to making sure it doesn't.

Lanning (B.S., Architectural Engineering, 2002), a structural engineer, has put his hands-on education to work for the last year in Afghanistan – away from family in the Bay Area, risking his safety in a

war-torn nation – inspecting buildings the U.S. Agency for International Development believes may be at risk of collapse in a quake. He recently signed on to stay longer

“There are all these school buildings and hospitals in the country – about 1,700 buildings – that aren't earthquake safe,” he said. “It's great to be involved in trying to fix that.”

Lanning is familiar with overseas aid work. He spent more than a year in Banda Aceh, Indonesia, designing new schools as part of the recovery effort after the 2004 tsunami in the Indian Ocean.

He wants to come back to the U.S. at some point. But he said that, even though aid work is a career path he happened upon almost by accident, he's both challenged and fulfilled by what he's doing now.

“It's important work,” he said. “It's important to people in the U.S. I've had reports on my work read by senators, and Hillary Clinton has been briefed on the project.

“Even deeper than that, though, it's important to the people in Afghanistan and Indonesia. It's positively impacting their lives.”

Fall 2009

In this edition:

- [Beacon of Learning](#)
- [Editors Note](#)
- [Getting to Know Joe Callero](#)
- [Cal Poly Students Go Weightless](#)
- [The Big Picture: Spanos Stadium gets a new scoreboard](#)
- [Getting to the Heart of the Matter](#)
- [Class of 2013 Arrives](#)
- [Making a Difference, Half a World Away](#)
- [Cutting Her Own Trail](#)
- [Alumni Voice Their Passion For Cal Poly](#)
- [Alumni in the News](#)
- [PolyLink: Get a Mentor, Be a Mentor](#)
- [PolyLink Photo of the Year](#)
- [University News](#)
- [Around Campus – Nips and Tucks](#)
- [Get Involved](#)
- [Where's Musty?](#)

Photo of the Year

Working in a war zone

There's little doubt Lanning is working in a war zone. He visits Afghani schools and hospitals for seismic inspections. But security officers for the US Agency for International Development organization (the federal organization for which Lanning has been working as a contractor) dictate which provinces and areas are okay to visit and which are off limits because of safety concerns.

Lanning travels to far-flung areas by helicopter, often joined by security agents with armored vests and AK-47s. He is accompanied throughout each inspection by a bodyguard carrying a concealed weapon.

The buildings are always simple and often in poor condition. But Lanning finds a stark contrast to the bleak atmosphere when he speaks to the people at the sites.

"The schools have absolutely no money, and they're teaching in really appalling buildings," Lanning said. "But the headmasters are always so friendly. They're very optimistic and warm. They care about their students and the condition of their schools."

Lanning gathers as much information as he can about the buildings through a quick visual inspection. From there, he makes information for his supervisors with USAID to use in deciding which schools will be retrofitted, which require further investigation, and which should be replaced.

Reminders of Afghanistan's instability are constant. While on site visit missions, Lanning's crew sometimes sleep overnight in nearby military bases or on the dirt floors of mud-and-straw huts. And Lanning and his coworkers are limited in their travel outside the housing compound where they live and work in Kabul. They work a six-day week and have Fridays off. They can go out for food and entertainment Thursday nights – but only to locations that USAID security has cleared as safe.

"They have certain places they've approved for us," Lanning said. "The team will drop us off, and you will go through a series of doors where you knock, and they look at you through a peephole, then let you through and frisk you. But then you make it into a restaurant courtyard, and it feels like you're in San Francisco."

Disaster's aftermath

Indonesia did not present Lanning with the same security-related constraints. But what it lacked in risk, it made up for in human drama as Lanning worked among a population recovering from one of the worst natural disasters in history.

Lanning moved to Banda Aceh, Indonesia, in November 2006 for a job designing earthquake-safe buildings for the rebuilding. Nearly two years after the massive quake and its deadly tidal waves, the wounds left by the disaster were still raw.

"It was shocking, the magnitude of it," he said. "The water line was five meters high on some of the trees. The whole city was underwater. You speak with the locals, and everybody has a horrible story. This person lost his wife. That person lost her kids."

Lanning was designing schools and hospitals for a Bay Area company when the quake hit in



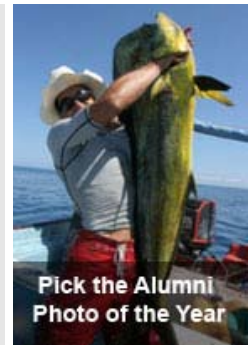
Multimedia: [See a slideshow of Lanning's photos](#)

Make sure popup blockers are OFF

Requires Flash player. [Download Flash player free](#)



Lanning's group passes a camel train heading for the lowlands in Badakhshan, northern Afghanistan.



Alumni: We want YOU to vote in the 2009 PolyLink Photo of the Year competition. Cast your ballot by midnight Oct. 16 - all ballots entered in a drawing for a \$25 EI Corral gift card for Cal Poly gear.

[Details](#)

Reader Survey

Win a \$25 Gift Card

Help us plan future editions of Cal Poly Magazine: [Take our Reader Survey.](#)



Complete the survey by Oct. 20 and you're automatically entered in a drawing for one of four \$25 gift cards good for Cal Poly Gear. [Take the survey now](#)

2004. Shortly after, a professional engineers group to which he belonged asked its members to volunteer their time from home looking at building designs and developing new, seismically safer plans for a San Francisco nonprofit group called Build Change operating in Indonesia.

After a year, Build Change invited Lanning and other volunteers to visit Banda Aceh for a month and see the results of their work up close. When the trip was over, Build Change offered Lanning a job working on seismic safety for houses in Banda Aceh.

"That was my first taste of working in the aid industry," he said. "I just fell into it. I never thought about it as a career when I was studying it at Cal Poly."



Lanning inspects a public auditorium for seismic safety in Herat City, western Afghanistan.

Lanning worked for six months for Build Change, then spent another eight months in Banda Aceh with the United Nations ensuring school designs met seismic safety standards.

Lanning spent more of his time in an office in Indonesia than he does in Afghanistan. In Banda Aceh, his job was to make sure design plans for buildings conformed to U.S. codes.

Indonesia offered Lanning much more freedom to explore than he has now. Though he wasn't allowed to drive, he could go where he wanted on his mountain bike. So he spent his weekends exploring the coast and riding into the mountains.

But Lanning said he feels more connected to home in Afghanistan.

"In Indonesia, I didn't have Internet at my house, and we only had it sporadically at the office. So I felt very isolated," he said. "We have satellite Internet in Kabul. So I can e-mail when I want and use Skype to call home. Also, I'm around more Americans here."

And in spite of the restrictions and precautions, Lanning said he enjoys the field work in Afghanistan more than his work in Banda Aceh.

"The social life is difficult; I miss the outdoorsy stuff," he said. "But I love getting out in the field. And I'm the only person doing what I'm doing here. I feel like I'm making a huge impact."

Finishing the job

Lanning enjoys the challenge of retrofitting a building – trying to make it safer in an earthquake but staying within the constraints of the existing structure. And he likes how working overseas forces him to think harder about his building designs.

"You have to be more creative," he said, "when you design a building that's earthquake safe and affordable in a third-world economy and that can be built where the workforce doesn't have the skills to repair more complicated construction."

Lanning thanks Cal Poly's hands-on focus for his ability to be more creative on the job. His professors' knowledge of what the industry needs and what's expected of engineers put him a step ahead and prepared him to do the work right away, he said.

"Most of my coworkers in San Francisco were Berkeley graduates with master's degrees," he said. "It took a lot of them a year to get up to speed. With a bachelor's degree, I already knew how a building comes together. That has let me be more creative about how I approach obstacles – exploring other methods and being open-minded."

He's not sure what lies ahead in his career. He knows his family would like him back in the U.S. In the longer term, he'd like to find a job based here that allows him to do some work overseas.

For now, he's agreed to return to Afghanistan with USAID – this time as a direct employee rather than a contractor. That will mean more restrictions on his personal life; he'll be required, for example, to live at the U.S. Embassy in Kabul and can't leave except for work.

It's a fair trade, he said, so that he can see his work through.

"If I were to quit and leave because of the safety issues," he said, "it feels like all of my work would have been for nothing."



Lanning (carrying the orange box) pauses at a wedding on Nias Island, Indonesia, after surveying a new school site.

[CP Home](#) • [CP Find It](#) • [Get Adobe Reader](#) • [Assistance Accessing News Web pages](#)

CAL POLY

Events • News Releases

Cal Poly Update E-newsletter

Alumni • Giving • Athletics

Cal Poly Public Affairs

California Polytechnic State University

San Luis Obispo, CA 93407

805.756.1511

polynews@calpoly.edu