

THE MORNING CALL

CHANCE makes passion for biology contagious

by Margaret Peterson From [The Morning Call](#) -- July 28, 2005

My aptitude for science is such that, for me to retain what I learned in school longer than it took to regurgitate the information for tests, I'm fairly sure the teachers would have had to resort to electric shock treatment.

I can't help but wonder if things might have been different if I had taken biology from Jacqueline McLaughlin, an assistant professor of biology at the Berks-Lehigh Valley campus of Penn State.

McLaughlin is a woman in a hurry. When I spoke to her recently, it became clear that she wants to transform the way science teachers teach and save the world from decimating its biodiversity ♦ not necessarily in that order. And she's running late.

To that end, a couple of years ago she started a program called CHANCE, which stands for Connecting Humans and Nature in the Costa Rican Environment. In the summer, McLaughlin leads a group of science teachers, and students who plan to teach science, on a two-week trip to Costa Rica. There they witness the nesting habits of leatherback turtles and do research in areas ranging from raptor migration to the harmful effects of invasive species on local ecology.

McLaughlin has an effective means of weeding out people who are just looking for a tropical setting to work on their tans. She requires participants to research pertinent topics in advance, and then put together interactive lessons on a Web site for science teachers across Pennsylvania to use in their classrooms.

Susan Baranek, who just left the East Penn School District to begin teaching biology at Parkland High School this school year, researched Costa Rico's role in raptor migration for her interactive Web lesson.

She has great memories of hiking through the Monteverde Cloud Forest, with its unique diversity of species about 8,000 feet above sea level, and of watching the Arenal volcano erupt while sitting in geothermal hot springs nearby. Such experiences stoked her passion for science and contributed greatly to classroom lessons.

"I've never had an experience where I learned so much," Baranek said. "I can't tell you how many examples I used with my students this year."

I asked if a program such as CHANCE stood a chance in today's high-stakes

testing environment, where educators are under pressure to teach to standardized tests while creative lessons come second. Baranek sees CHANCE as paying off both ways.

"When kids are excited about something, they'll do so much more," and they'll retain more, she said. "Kids that are taught at this level achieve so much more, even on tests."

Melanie Hoskins, who teaches biology at Allen High School, researched invasive species for her interactive Web lesson and learned about some species found in both Pennsylvania and Costa Rica.

She's able to tell her students about the Costa Rican villagers she lived with during the trip, who once had contributed to the endangerment of the leatherback turtles by poaching them but now are part of the effort to preserve them, thanks to the eco-tourism the turtles generate. The trip gave her a better "appreciation for biodiversity and the importance of preserving it," Hoskins said. She uses a slide presentation and lessons from her trip to try to pass on that appreciation to her students.

Said Hoskins: "The passion is so contagious. I caught it from [McLaughlin]."

McLaughlin, who runs CHANCE in conjunction with Penn State and the Pennsylvania Department of Education, is convinced that experience is the best teacher and makes teachers the best. "The first goal is to get the teachers to come back and change their classrooms," McLaughlin said.

Sounds like a better idea than electric shock treatment for students.

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