PRISM Goes Global

In 2009, the strategic goal of PRISM to develop an international profile was attained. The goal was to open doors and expand horizons for New Jersey students. Through a series of programs, videoconferences, presentations at conferences, and in-person meetings, the outreach of PRISM has been extended to several foreign nations from Thailand to Panama, and a multitude of schools. The work of PRISM staffers has cultivated our foreign network to develop exchanges for both educational and research purposes. Efforts were made on the following fronts:

1- Papers were presented by PRISM staff members at international conferences attended by participants from many countries (see page 5).

2- International cooperation resulted in partnerships that have expanded the classroom cultural exchanges begun in 2003 in Panama and still offered in the 8th year (see page 3).

3- New research partners have increased the topics and locations available for electronic field trips and chats for classes (see page 2).

This issue of “On the CUSP” explores the impact of PRISM activities in the world outside our classrooms. Read on to find out how your class or school can participate in stimulating discussions with researchers, teachers, and students in exotic locations.

Dr. Willis meets a tiger in Thailand, and more -- story on page 5.
New Grant Proposals in the Works

Dr. Jacalyn Willis, PRISM Director, is designing two grant proposals for submission in 2010 to support on-going professional development and credit-bearing science and mathematics programs for K-12 teachers. Please be alert for opportunities to partner your school district with Montclair State University in upcoming grant proposals to the National Science Foundation and the US Department of Education. The plan is to seek support for teacher stipends, certificate and Master’s programs, on-site coaching, and online videoconference professional development. Letters of agreement will be provided in template format so that you can easily take material to your board meetings for discussion and approvals. Districts will not pay for services provided through the grants, but will be expected to clear obstacles to teachers’ efforts for re-tooling.
The Mangrove Connection Live From Thailand

The Rainforest Connection has expanded on several fronts, including new content and new curriculum areas. Six classes in Ohio and New Jersey (Orange, East Orange, Jersey City, and Bridgewater-Raritan) had a lively discussion of the ecology of mangroves with a marine biologist in Thailand. They asked about the shipworms that dwell there and provide a meagre subsistence for a family of Thai fishermen. Dr. Kashane Chalermwat has involved the family in his data collections on the organisms of the mangroves.

The school program was held on the morning of October 13, the day after Columbus Day. It was an appropriate connection because all 9 ships of Columbus’ 4 voyages were sunk by shipworms that riddled the wooden hulls with myriad burrows. The “termites of the sea” nearly defeated Columbus, and certainly left him stranded for many months on Jamaica. Likewise, along the New Jersey shore, the recently cleaned waters have allowed shipworms to flourish, feeding on the wood of dock pilings and boats. Owners of shore homes and marinas are now paying large sums of money to protect their submerged wooden structures.

The connections were made by internet, using laptops equipped with webcams, projectors, microphones, and speakers. Downloading free Marratech software from PRISM’s corporate partner, Verizon Access-NJ made it possible to share photos and video clips, as well as see and hear each other very clearly. Because of the pilot nature of the program, all six classes were connected during a period of 90 minutes.
Rainforest Connection 2010 -- LIVE from Panama

By appointment: Send email requests for topics, dates, grade level, and requested times to Dot Stradford at stradfordd@mail.montclair.edu Spanish or bilingual versions available.

Full topic descriptions on website:
http://prism.montclair.edu

Feb. 22 - 26:

The Panama Canal

Tribal Peoples of Panama

Tropical Rainforest Introduction

March 8 - 12: Choose one of these topics or any of the above 3 topics.

Predators Stalk within a Food Web

Ocelots

Monkeys

Symbiosis

The World of Ants

Bats

Decomposition

Snakes

The Poop-Cam

March 16 - 17: These topics only.
Spanish or English.

Mammals: How do we study them?

Ocelots

The Poop-Cam
In the third and final year of the e-CUSP project the PRISM staff have worked to help teachers implement their new teaching plans and strategies.

E-CUSP stands for “Elementary-Creative University-School Partnerships.” It is the continuing support of our partnerships with districts that has made the summer institutes a success every year. We are gratified to hear of your classroom successes, and the engagement of your students in mathematics and science studies. The focus has been on grades 3 and 4, where students desperately need to stay engaged, and all too often slip away from math and science. We are thankful for the Math-Science Partnership funding from the NJDOE and the US Education Department. Here are some letters from e-CUSP teachers.

Dear PRISM:

The summer workshops were awesome. They were well organized by well-prepared professionals. All of the topics were developmentally appropriate and on the cutting edge of educational strategies. They have proven to be very helpful in the classroom already. The children in my class are notebooking for the first time and loving it. Parents think it’s pretty impressive too!!! Thank you for everything this summer.

Thomas Hornes
Rochelle Park, 3rd grade

Dear PRISM:

The summer institute made me more aware and proved how you can really love learning through observing, investigating, and note-taking. I have had the students observe lemons, oranges, 3 types of soil and we are now on rocks and minerals. The teacher has to be prepared but once your plans are set the students do the work. I have found the note-taking to be a wonderful tool for organization and writing across the curriculum. We went to Pyramid Mountain for a field trip and the students could really relate the material we have covered to the hike. On to the Sterling Mine next.

For myself, the program was a true success. There are so many activities you can use and ways to implement them into the classroom.

Janet Kern
Butler, 4th grade
Montclair State University has a collaboration agreement with prestigious Burapha University in Thailand. Developed by the Dean of the College of Science and Mathematics, Robert Prezant, the collaboration began with a joint marine biology research project. Later, the resident marine biologist agreed to chat with PRISM students in NJ on the internet (see page 2). Soon we will also add Thai schools to this international venture. Anna Mazzaro (pictured above), science specialist of PRISM, presented a paper at an international conference sponsored by Burapha University in Bangkok, where teachers learned how to videoconference with classes and scientists in the PRISM community. The paper was a joint project by Anna and myself to expand the PRISM community beyond our contacts in Panama, Belize, and New Zealand.

As part of the project, I have been investigating ways to help local students become biologists in Thailand. We visited several parks and talked with local conservationists about the research in progress and the need for more projects and researchers.

I will return in January to consult on programs that will fit the local needs while also offering new content for videoconference chats with our PRISM teachers and their classes. The most exciting parts of my trip included meeting hand-reared tigers rescued from poachers and riding an elephant while learning about their near-extinction in the wild in most of Asia.