

## Sc:iii Research Experience for Teachers

Summer 2008

### DEP Office of Environmental Education



In summer 2008, the Department of Environmental Protection (DEP) hosted 24 teachers for hands-on research projects as part of the Panhandle Area Education Consortium's (PAEC) Science Collaboration: Immersion, Inquiry, Innovation or Sc:iii (pronounced "sigh triple I") project. With grant funding from the Florida Department of Education, the Sc:iii project enabled 120 science teachers in the Panhandle an opportunity to conduct hands-on research and monitoring alongside scientists, resource managers and environmental specialists in the field, immersing them directly into ongoing research.

A team of three non-science teachers were assigned to DEP's Office of Environmental Education (OEE). Led by Greg Ira and Kristy Butgereit of the OEE, the team members included ESE teacher Melissa Rios-Rozier from Wakulla Middle School, 3<sup>rd</sup> grade teacher Cassie Burnham from Riversink Elementary and 4<sup>th</sup> grade teacher Diane Driggers from Riversink Elementary. The OEE goal was to give these teachers hands on experience in water quality monitoring and develop a pilot set of field labs for 7<sup>th</sup> grade students at Riversprings Middle School.

The team spent a total of 15 days (90 hours) together in the field. Each day the team tested the water quality at locations within the Wakulla Springs Springshed such as Munson Slough, Lake Munson, Ames Sink, Leon Sinks, Wakulla Springs and St. Marks. They visited the Tallahassee Waste Water Treatment Plant and sprayfields and also met with experts from DEP and the Florida Geological Survey to learn more about nonpoint source pollution, ground water monitoring and bioassessment. The teachers experienced inquiry-based learning and discussed ways they could incorporate their newfound knowledge back in the classroom.

“The way I am going to teach now is completely different than the way I have been teaching before.”



*-Melissa Rios-Rozier, Wakulla Middle School*

“Everything that I’ve heard and everything that I’ve done I can use in my classroom, and to me that is the most valuable thing.” – *Diane Driggers, Riversink Elementary*



On using an inquiry lesson in the classroom-“I know they 'Got It' as compared to other lessons because of their increased level of engagement and performance on follow up assignments.”



*-Cassie Burnham, Riversink Elementary*

Not only did our team of teachers become scientists this summer, they experienced the wonder and anxiety that comes with not knowing all the answers. The greater part of the time was spent learning how to use the field equipment, collecting water quality data and interpreting the data. The teachers' used their spare time to follow up on questions that arose and discuss their findings with the experts.

"We as scientists don't have all the answers. Kids think, ... "I can't do it," but being in an environment like this gives them the opportunity to explore, to ask, be right or wrong but not necessarily a failure."

– *Melissa Rios-Rozier, Wakulla Middle School*

For more information on the PAEC's Sc:iii project, visit [www.paec-sc-iii.org](http://www.paec-sc-iii.org).