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Newsletter and Report

Volume 17 No. 3, May 2011

# Elementary Outdoor Science Adventure

This year's Elementary Outdoor Science Adventure (EOSA) was another huge success. Through connection with the environment, the event seeks to give our elementary student a weekend to help them grow, foster their learning and self confidence, and unlock their potential as future college students. The team of dedicated URI student mentors, the URI Center for Student Leadership, SMILE club teachers. some parents, and the SMILE staff worked together to give our elementary students a weekend outdoor experiential of and environmental education.

Planning for this major event begins in January when URI students attend a weekly class that revolves around the EOSA,

and SMILE teachers plan activities in their weekly clubs that prepare the elementary students for the weekend getaway. This year, two very motivated URI students, Michaela Cashman and Will Masse, played a large role in the planning and facilitating as student coordinators. Michaela, a South Kingstown SMILE alumnus, now a junior at URI studying Environmental Science and Management, and Will, a senior graduating with a Bachelor of Science in Wildlife Conservation Biology, put their knowledge to work as they developed strategies to integrate science content and leadership skills for the field activities.

The SMILE students began the weekend by arriving on Friday afternoon, April 29<sup>th</sup>, at URI's Alton Jones campus, which is 2,300 acres of beautiful forest, meadow, pond, stream, lake, and farm. The students were immersed in this enriching environment for 3 days and 2 nights.



### Trailblazers

The weekend culminated with a challenging final project, where students go to a new site and had to solve an environmental problem by collecting and analyzing new data practicing the skills they had learned in the days prior. Sunday morning students make a presentation to a large audience of proud family members, and staff members. Each team created a poster board, and each student actively participated in the presentation. The weekend will continue to be an incredible way to foster students' love for learning and set them on a pathway to college.

Continued page 2



"I had the most fun when I was at the vernal pool habitat where I put on the waterproof suit. I felt like an astronaut in water."

Central Falls Elementary Student

From page 1

### Busy Bees, Lady Bugs, Mayflies, and Butterflies

Groups of young students going back and forth exploring, collecting samples and asking questions. Students are so involved in the field studies that they do not want to stop.

Each day student groups rotate through five different study fields. In each field study students explore, collect specimens, use real science equipment, and collect and analyze data.

All activities are design to expose these young students to realworld science and to build their knowledge-base and confidence in doing science. In addition, working alongside these motivated college students opens their eyes to future career possibilities.





### Exploring, testing and discovering

SMILE students go into the pond, the meadow, and the forest to explore the diversity and beauty of nature and to learn the importance of understanding and protecting it.







Students gain hands-on experience with the natural world.





"The best part of the EOSA was being able to learn hands on about nature. I liked that because I got to see everything up close." West Warwick Elementary Student

*"I learned the most when I actually got to do hands on things like doing the pH of the water, catching animals and more."* 

Woonsocket Elementary Student

"My favorite place in nature is the forest because we learn stuff like when I came here I didn't know what a salamander was." West Warwick Elementary Student

## Environmental Science Explorations & Leadership

### The URI Mentors Run the Show

These extremely energetic teachers helped our SMILE students make real-world connections that are so important. Besides teaching science they encouraged openness and acceptance among the students and took a genuine interest in connecting with the students. Larger ideas, such as trust, communication, respect, participation, and teamwork were all discussed and practiced.

### The Final Project

### Applying the New Knowledge

The weekend culminated with a challenging final project. Students go to a new field study site, where they had to solve an environmental problem by collecting and analyzing new data. With this challenge students practiced the skills they had learned in the days prior.





Presentation

Sunday morning presentation to a large audience of proud family members, mentors, and staff members. Each team created a poster, and each student actively participated in the presentation.



"I learned the most when I was in different groups without my friends." South Kingstown Elementary Student

"I had the most fun when I was out with my SMILE friends and exploring and learning about the world around us." Woonsocket Elementary Student

### Personal Development and Leadership



Children had many opportunities to make new friends



#### Teachers Workshop May 13

On Friday morning, teachers came together to celebrate a very successful SMILE year. SMILE students are thriving under their leadership and SMILE Director Carol Englander praised the teachers' high expectations for all their students. Our teachers have created a professional community throughout the state. They take field trips together, share lesson plans, and are very supportive of each other. During the workshop, teachers continued their evaluations on the club and district levels and had very productive discussions. In our conversations about SMILE, teachers brainstormed ways to present SMILE club and annual activities to future students and parents.

We celebrated the conclusion of the 17<sup>th</sup> year of SMILE with a slide show presented by Lacey Feeley of each of the district Family Science Nights, Middle School Bridge Engineering Challenge Weekend, High School Biotechnology Challenge Weekend, and the Elementary Outdoor Science Adventure. It was an impressive collection of "smiles" from teachers, students, family members, industry mentors, and URI student mentors.

After lunch we visited the Kettle Pond Visitor Center in Charlestown, RI. This facility contains interactive exhibits, displays, classrooms for special events, and knowledgeable people where visitors can come and explore the refuges and learn about the wildlife resources and coastal environments of each refuge. Janis Nepshinsky, U.S. Fish and Wildlife Service's Visitor Services Manager gave teachers a presentation about the Ninigret National Wildlife Refuge which is located on the shoreline of the largest salt pond in RI and sits on the glacial outwash plain of the Charlestown moraine and the Kettle Pond Visitor Center. The new Kettle Pond Visitor Center and headquarters, which opened in October 2005, celebrates the Ninigret Refuge and all of the other refuges in Rhode Island. Teachers were impressed with the facility and staff expertise and look forward to planning SMILE club field trips to the Kettle Pond Visitor Center.





Teachers are looking forward to an exciting conclusion of their SMILE club year, and the upcoming Teachers Workshop, July 19-20 and September 17 when we put their suggestions to use and introduce new themes.

### **Club Spotlight**

# Shea High School

#### By Badiallo Sidibe, Nunah Boway, and Kevin Arguetta

We, the students of Shea High School have invested our time and gained much experience into the field of science through The SMILE Program. Early exposure to careers is what every successful college bound student strives for. We have become well acquainted with a few topics in the science. We learned some aspects of oceanography through ROV research and we learned about genetic engineering through chromatography labs. Our experiences with ROVs have given us insight in marine science and discoveries from the ocean floor. Working with chromatography has taught us how to separate everyday compounds into its own pigments. Due to our knowledge of chromatography we were able to make our very own tiedye t-shirts!

Overall, our achievements in The SMILE Program wouldn't be possible, without the bonds of friendship we Shea High students have created with each other and other schools from the SMILE Challenge Weekend at URI.

# **Club Spotlight**

## West Warwick High School

By Mark Villanueva Senior West Warwick High School

This SMILE Challenge Weekend may have been typical to most other schools. The same environment, a good deal of the same friends, and the same food and pool that we all came to enjoy. But to the West Warwick High School SMILE Group, this trip was just a bit more special.

The West Warwick High School SMILE Group boasts a great deal of seniors, approximately six or seven. Comprising a majority of the group, it is safe to say that the seniors will be going on to bigger and better things next year and they will be sorely missed by their comrades. Most every member of our SMILE Group can attest to the amounts of expertise and experience that we have brought to the table, and we know that we have come to love the mission of this club



We learned a lot about the field of bioengineering, shared a lot of laughs, a lot of food, a lot of good times, and of course...

A lot of SMILEs

and the people we have met along the way.

On the bus, a friend of mine, Rosario Sanchez, remarked to me how special this last trip would be for us. After all, the majority of us had been in SMILE for all four years of high school. Not to mention, we were the first group of SMILE students that teachers Mr. DaSilva and Mr. Gallo have seen through all four years of high school. But we all knew that good times were to follow and that this trip was to be something special.

And of course, it was. We were greeted with our shirts and had our share of jokes. I know that we all made good friends, freshman to seniors and back again. And we encountered some old ones too as we made the journey with some familiar faces at Coventry High School. And along the way, we spared no expense in helping the freshman and the other lower grade levels in finding new methods as well as new friends. We learned a lot about the field of bioengineering, shared a lot of laughs, a lot of food, a lot of good times, and of course, a lot of SMILEs.

So yes, West Warwick High School SMILE will lose a great deal of kids to college, but we consider it less of a loss and more as a "See ya later." Not to mention, with a great number of seniors attending URI next year, it may as well have been as if they never left, soon to be surrounded by an enlightening and intelligent group of peers, similar to those we find in any SMILE group. And although we know that we will be sorely missed and that our SMILE days as kids are behind us, I am confident that I speak for all the West Warwick Seniors, and probably all the SMILE seniors that we will miss them and cherish them for years to come.

# SMILE High School Graduates 2011



Josmari Torres Central Falls High School Providence College Music/Communications



Nicole Brule West Warwick High Scool URI or RIC Human Development/Psychology



Kellicrisna Ngourn West Warwick High Sccool URI Wildlife Biology



Mark Villanueva West Warwick High Scool Brown or URI Engineering



Jaritza Feliciano West Warwick High Scool URI, PC, or MCPHC Pre-med or Biology



Muang Phyo West Warwick High School URI, WPI, Stonehill, or RIC Engineering



Rosario Sanchez West Warwick High School URI Nursing



Adriana Neira West Warwick High School URI Psychology and Linguistics



Wendy Estrada West Warwick High School CCRI/URI

# SMILE High School Graduates 2011



Angelica Dubois Woonsocket High School RIC or UMaine Pre-Veterinary Studies



Kelsey Doiron Woonsocket High School



Christina Goulet Woonsocket High School



Sarah Brennan Woonsocket High School NE College or Catholic University Pre-law



Cassandra Cooper Woonsocket High School Brigham Young University Nursing



Sean Eden South Kingstown High School Boston University, Brandeis, or Drexel Pre Medicine



Kevin Matthews South Kingstown High School URI Electrical Engineering



Lily Phommachanh Woonsocket High School MCPHS Pharmacy



Andrew Berry North Kingstown High School URI or RIC Education & English

# SMILE Coventry High School Graduates



Eric Harrington CCRI/URI Biology or Microbiology



Alex Fleury CCRI / URI Biology/Forensics



Chris Lopes University of New Haven Bio-Chemical Engineering



Nikkayla Noel URI Nursing



Casey Monroe University of Arizona Science Education



Matt Vandal URI or UMass Amherst Biology



Jillian Lombardi Bay Path Forensic Science



Justine Melvin Bay Path Psychology



Kayla Duchesneau Sacred Heart University Physical Therapy



Randy Bell URI Biotechnology



Luke Smith CCRI/ URI Engineering Technology

# **Club Spotlight**

### West Warwick Elementary School

Another year of SMILE is coming to a close, but it was a year filled with memories of adventures and learning. Our SMILE group from West Warwick started our year learning to search for food, communicate, and cooperate dolphin style. Whether we listened to them "chatting" on the interactive web site or imitated them with our own "toilet tissue" rostrums, we had fun learning about dolphins. Blubber gloves showed us how they keep warm in the frigid ocean and balloon experiments modeled how their lungs hold a much higher reserve of air than ours. We showed off our knowledge of dolphins at Family Science Night back in November and impressed our parents and friends.

The cold winter months found us working as criminologists as we learned to take fingerprints and classify them according to patterns followed by law enforcement. We worked on solving a robbery from a company's safe. Using the suspects' fingerprints, we identified the criminal, but learned



a valuable lesson about our system of justice when we were unable to prove guilt beyond a reasonable doubt, since all of the suspects would have had reason to have their finger prints on the safe. Science and civics made a good combination!

Most of us expected to wear gloves during the cold winter, but we needed gloves inside when we made ice cream. Mixing our plastic bag of ingredients inside a bag of ice was cold enough, but then we added salt to the ice and watched our thermometer dip even further down. Our fahrenheit thermometer went from 32 to 20 to 16 to 10. Our hands froze, but it was worth it when we finally opened our plastic bags and poured out delicious, thick ice cream. Whipped cream, cherries, and chocolate sauce made it perfect!

Before we realized it, Wilderness Weekend was upon us. We made a Plant Wheel so we could identify bushes, trees, and plants in our environment. We found 21 different plant species just in our school yard!

Practicing our skit "A Snake Around Your Waist" helped us to see how fragile our environment is and how one single act can change an entire habitat. Alton Jones was the ultimate environment for any SMILER and we loved everything about our weekend. The only complaint was that it had to end!!

SMILING at YOU West Warwick Elementary SMILE



## **Club Spotlight**



Field trip to observe diffent kinds of bridges



Middle School Challenge Weekend

#### By Jacob Ottaviani, SMILE Student

The best part of SMILE this year:

The best part of SMILE this year was going to URI for the challenge weekend. I got to meet kids from all around the state, and I got to eat in the URI mess halls which have the best food EVER! And I got to stay in the Holiday Inn and swim in the URI pool.

#### What I learned new this year:

What I learned is how to build bridges out of chopsticks and glue. Also, I learned what the different types of bridges are and how to identify the different kinds of bridges. Also, I learned a lot about the Titanic and what happened to it.

Why I would recommend SMILE to other students: I would recommend SMILE to other students because it is fun, educational and it lets you meet other kids from all around the state at the challenge weekend. Also, the potluck supper is awesome because you get to choose what you eat and drink. That's why I recommend SMILE!

Members of the Calcutt Middle School SMILE club have had a very busy year! After welcoming our members and identifying the rules and objectives of the program, we began discussing the specific topics that were addressed throughout the year. First, we began our coursework investigating the Titanic. This miraculous ship was said to be the "unsinkable" but through various hands-on investigations, our students determined this statement to be false.

Next, we began activating the students' prior knowledge on Bridges. This was the next topic discussed as well as the major theme for the SMILE overnight. Collaboratively, the students explored the different types of bridges using many resources but specifically benefiting from the use of the West Point Bridge Contest. This website engaged students in an interactive challenge that encouraged them to design and virtually build bridges. Once the process was complete they tested their design to see if a truck could successfully drive over them. With this knowledge, they were able to construct their own bridges by using straws, cardboard, string, glue, pipe cleaners, and craft sticks. sign components in mind to construct an effective bridge.



Central Falls SMILE Students during the Bridges Field Trip

Continued on page 11

### SMILE TEACHERS

#### **CENTRAL FALLS**

Roberts Elementary School Sheryl Wilson Alyssa Silva

Calcutt Middle School Katie Vespia Karen Fiore

Central Falls High School Dale Dearnley Susann Arenass

COVENTRY HIGH SCHOOL Julie Pankowicz

#### NORTH KINGSTOWN

Davisville Middle School Fran Pacheco-Fogarty Ann Marie Cody

N. Kingstown High School Karen Finlan

> PAWTUCKET Ann Marie La Roche Kim Hewson

SOUTH KINGSTOWN

West Kingston Elementary PeaceDale Elementary Debbie Vannoy Cynthia MacNeil

Curtis Corner Middle School Gina Haberlin Melissa Dushi

S.Kingstown High School Brenda Dillmann JoAnn Basel

WEST WARWICK

Horgan Elementary School Geraldine Giroux Amy Horne

Deering Middle School Buddy Comet Alicia Manganelli

West Warwick High School Eugene Gallo Nelson DaSilva

WOONSOCKET

Harris Elementary School Heather Neil Stephanie Roberts

Woonsocket Middle School Geraldine Burgess Tara Anderson

Woonsocket High School Claire Laquerre Laura Woods Schneider Electric volunteers make improvements to W. Alton Jones Campus.

Site of the SMILE Elementary Outdoor Science Adventure



**Partnerships** 



Schneider Electric Day of Action

#### Central Falls Middle School (Cont.)

Taking a field trip to various bridges throughout the state allowed the students to take this newly learned knowledge and apply it to a visual representation of several types of bridges. In the SMILE meeting following the field trip, the students were eager to share their drawings of the recreated bridges. Many of our students had never driven over a bridge before. It was nice to provide these students the opportunity to see such structures.

For the remainder of our SMILE year, the students worked with the Physics quest program, performing many hands on experiments. They investigated how mass effects the rate of a falling object, the variables that can affect a swinging pendulum, as well as how the mass/velocity of a projectile affect how far an object flies and how fast it drops. The students thrived using a variety of the materials provided and incorporated the techniques learned, to solve complex questions and equations that were presented to them on a weekly basis.

This year in SMILE has proven to be one of your best yet! It would never have been possible without the hard work and dedication that our students expressed both in and out of the SMILE program. As they all venture to the high school, we know that they will be bringing all that they have learned this year to continue their path paved for a successfully college experience.

### SMILE Newsletter

University of Rhode Island 50 Lower College Road, Suite 305 Kingston, RI 02881 Phone: 401-874-2036 Volume 17, No.3, May 2011 Carol Englander, Editor Nick Blacklock, Printing Schneider Electric

SMILE (Science and Math Investigative Learning Experiences) is an enrichment program for educationally disadvantaged students in grades 4-12 in seven Rhode Island communities. SMILE's goal is to provide group activities for these students in math, science and computers. Generous gifts by participating donors make this program possible. The University of Rhode Island SMILE Update is published three times a year. We encourage your comments and ideas. Please share this newsletter with others who might be interested in SMILE.

#### SMILE STAFF

Carol Englander Director

Augusto Gomes Assistant Director EOSA Coordinator

Lacey Schlachter Program & Evaluations Coordinator

Patricia Macchioni Development & Publications Coordinator

Kelsey Johnson Tim Madden Student Interns

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University of Rhode Island

Weekly SMILE Club Meetings

Scientific and Career Exploration Field trips

### **Special Annual Events**

High School Challenge Weekend April 1-2, 2011 URI Kingston Campus

Middle School Engineering Challenge Weekend March11-12, 2011 URI Kingston Campus

Elementary School Outdoor Science Adventure April 29-30 -May 1, 2011 URI Alton Jones Campus

#### Teachers' Professional Development Workshops

January 28, 2011 May 13, 2011 July 19-20 Sep 17, 2011 University of Rhode Island University of Rhode Island University of Rhode Island Math and Science Math and Science Math and science Curriculum. Curriculum. Curriculum Special events planning End of year evaluation Planning for the year Stay Connected

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**17th** Year of service

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The SMILE Program 50 Lower College Road, Suite 305 Kingston, RI 02881-0800

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