

THE SMILE PROGRAM

Science & Math Investigative Learning Experiences

The SMILE Program seeks to improve the educational outcomes of underrepresented and underserved students by giving them confidence in their academics and life skills in order to pursue higher education and career opportunities of their choice. Our work supports the University of Rhode Island's initiatives to achieve the enrollment of a talented and diverse community of students, as well as increase first-year retention of freshmen by focusing on college preparedness of underserved pre-college students who are in grades 4 – 12. With a dedicated team of SMILE staff members, club teachers/leaders, school administrators, college faculty, graduate and undergraduate students, and community members, The SMILE Program experienced another successful year.



Table of Contents

Letter from the Director
Our Reach
Participants
Year in Review
Year in Review
Partnerships
Sponsors
Executive Board & Recognition
Success/Alumni

MESSAGE FROM THE DIRECTOR

CAROL M. ENGLANDER Director

Dear Friends:

What a rewarding 20 years it has been for The Science and Math Investigative Learning Experiences SMILE Program!

I am delighted to present you with the 2013-2014 report. This year SMILE celebrated its 20th year of providing a quality after school program that motivates and prepares Rhode Island students to become the STEM workforce of the future. With the support and dedication of students, teachers, school administrators, URI professors and student mentors, corporate and private foundation sponsors we have been able to continue with our mission.

In May 2013, Ocean State Charities Trust presented The SMILE Program with the Roger Schonning Award for our multi-faceted pre-college, after school math and science academic enrichment program. In October 2013, The SMILE Program received the prestigious **2013 Lights on Afterschool Outstanding Youth Program Award** presented by Rhode Island After-school Plus Alliance, an initiative of the United Way of RI.

This report highlights the many wonderful experiences our students, teachers, and volunteers enjoyed during this year. We continue to prepare SMILE students to achieve their educational goals by offering opportunities that facilitate the development of the student through meaningful real life learning experiences, mentoring and collaborations that build positive relationships and a sense of community. All our activities are designed and rooted in our philosophy and core values of providing high expectations, engagement, and skills for college, work and beyond. We view our students as future college students.

In this report we present the year's accomplishments and data that confirm the positive impact of the SMILE Program on our students through the last 20 years. Your support is helping to reverse the trend in the U.S. of only 15% science and engineering undergraduates compared to other countries with percentages between 38% and 67%. SMILE is making a difference and with your sponsorship and additional funding opportunities, we will continue to expand and fulfill the wish of one SMILE student: "SMILE belongs in every school in every state".

Your efforts on behalf of our SMILE students and teachers are greatly appreciated. We continue to be impressed by all SMILE alumni persisting and graduating from college, most of them in four years.

The SMILE Program became an independent non- profit 501 (c) (3) organization, approved by the IRS in February 2014, retroactive to December 2012. We continue to be associated with The University of Rhode Island as we have in the past.

Sincerely,

Carol Englande

SCHOOLS

The SMILE Program served 427 students and 19 schools across Rhode Island

CENTRAL FALLS

Ella Risk Elementary School Calcutt Middle School (5th grade) Calcutt Middle School (6-8th grade) Central Falls High School

NORTH KINGSTOWN

N. Kingstown High School

PAWTUCKET

Slater Junior High School Tolman High School Shea High School

SOUTH KINGSTOWN

West Kingston Elementary/Broad Rock Middle (5th Grade)
Curtis Corner Middle School/Broad Rock Middle (6th Grade)
South Kingstown High School

WEST WARWICK

Horgan Elementary School Deering Middle School West Warwick High School

WOONSOCKET

Harris Elementary School Citizens Elementary School Coleman Elementary School Woonsocket Middle School Club 1 Woonsocket Middle School Club 2 Woonsocket High School







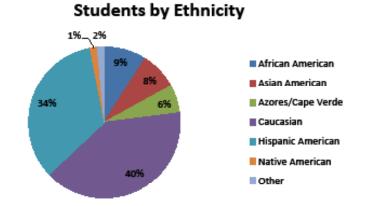
2013-2014 PARTICIPANTS AND CONTINUING STUDENTS

STUDENTS WITH 2 OR MORE YEARS IN THE PROGRAM				
	# students/grade	2 or more years	% 2 or more years/grade	
	# students/grade	2 of filore years	years/graue	
Elementary	69 (5 th grade)	36	51 %	
Middle	129 (6-8 th grade)	75	58 %	
High	141(9-12 th grade)	75	53 %	

RETURNING STUDENTS 2013-2014		
TOTAL RETURNING STUDENTS	186	43.5%
TOTAL STUDENTS IN 2013-2014	427	

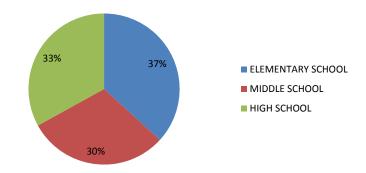
PARTICIPANTS

STUDENTS BY ETHNICITY			
African American	41	9 %	
Asian American	32	8 %	
Azores /Cape Verdean	25	6 %	
Caucasian	171	40 %	
Hispanic American	146	34 %	
Native American	6	1.5 %	
Other	6	1.5 %	



STUDENTS BY GRADE LEVEL

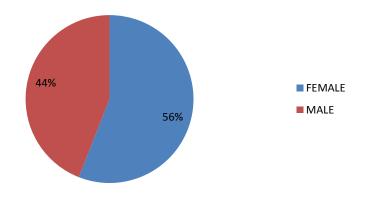
STUDENTS BY GRADE LEVEL			
	STUDENTS	PERCENTAGE	
ELEMENTARY SCHOOL	157	37%	
MIDDLE SCHOOL	129	30%	
HIGH SCHOOL	141	33%	



STUDENTS BY GENDER

	STUDENTS	PERCENTAGE
FEMALE	239	56%
MALE	188	44%

Students by Gender



YEAR IN REVIEW









SMILE Teachers' Workshop July 17-18, 2013 - The unveiling of a new curriculum exciting theme....Watershed Forestry. The focus is on the connections between students, their school, and town; they will make detailed observations on the impacts that their small area has on their immediate surroundings, wider community, watershed, and state. Students will investigate their school grounds and local watershed in the fall and early winter while preparing to develop and implement a Stewardship Project for the spring. The goal of this project will be to increase biodiversity and/or decrease stormwater runoff at your school or community site.

SMILE Teachers' Workshop December 5, 2013 - 40 SMILE teachers attended the winter workshop. Elementary teachers will work with their students to prepare for the Elementary Outdoor Science Adventure. They will be studying Biotic and Abiotic Factors that Create an Ecological Community. Middle schoolers will study Bridges and Earthquakes to prepare for the Engineering Challenge in May. High school students will study biotechnology to prepare for their Challenge event in March.

District-wide Family Science Nights In SMILE, each district plans a wonderful event called a Family Science Night (FSN). These events bring together SMILE students, their families, and community members. Students demonstrate and explain interactive science and math activities. SMILE personnel inform parents and students about college admissions and student financial aid. The FSN is a wonderful expression of interest and support by parents and community members. Parents have the opportunity to get more involved in their children's education, and see them as competent learners. The SMILE students' self-esteem soars!

SMILE High School Challenge Event! March 21-22, 2014 - This year, SMILE High School students from 6 high schools participated in the event. Students from Central Falls, Shea (Pawtucket), Tolman (Pawtucket), South Kingstown, West Warwick, and Woonsocket were represented, making a total of 110 students! It was a busy event with lots of involvement from URI students and Professors (their expertise was priceless!). Throughout the weekend, everyone got a chance to perform a biotechnology lab in the Center for Biotechnology and Life Sciences building - Restriction Digestion & Analysis of Lambda DNA facilitated by Linda Forrester (Manager of Biology Labs) and graduate and undergraduate students. Participants also got to experience the Human Simulation Lab (pictured below), which was facilitated by Dr. Clinton Chichester and Dr. Amanda DeAngelis-Chichester and the 3-D Teaching Lab, facilitated by Dr. Bongsup Cho and Dr. Roberta King. Students from AISES (American Indian Science & Engineering Society) and SACNAS (Advancing Hispanics/Chicanos & Native Americans in Science) facilitated different activities with our SMILE students at the greenhouses and outdoors to teach about biodiversity. Students from Tau Beta Pi, NSBE (National Society of Black Engineers), and SNPhA (Student National Pharmeceutical Association) volunteered in different capacities -the Marshmallow Challenge was a huge hit! The event was a huge success. We are happy to say that this is our future STEM workforce!

The SMILE Program's success is due to the commitment of the teachers, the talented and enthusiastic students, and the collaborations with URI, communities, private foundations, and corporations.

Elementary Outdoor Science Adventure! April 11-13, 2014 - This was a powerful event! URI mentors, who started planning in January, made this weekend happen. Their gentle and kind approach to all students made for a very harmonious experience for all. They developed incredible bonds with students as they taught environmental science and interacted with students during the campfires, cabin talks, and mealtimes. They are the best role models. They worked together as a team and trusted each other. They made college more transparent for students and held high expectations. Plus, we had AMAZING weather, and saw incredible wildlife! Connection to nature is priceless!

A Tour of Bridges! April, 2014 - Middle school students learned about bridges by going on a field trip! They saw the IWAY, Braga, Mt. Hope, Sakonnet, Newport, and Jamestown Bridges. Engineers from Steere Engineering and Pare Engineering came along to teach the kids about bridge design and construction. They also stopped at Roger Williams University and heard an inspiring talk by their admissions officer, Don Mays. When possible, students inspected the bridges and drew diagrams

Middle School Engineering Challenge Weekend. May 2-3, 2014 - Middle school students (6th, 7th, and 8th graders) worked in teams to build a truss bridge. The record amount of weight held was 122 pounds! Club members from each school also brought balsa-wood bridges that they built during their club meetings. These were tested on a shake table, which simulates an earthquake. Thank You! to Dr. George Tsiatis, URI Professor in Civil & Environmental Engineering, for facilitating this part of the event . A special thanks also goes out to the URI Transportation Center, who funds this event, and Jeff Cathcart, Director of Outreach and Education, who always helps to make this particular bridge challenge a success for SMILE.

Preisser Lab Outreach - Field Trip to Alton Jones! May 7, 2014 - SMILE students had a blast learning from dedicated URI graduate and undergraduate students. This field trip was part of an ongoing outreach effort made by Dr. Evan Preisser, who is a URI professor and community ecologist interested in understanding how food webs 'work.' Mauri Hickin, an MS student in the Preisser Lab, planned and organized this informative and fun field trip. The purpose of this field trip was to get students excited and acquainted with the world of insects, plants and ecology. It was a fun time, and we look forward to more trips with the Preisser Lab in the future!

SMILE Students Design & Implement STEWARDSHIP Projects This spring, students from all SMILE clubs, 20 schools all together, developed and implemented their Environmental Stewardship Projects. Thanks to grants from NOAA B-WET, Dominion Foundation, and the Blackstone River Coalition, SMILE students have been able to "think big". Their goal: to decrease stormwater runoff!









The SMILE Program Annual Report 2013-2014

PARTNERSHIPS

SMILE Facilitated the Engagement of Industry, University Faculty and College Student Mentors

SMILE Teachers Professional Development Workshops

URI faculty and industry experts made presentations at the Teachers Professional Development

Challenge Weekends and Elementary Outdoor Science Adventure Mentors

Amgen International Network Schneider Electric

Toray Plastics

National Society of Black Engineers (NSBE)

Natural Resource Science Students

Society of Women Engineers (SWE)

American Society of Mechanical Engineers (ASME)

URI Society of Hispanic Professional Engineers (SHPE)

URI Center for Student Leadership

CH2MHill

American Indian Science & Engineering Society (AISES)

Advancing Hispanics/Chicanos& Native Americans in Science (SACNAS)

Tau Beta Pi

Student National Pharmaceutical Association (SNPhA)

SMILE URI partners in pre-college STEM outreach activities.

URI Transportation Center
URI Center for Student Leadership
URI College of Engineering
URI Talent Development
URI Graduate School of Oceanography

Dr. Evan Preisser Lab
Dr. Rainer Lohmann Lab
Steere Engineering
Pare Engineering

A Unique URI Learning Community

This year during the spring semester, 17 URI students from different majors took the SMILE EOSA Mentor course.

The EOSA program has become an important tradition for URI college students. They design the curriculum and activites, and act as leaders for a 3 days/2 nights elementary environmental camp at URI Alton Jones Campus.



15 URI students took the 3 credit URI PLS/NRS 492 SMILE EOSA Mentor Course

SPONSORS

The SMILE Program gratefully acknowledges the following sponsors for their support

Amica Companies Foundation

Amgen Foundation

Amgen Biotechnology Expereince

Armold Lumber Co, INC

Belmont Market Place

Blackstone River Coallition

Connecting For Children and Families

Dominion Foundation

Dunkin Donuts Saunderstown, RI

Eaton Corp Charitable Foundation

Glenda Kirby

Gilbane Building Company

Graphic Expressions

Holiday Inn South Kingstown

Lloyd G. Balfour Foundation, Bank of America, N.A Trustee

National Oceanic & Atmospheric Administration (NOAA) B-Wet

Ocean State Charities Trust

Pawtucket COZ-21 st Century

Ramsey McCluskey Family Foundation

Schneider Electric

Steere Engineering

Toray Plastics, America, Inc.

University of Rhode Island

URI Graduate Student Association

URI Transportation Center

URI Dr. Evan Preisser NSF Grant

YMCA of Greater Providence

Wood-Pawtucket Watershed Association

Central Falls School Department

North Kingstown School Department

South Kingstown School Department

Pawtucket School Department

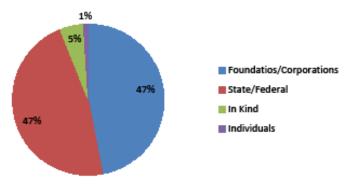
West Warwick School Department

Woonsocket School Department

Ocean State Chanties Trust

FUNDING SOURCES

Funding Sources



EXECUTIVE BOARD

BOARD OF DIRECTORS

SMILE STAFF

Carol Englander
Director

Lacey Feeley
Assistant Director
EOSA Coordinator

Augusto Gomes Assistant Director EOSA Coordinator

María-Gabriela Lizano
Development and
Publications Coordinator

Carolyn Mason
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Catherine Valentino Curriculum Advisor Fred Frostic President

John Peterson Vice President

Marilyn Cohen Secretary

Domenic Valentino Treasurer

Malcolm Spaulding Board Member

> Glenda Kirby Board Member

> William Horan Board Member

> Margaret Kerr Board Member

> Ruth Jarrett Board Member

AWARDS & RECOGNITION

Roger Schonning Award, Ocean State Charities. May 2013.

Ocean State Charities Trust presented The SMILE Program with the Roger Schonning Award for oustanding multi-faceted pre-college, after school math and science academic enrichment program.

SMILE Wins RIASPA's Lights On Afterschool Outstanding Youth Program! October 16, 2013

Congratulations to SMILE for winning the Rhode Island Afterschool Plus Alliance (RIASPA) Lights On Afterschool Outstanding Youth Program! We were nominated and selected because of our strong program and proven outcomes presenting science, technology, engineering, and math (STEM) academic after-school program for underrepresented students in grades 4th-12th. We received this prestigious award on October 16th at the RIASPA Breakfast of Champions at Rhodes on the Pawtuxet in Cranston, RI.

SMILE Director Presents at NSTA Conference in Portland, OR October 24, 2013

Congratulations to SMILE for being picked to present "A STEM Success Story" at the 2013 National Science Teachers Association Conference in Portland, OR!

2013-2014 SMILE High School Graduates

- 1. 27 SMILE High School seniors students graduated high school
- 2. 100% of SMILE high school senior students reported attending a two-or four-year colleges in the Fall of 2014.
- 3. A Central Falls SMILE high school senior student is the first in the school history to be accepted by Harvard
- 4. SMILE high school senior students declared the following future college majors. 10 students declared STEM majors (Physics, Nursing, Biology, and Engineering); 15 students were undecided; 1 student is majoring in English, 1 in Business, and 1 in Criminal Justice.
- 5. Selected Colleges and Universities: University of Rhode island, Harvard University, Johnson and Wales University, Texas A & M University, Arizona State University, Worcester Polytechnic Institute, Community College of Rhode Island

COLLEGE ENROLLMENT DATA 1994-2013

Source: College Enrollment by Participants in The SMILE Program 1998-2013 URI Office of Institutional Research, February 2014

- 1. Since its founding in 1994 to 2013, 2,425 students have participated in The SMILE Program.
- 2. The high school graduation rate for students that participated in SMILE for one or more years is between 97% and 100%.
- 3. The college enrollment of students who we were able to track using the National Student Clearinghouse is <u>51%</u>. In 2011, 58% of all Rhode Island students who graduated immediately enrolled in college. Among low income student only <u>44%</u> immediately enroll in college (2014 RI Kids Count Fact book).
- 4. Since 1998, SMILE former participants who graduated high school have attended 144 different colleges and universities with locations in 33 different states plus the District of Columbia and Puerto Rico.
- 5. Between 1998 and 2013, 170 SMILE alumni have enrolled at URI and 63% pursued STEM majors.
- 6. In 2013, 75 SMILE alumni are enrolled at URI and 73% of them are in STEM majors. Note: only 14% of all U.S. college undergraduates are enrolled in STEM according to a 2009 US Dept. of Education report.
- 7. For students in SMILE for three or more years, the ratio of students attending college (189) versus those who did not attend college(85) is 2:1

SUCCESS STORY



Jean Paul Valencia, Central Falls High School SMILE student,

Jean Paul is this year's Central Falls class valedictorian. He is the first student from Central Falls High School to be accepted at Harvard University in more than three decades. He was also accepted at Yale, Brown University, Columbia University, and Dartmouth College. Jean Paul has decided to become a member of the Harvard's class of 2018.



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THE UNIVERSITY OF RHODE ISLAND