Annual Report

The SMILE Program
University of Rhode Island

Inspiring students to go to college and pursue careers in STEM fields.
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.

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MESSAGE FROM THE DIRECTOR

To our partners, supporters, mentors, and friends:

I am so proud of the accomplishments of The SMILE Program. In addition to its nineteen years of growth and financial sustainability, SMILE expanded again at the request of three school districts to include two additional elementary clubs and one high school club all opened last September with very successful experiences. Continuity of leadership in SMILE at both URI and club levels is a significant source of our strength. I, along with Augusto Gomes, Assistant Director, have been guiding RI SMILE since its inception in 1994. Our staff of four, rounded out with a Development and Publications Coordinator, Gabriela Lizano, and an Assistant Director for Program and Evaluation, Lacey Feeley, both of whom have been SMILE for many years, have developed and overseen the delivery of exciting STEM curriculum to all clubs that has contributed to successful rates of high school graduation, college enrollment, and pursuit of STEM careers among SMILE students. Recently, another committed additional staff member, Carolyn Mason, has joined our team and added to our success. I was honored by the Rhode Island Department of Transportation with The Ninth Annual Transportation Excellence Award as Educator of the Year.

The SMILE Program has just completed its very successful 19th year serving 377 underrepresented students in six school districts and 36 teachers. We know that our after school STEM academic program continues to have a positive impact on our students.

- The number of our SMILE graduating seniors is 22
- 21 SMILE seniors have been accepted into college
- 16 or 76% of those students are majoring in STEM disciplines. 1 student will enter the Marine Corps.
- A Central Falls SMILE senior is the first in school history to be accepted to Massachusetts Institute of Technology (MIT) where he will attend this Fall.
- 5 SMILE seniors received a SMILE scholarship of $500 toward their college expenses.

This year SMILE alumni at URI formed a new university recognized club- URI Collegiate SMILE. There are approximately 25 members. Their focus is to support The SMILE Program at their respective high schools, be mentors at The SMILE Annual Engineering Challenges and also look for ways to be good URI citizens.

SMILE alumni at URI have gone on to achieve great academic success. With the assistance of the University of Rhode Island (URI) Office of Institutional Research we have determined that at URI there are currently 75 SMILE alumni undergraduates and 73% are in STEM majors.

We continue to involve corporate partners as mentors in our Annual Challenges and as sources for career oriented field trips. They motivate SMILE students as well as URI mentors. Employees of Amgen, Toray Plastics, America, Schneider Electric, FarSounder, and Wind Energy Development have participated through their company’s community outreach programs, as has the RI Department of Transportation employees. This gives students an added dimension of career exploration during our high school solar car engineering challenge and middle school wind turbine building challenge. We also have partnerships with the URI Center for Student Leadership which involves undergraduates in a variety of college majors as SMILE mentors, National Society Black Engineers Society (NSBE), and the Society of Women Engineers (SWE), American Society of Mechanical Engineers (ASME). 15 URI students took the 3 credit URI course PLS/NRS 492 SMILE EOSA field Study Project.

Your support of The SMILE Program 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 support 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 and support 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.

Sincerely,

Carol Englander

Director
SCHOOLS

The SMILE Program served 377 students and 18 schools across Rhode Island

**CENTRAL FALLS**
- Ella Risk Elementary School
- Calcutt Middle School (5th grade)
- Calcutt Middle School
- Central Falls High School

**SOUTH KINGSTOWN**
- West Kingston Elementary
- Curtis Corner Middle School
- SouthKingstown High School

**WEST WARWICK**
- Horgan Elementary School
- Deering Middle School
- West Warwick High School

**PAWTUCKET**
- Slater Junior High School
- Tolman High School
- Shea High School

**NORTH KINGSTOWN**
- N. Kingstown High School

**WOONSOCKET**
- Harris Elementary School
- Citizens Elementary School
- Coleman Elementary School
- Woonsocket Middle School
- Woonsocket High School

2012-2013 PARTICIPANTS AND CONTINUING STUDENTS

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<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
<td>5</td>
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<tr>
<td>Woonsocket</td>
<td>5</td>
<td>3</td>
<td>2</td>
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**Students ≥ 2 years in the program**

- Elementary School: 36
- Middle School: 66
- High School: 60

Total Returning Students: 162
Total %: 43%
PARTICIPANTS

Students by Ethnicity

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<td>25</td>
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<tr>
<td>Azores/Cape Verde</td>
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<tr>
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Number of Students by Grade

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<td>148</td>
<td>39%</td>
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<tr>
<td>Middle School</td>
<td>100</td>
<td>27%</td>
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<tr>
<td>High School</td>
<td>129</td>
<td>34%</td>
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<td><strong>Total</strong></td>
<td>377</td>
<td>100%</td>
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Students by Gender 12-13

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<th>Percentage</th>
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<td>143</td>
<td>38%</td>
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<tr>
<td>Female</td>
<td>234</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>377</td>
<td>100%</td>
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YEAR IN REVIEW

Afterschool Clubs
This year SMILE clubs completed the Watershed curriculum, and the pre activities for the annual challenge events.

Teachers Professional Development
Three Workshops introducing science concepts and career opportunities to bring back to students

Family Science Nights
Students from all levels presented interactive hands-on science activities for family members to try. In each district the event brought together about more 100 students and their families. Also, some school administrators and community members were present.

Elementary Outdoor Science Adventure
The event was focused on hands-on, field–based biology and environmental science designed by URI college students. This year, students became herpetologists, hydrologists, environmental scientists and consultants, entomologists, and biologists as they rotated through the field studies.

Middle School Engineering Transportation Challenge Weekend
Wind Turbine Challenge. SMILE Middle school students became engineers by designing and building wind turbine blades, building a nacelle, and testing the turbine’s production of electrical energy. They learned to work with SMILE students from other clubs, and with college students in science, engineering, and other majors. They also ate meals in a dining hall, and enjoyed recreation at Tootell Gym. They learned a lot about student life on a college campus and the many activities at URI.

High School Engineering Challenge Weekend
SMILE students from seven high schools were given the challenge of constructing a vehicle that could be powered by a solar panel. Vehicles were then tested and timed on a 12 meter track.

Fieldtrips- Watershed club field trips, GSO, Amgen, Kettle Pond, Alton Jones Campus, Camp Champlin, Audubon Society
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.

Beginning of the year Field Trips – Elementary students visited the Kettle Pond Visitor’s Center in Charlestown and high school and middle school student visited Lake Eisenhower at Alton Jones to kick-off the year, meet other SMILE friends, and get started with the watershed theme.

Amgen Field Trip – Amgen hosted another field trip for the SMILE high school students. The content of the visit was related to environmental science to align with the watershed theme that students were studying. Students heard from employees from the Environmental Health and Safety (EH&S) department, toured the facility, and took part in a teambuilding challenge, all run by the enthusiastic employees of Amgen.

Talent Development RELAAY Grant – SMILE is part of an Office of Higher Education grant that the University of Rhode Island received through Talent Development. The RELAAY Grant, or Recruit and Educate Local At-Risk Adults and Youth, has the goal of supporting and retaining the number of RELAAY Project participants, which includes SMILE alumni who are both talent development and non-talent development students, at URI. SMILE students attending URI will be joined by students from College Crusade, College Visions, and Educational Talent Search, who are all the main beneficiaries of the grant.

URI STEM Student & Corporate Volunteer Luncheon – At this year’s High School Engineering Challenge Weekend, the Student Affairs Diversity Fund funded a URI STEM Student and Corporate Volunteer luncheon. The event was for URI students, including members of NSBE, SHPE, and SWE, to network, ask questions, and learn from Rhode Island industry mentors from Amgen, Toray Plastics, Eaton Aerospace, Schneider Electric, and NUWC (Naval Undersea Warfare Center).

Wind Turbine Field Trip – On April 24th, 2014 100 SMILE middle school students and teachers from 5 clubs converged on the Wind Turbine in North Kingstown, at the home of developer Mark DePasquale, CEO of Wind Energy Development, LLC. Standing up close to a 1.5 megawatt turbine was awesome. Mr. DePasquale helped students understand and appreciate how the turbine changed wind energy into electricity.

Wood-Pawcatuck Watershed Association Partnership – Denise Poyer at the Wood-Pawcatuck Watershed Association has helped out SMILE Program students a great deal this year, particularly through lending out waders for SMILE students to investigate their watersheds.

Watershed Stewardship Project – From May through early June students also participated in an Annual Environmental Stewardship Project as follows: Central Falls HS – Community Garden on Hedley St., Tolman High School – Rock Garden in front of school; South Kingstown HS – South Kingstown Town Beach cleanup; Woonsocket High School – Students designed an outdoor space which they named “the circle of life reflection area.” The garden they planted is a place where students and teachers can go to relax and reflect, West Warwick HS -Clean the River Walk.

Schneider Electric’s Day of Action – Schneider Electric not only funds The SMILE Program, but their employees also volunteer their time. They had another successful Day of Action at Alton Jones on May 24th, where volunteers raked, cleaned up the ropes course, and planted flowers around the Whispering Pines area. There is no better place in the world than Alton Jones for SMILE’s annual Elementary Outdoor Science Adventure.

URI’s Center for Student Leadership Partnership – The URI Center for Student Leadership has been a valuable partner for many years now. This year, a limited number of scholarships will be offered to SMILE students to attend The First-Year Student Leadership Institute during the summer.

URI/SMILE Courses – SMILE Staff instructed a spring-term course (NRS/PLS 492) for URI students facilitating the EOSA. SMILE staff also created a three credit course for SMILE teachers (EDC 923).

URI Collegiate SMILE - There are approximately 25 members. Their focus is to support The SMILE Program at their respective high schools, be mentors at The SMILE Annual Engineering Challenges and also look for ways to be good URI citizens.
PARTNERSHIPS

SMILE facilitated the engagement of industry, university faculty and students mentors

SMILE Teachers Professional Development Workshops

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

Challenge Weekend and Elementary Outdoor Science Adventure Mentors

Amgen International Network
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
Wind Energy Development, LLC

SMILE URI partners in pre-college STEM outreach activities.

URI Transportation Center
URI Center for Student Leadership
URI College of Engineering
URI Chemistry Department
URI Collaboration for Exploration in Mathematics and Science (CEMS)
URI Watershed Watch
URI Talent Development
URI Graduate School of Oceanography
The SMILE Program gratefully acknowledges the following sponsors for their support

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University of Rhode Island
URI Transportation Center
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

Funding Sources
CentraL Falls High School senior and Class of 2013 valedictorian, Edwin Africano has been accepted to the MIT Class of 2017. “You stood out as one of the most talented and promising students in one of the most competitive applicant pools in the history of the institute.” stated Stuart Schmill, Dean of Admissions at MIT in his letter to Edwin.

“I am very happy to have been accepted and grateful for the love of my parents and family and to have the support of my teachers and fellow students,” said Africano who plans to call MIT home this Fall. Edwin was born in Colombia and came to the United States in 2008 and completed his 8th grade at Calcutt Middle School before coming to Central Falls High School. He is a member of the SMILE Club, the ACE program, the Science Olympiad Team, as well as a tutor in the AP Biology for his fellow peers.

The entire community is proud of Edwin and is celebrating this student’s accomplishments in the 1.3 square mile city.

“Are we proud of Edwin and we know that he will continue to succeed and go on to achieve his goals. This is further proof that when you dream big and dream fierce, your dreams can come true.” said high school Principal Joshua Laplante.

Edwin’s acceptance comes in the midst of a number of great projects and initiatives taking place in Central Falls. “We know that when parents and teachers work together on behalf of children great things can happen. Edwin is a model for what is possible and we are extremely proud of him, we are excited for his parents and grateful for all the teachers that worked with Edwin throughout his schooling”, said Superintendent of School, Fances Gallo.

Kevin Arguetta
Shea High School
Brown University
Engineering

“I was my class valedictorian, member of the Rhode Island National honor society and Rhode Island National honor society, AMSA (math league) to scoring student for 2012 & 2013 of Shea, Upward Bound Highest Achiever in multiple subjects, Junior Prom King, voted most likely to succeed, and Scholastic Arts and Writing Award silver key winner.

For the challenge weekend we were even more involved in our scientific topics, and the challenges themselves required numerous lab hours invested on the project. I’d say a whole day was invested on each year’s project, be it mutant fluorescent protein recombination; building an ROV which included making the frame, circuitry and many other steps; and finally making our own solar racers from every aspect of frame to the transmission. Clearly, the SMILE coordinators intentions were to expose students to science with authenticity by using real world applications, equipment, and techniques, at a relatively early age. From my perspective, the more closely that a SMILE project reflects the type of work of its professional scientific experiment counterpart the more effective the program”
With help from the URI Office of Institutional Research we have analyzed our data base. The results confirm that SMILE has been able to increase students’ interest, motivation, and attitudes toward college and selection of STEM careers.

- Since its founding in 1994, 2259 students have participated in URI SMILE.
- The high school graduation rate for students that participated in SMILE for one or more years is between 97% and 100%.
- Since 1998, SMILE graduates have attended 90 different colleges and universities.
- Between 1998 and 2013, 170 SMILE alumni have enrolled at URI and 63% pursued STEM majors.
- This year 73 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.
- SMILE student college enrollment compared to the RI Low Income College Participation is 2:1.
- For students in SMILE for three or more years, the ratio of students attending college versus those who did not attend college is 4:1.
- 100% of the students in SMILE for more than 7 years went to college.

Alumni

Skylar Potter
Woonsocket High School
SMILE Class 2012

Skylar is a SMILE alumnus and second year student at the University of Rhode Island. She had a leadership role in the Woonsocket High School SMILE club and participated for 4 years. Now, she’s double majoring in Nursing and Pharmacy and triple minor in Women Studies, Spanish, and Leadership and ended her first year with a 3.65 GPA.

At URI, Skylar is very active in extracurricular activities; a few include Student Senate, Collegiate SMILE, and Habitat for Humanity. Skylar spent many hours helping to mentor and facilitate activities at last year’s SMILE annual events with middle and high school students. She’s also very involved with the LGBTQ Center and volunteers as a Safe Zone Facilitator, a workshop to help increase awareness, knowledge, and support of LGBTQ people and issues. Additionally, she works at the URI Visitor’s Center for Public Programming and Special Events.

Skylar is a motivated and courageous individual. She’s overcome many adversities in her life but hasn’t let any of that stop her. She’s thriving at URI and has big dreams, academically and personally. She encourages students to “always smile big and dream bigger.” We look forward to keeping in touch with Skylar throughout her URI career and beyond. Her tenacity, drive, focus, and kindness will help her reach her dreams.

Dr. Tarra Evans, MD
South Kingstown High School
SMILE Class of 2006

Graduated South Kingstown High School 2002
Graduated Brown University Alpert Medical School 2010

Currently, she is in her 3rd year as a resident in Obstetrics and Gynecology (OBGYN) at Pennsylvania Hospital in Philadelphia, planning to continue her studies in OBGYN Oncology.

Dr. Evans participated in SMILE for seven year beginning in the 6th grade.
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