

The SMILE Program
University of Rhode Island
90 Lower College Road, Roosevelt Rm 1
Kingston, RI 02881-0800

Annual Report 2016-2017



www.uri.edu/smile



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.



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2016-2017 SMILE High School Graduates

1. 19 SMILE high school seniors students graduated high school.
2. SMILE high school senior students declared the following future college majors: engineering, pharmacy, nursing, and neuroscience among others.
3. Selected Colleges and Universities: University of Rhode Island, Stonybrook College, Rhode Island College, Rensselaer Polytechnic, Wellesley College, Roger Williams University, and Community College of Rhode Island.

COLLEGE ENROLLMENT DATA 1994-2016

Source: College Enrollment by Participants in The SMILE Program 1998-2016
URI Office of Institutional Research, May 2017

1. Since its founding in 1994 to 2017, 3,492 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 90% and 100%.
3. The college enrollment of students who we were able to track using the National Student Clearinghouse is 56%. In 2016, 56% of all SMILE students who graduated immediately enrolled in college. Among low income students only 44% immediately enroll in college (2014 RI Kids Count Fact Book).
4. Since 1998, former SMILE participants who graduated high school have attended 237 different colleges and universities with locations in 33 different states plus the District of Columbia and Puerto Rico.
5. Between 1998 and 2016, 282 SMILE alumni have enrolled at URI and 70% pursued STEM majors.
6. In 2016, 26 SMILE alumni enrolled at URI, 73% of them are in STEM majors (Note: only 14% of all US college undergraduates are enrolled in STEM according to a US Dept. of Education Report).
7. For students in SMILE for three or more years, the ratio of students attending college versus those who did not attend college is approximately 2:1.
8. 100% of the students in SMILE for more than 7 years went to college.

SUCCESS STORIES

This year's graduating SMILE seniors are attending various colleges and universities in Rhode Island including Rhode Island College, University of Rhode Island, Roger Williams University, and Community College of Rhode Island. Students are aiming to pursue STEM careers including: Engineering, Nursing, Pharmacy, and Neuroscience among others.

The SMILE Program congratulates all SMILE seniors class of 2017 and wishes them success in their academic and professional careers!

EXECUTIVE BOARD

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AWARDS & RECOGNITION

Women in Transportation (WTS) Seminar Awards Breakfast May 23,2017. This May, SMILE Director Carol Englander was the keynote speaker at the Women in Transportation (WTS) Seminar Awards Breakfast. Here, Carol presented the URI SMILE Program, its acheivements, and how it continues to leave a great imprint in the STEM field. Transportation industry leaders were impressed to learn how SMILE levels the playing field for our underserved and underrepresented students introducing them to and preparing them for STEM careers.

MESSAGE FROM THE DIRECTOR



CAROL M. ENGLANDER

Dear Friends and Supporters of The SMILE Program,

It is with great satisfaction that I reflect on The SMILE Program’s 23rd year. We have 517 Rhode Island students participating in the program this year at the elementary, middle and high school levels from seven school districts, including students from Westerly, a district which we expanded to this year through the generosity and forward thinking of the Rhode Island Foundation. Parents loved the fall district Family Science Nights that our teachers organized and coordinated. The students were the teachers of activities, and parents, impressed with their children’s learning, became more committed to their student’s academic success. It has been a most rewarding year, culminating in the graduation of 19 SMILE high school seniors, most of whom are planning to attend college this fall. Seven of those seniors were each awarded a \$500 SMILE college scholarship, inspired by Saul Nulman, a SMILE supporter, who said “Dreams, determination , and discipline will make you succeed.” We are all so proud of their accomplishments. Not every students remains in SMILE through their senior year. There are 256 students who have been in SMILE for one or more years who will graduate this year whose college attendance we will track.

SMILE alumni students select STEM majors at the University of Rhode Island at a 70% rate, well above the national average of 14%. The SMILE Program continues to be Rhode Island’s only STEM pipeline for helping diverse students develop their identity and competence as scientists in preparation for college. Our middle school students had the opportunity to explore engineering and technology at the University of Rhode Island through a bridge design, build, and test challenge, and SMILE high school students used forensic and biotechnology skills to investigate and solve a rare plant theft. They did these activities at the University of Rhode Island, assisted by URI students, faculty and industry mentors. They gained confidence, new skills and a deepening awareness of what it is like to be a college student. Elementary students were engaged in environmental activities: 4th grade Elementary students came to URI Kingston campus for an Ecology Field Day mentored by URI students, and 5th graders participated in a 3 day 2 night environmental camp at URI W. Alton Jones campus led by URI students. For students who will be first in their family to go to college, these are wonderful first university experiences.

Through stewardship projects, SMILE students have even greater positive connections to their communi-ty and environment. These include school yard and bike path clean ups, reusing plastics containers for planters, aluminum cans for pencil holders, and designing, digging and planting school and community gardens. One club designed and built a raised bed that is wheel chair accessible.

Thank you for all your support and efforts on behalf of all our SMILE students current and future. The current fi-nancial climate for educational non- profit organizations is challenging. We look to all of you to promote The SMILE Program in any way you can.

Sincerely,

Carol Englander

SCHOOLS

The SMILE Program served 517 students and 25 schools across Rhode Island.

CENTRAL FALLS

Ella Risk Elementary School
Calcutt Middle School
Central Falls High School

WESTERLY

Springbrook Elementary School
Westerly Middle School
Westerly High School

NEWPORT

Claiborne Pell Elementary School
Thompson Middle School
Rogers High School

WEST WARWICK

Horgan Elementary School
Deering Middle School
West Warwick High School

PAWTUCKET

Goff Middle School
Tolman High School
Shea High School

WOONSOCKET

Harris Elementary School
Citizens Elementary School
Coleman Elementary School
Woonsocket Middle School at Hamlet
Woonsocket Middle School at Villa Nova
Woonsocket High School

SOUTH KINGSTOWN

West Kingston Elementary
Curtis Corner Middle School
South Kingstown High School

2016-2017 PARTICIPANTS AND CONTINUING STUDENTS

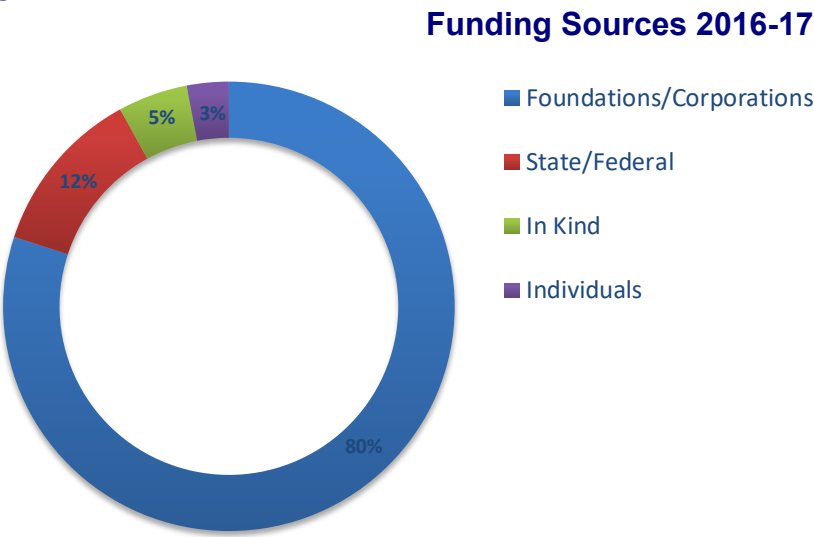
| STUDENTS WITH 2 OR MORE YEARS IN THE PROGRAM | | |
|--|---------------------------|-----------------|
| | Students/Grade | 2 or More Years |
| Elementary | 195 (4-5 th) | 178 |
| Middle | 187 (6-8 th) | 163 |
| High | 135 (9-12 th) | 100 |

| RETURNING STUDENTS 2016-2017 | | |
|------------------------------|-----|-----|
| Total Returning Students | 234 | 45% |
| Total Students in 2016-2017 | 517 | |

The SMILE Program gratefully acknowledges the following sponsors for their support

- Amgen Foundation
Amgen Biotech Experience
Amica
Anonymous Donors
Arnold Lumber
Connecting For Children and Families
The Champlin Foundation
Dominion
Dunkin Donuts
Graphic Expressions
Gilbane
Holiday Inn South Kingstown
Lloyd G. Balfour Foundation, Bank of America, N.A Trustee
Nordson Corporation Foundation
NOAA B-Wet Program
Pawtucket COZ-21st Century
Pfizer
- Preisser Lab, URI
Ramsey McCluskey Family Foundation
Rhode Island Foundation
Schneider Electric
Steere Engineering
Toray Plastics, America, Inc.
University of Rhode Island
YMCA of Greater Providence
Central Falls School Department
Newport School Department
South Kingstown School Department
Pawtucket School Department
Westerly School Department
West Warwick School Department
Woonsocket School Department
van Beuren Charitable Foundation
Verizon Foundation

FUNDING SOURCES



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 and Workshops

Challenge Weekends, Elementary Outdoor Science Adventure and Elementary Ecology Field Day 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
- American Indian Science & Engineering Society (AISES)
- Advancing Hispanics/Chicanos & Native Americans in Science (SACNAS)
- Tau Beta Pi
- Student National Pharmaceutical Association (SNPhA)
- College of the Environment and Life Sciences Graduate Students

SMILE URI partners in pre-college STEM outreach activities.

- URI Transportation Center
 - URI Center for Student Leadership
 - URI College of Engineering
 - URI Graduate School of Oceanography
- Dr. Evan Preisser Lab
 - Steere Engineering
 - URI Talent Development

A Unique URI Learning Community

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

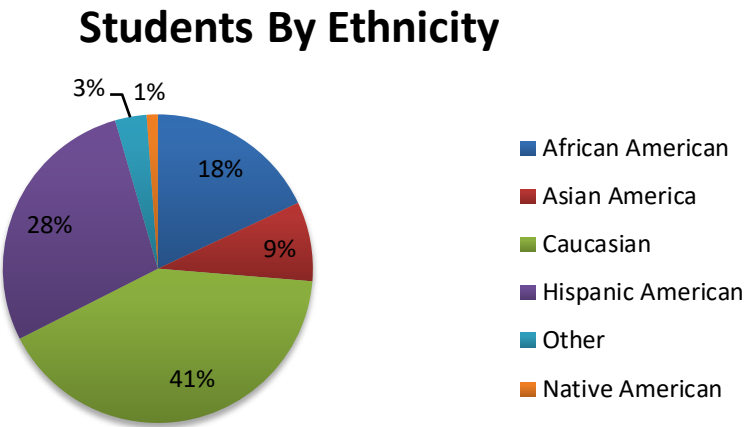
The EOSA program has become an important tradition for URI college students. They design the curriculum and activities, and act as leaders for a 3 days/2 nights elementary environmental camp at URI Alton Jones Campus.



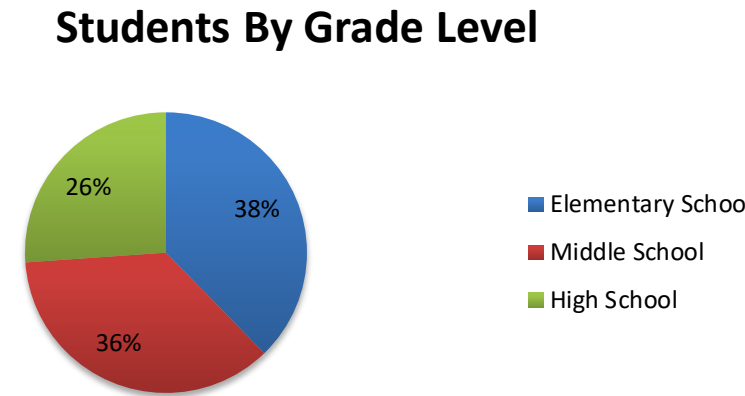
URI students took the PLS/NRS 492
SMILE EOSA Mentor Course.
Here’s the 2017 Mentor Team

PARTICIPANTS

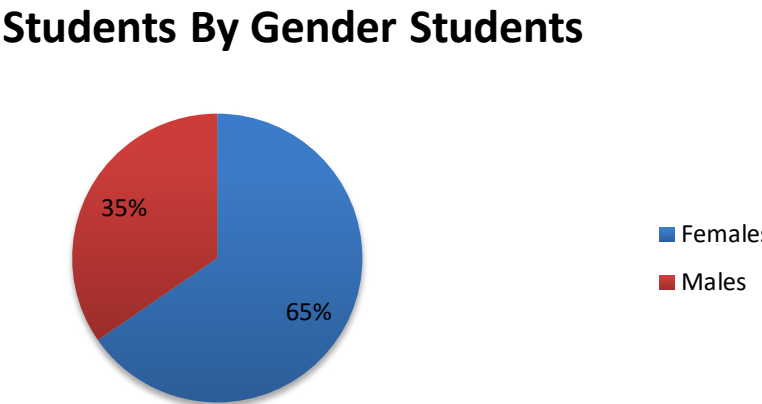
| STUDENTS BY ETHNICITY | | |
|-----------------------|-----|-----|
| African American | 93 | 18% |
| Asian American | 43 | 9% |
| Caucasian | 213 | 41% |
| Hispanic American | 145 | 28% |
| Native American | 6 | 1% |
| Other | 17 | 3% |



| STUDENTS BY GRADE LEVEL | | |
|-------------------------|----------|------------|
| | Students | Percentage |
| Elementary School | 195 | 38% |
| Middle School | 187 | 36% |
| High School | 135 | 26% |



| STUDENTS BY GENDER | | |
|--------------------|----------|------------|
| | Students | Percentage |
| Female | 338 | 65% |
| Male | 179 | 35% |



YEAR IN REVIEW

SMILE Teachers' Workshop August 24-25, 2016

This workshop presented SMILE teachers with the new curriculum theme "Great Inventors." The focus on this past years' curriculum was on the interdisciplinary field of engineering. The curriculum aimed to teach students how this STEM field has transformed the world in which we live. Teachers gained content knowledge through modules created for each school level (elementary, middle, and high schools) and were provided with training on a series of hands-on activities for implementation in their clubs.

SMILE Teachers' Workshop December 7, 2016

The SMILE winter workshop focused on preparation for SMILE's annual events. Elementary teachers prepared for the 5th grade Elementary Outdoor Science Adventure and 4th grade URI Ecology Day with pre-activity themes on habitats. Middle school teachers learned about bridges and pre-activities to prepare their students for a bridge building challenge. High school teachers focused on pre-activities and lessons to teach their students in preparation for a biotechnology and forensics challenge.

District-wide Family Science Nights November 2017

Every fall each district plans a wonderful event called "Family Science Night (FSN)." These events bring together SMILE students, their families, and community members. FSN gives students the opportunity to demonstrate and explain interactive science and math activities. SMILE personnel inform parents and students about college admissions and student financial aid. 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. This event serves as an engaging opportunity for students and families and boosts the confidence of our SMILE students.

Middle School Engineering Challenge Weekend. March 3-4, 2017

This past March, middle school students from seven districts came together to URI to work in mixed school teams on an engineering challenge. Students worked together in teams to design, build and test a truss bridge. Students became engineers, designing their bridges out of simple materials and then testing them for weight-bearing and environmental force on a shake table. Middle schoolers also experienced 'college life' with meals in the dining halls, a tour of the campus, and time in the recreation areas. A big Thank You to all of our URI student and faculty mentors, and sponsors who helped make this a wonderful Challenge Event.

High School Engineering Challenge Weekend. March 31-April 1, 2017

This year, high school students from seven high schools participated in the biotechnology and engineering high school challenge. For this challenge, students investigated a fictitious crime scene using biotechnology and forensic skills. These included DNA identification gel electrophoreses, fingerprint and clothing fiber analysis, and hair analysis. SMILE students got a real taste of college life. During the event students met with university students from science, math, and engineering colleges and Admissions staff, ate in the dining halls and visited the college recreation center.

The SMILE Program had a successful year and increased its reach to include Westerly School District. This year, three new clubs were started including Springbrook Elementary, Westerly Middle School, and Westerly High School. The success of The SMILE Program is due to the dedication of our teachers and students; collaboration with URI, school districts, local communities and mentor volunteers; and support from private foundations, corporations, and donors.

5th Grade Elementary Outdoor Science Adventure. April 7-9, 2017

This year marked the 22nd Annual EOSA event. In early April, 5th grade elementary students attended a 3-day 2-night environmental science camp at URI's W. Alton Jones Campus. URI student mentors led SMILE students through a series of outdoor field-studies where students had the opportunity to visit and explore different habitat types and learn about habitats. The URI student mentors were wonderful role models to SMILE elementary students, sharing their stories and career aspirations during evening campfires and cabin talks.

4th Grade URI Ecology Day April 13, 2017

On April 13th, SMILE 4th grade elementary students attended the second annual SMILE URI Ecology Field Day. SMILE students spent the day with URI graduate students from the College of the Environment and Life Sciences participating in hands-on environmental activities. Throughout the day students rotated through different areas of the campus and learned about life and environmental sciences. At the greenhouse, they learned about plants and got to transplant and take home their own tomato plant. In the Center for Biotech and Life Sciences, students took part in a hands-on marine life lesson. In North Woods, students took a hike to observe the biodiversity in the area and explore the life in a vernal pool. The focus of the day was to introduce students to a variety of science and environmental careers and provide them with exposure to a college campus.

SMILE Students Design & Implement STEWARDSHIP Projects

This spring, 25 SMILE clubs participated in Environmental Stewardship Projects. Thanks to grants from NOAA B-WET SMILE students were provided with the opportunity to participate in a community stewardship project and/or design and implement a stewardship project on their school grounds. Projects from this year included school gardens, bird house/nest building, cleaning up school grounds, beach cleanups, and a stone pathway among others. These projects instill in SMILE students a sense of responsibility and stewardship towards the environment and community. SMILE is especially proud of its students and the wonderful work they have done for their schools and community this Spring.

