

A STEM PROGRAM

SMILE

Science and Math Investigative
Learning Experiences

Newsletter
Volume 28, No. 2 March 2022

*28 Years of Service **

SMILE Middle School students from around the state rose to the Challenge at this years Middle School Engineering Challenge.



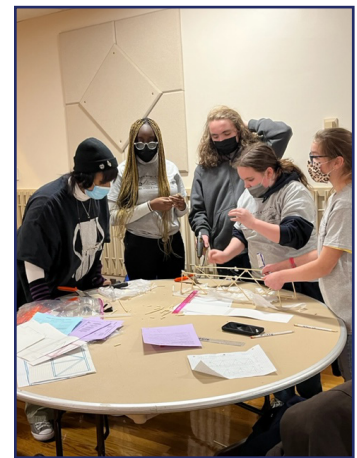
MIDDLE SCHOOL ENGINEERING CHALLENGE

On March 4th, 98 middle school students from 6 districts across the state came to the University of Rhode Island to participate in a Bridge Building Engineering challenge. The day started with a presentation by the Department of Transportation highlighting how they maintain all 779 bridges in Rhode Island. Afterward, the students began their build using blueprints generated in their after-school club meetings. Although the students were hard at work, they were able to tour the URI campus as well as attend a demonstration on earthquakes. The day ended with the students testing how much load their bridges could hold without breaking. The record for the day was 75 pounds.

“I got to have learning opportunities that challenge me and give me more knowledge.”



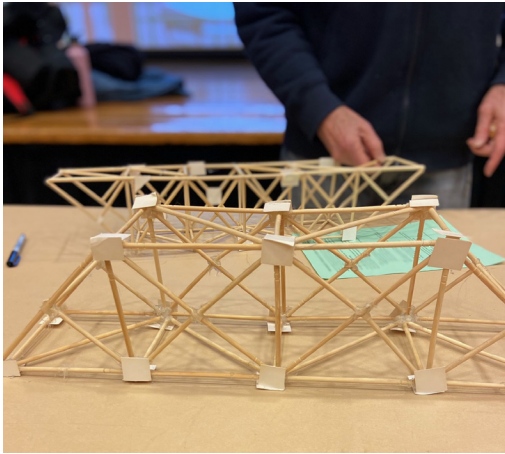
“I wish I could just rewind today and do it all over again.”



“Being a part of SMILE is giving me a road to success and future accomplishments.”

“I love building things, and making memories.”

MIDDLE SCHOOL ENGINEERING CHALLENGE



“Today was a blast. Being here today really sparked my love for learning.”



CLUB UPDATES

Citizens Memorial Elementary School, Woonsocket

James Bucci, Jodi Michienzi
By Citizens SMILE Club



-SMILE is awesome because we get to do fun activities that we don't do in class. We get to learn about Science and study Engineering

Jamie Fassah and Izabella Robichaud

- I like that we get to do a lot of fun activities and learn about what type of Scientist we would like to be when we grow up! This will help us in High School and College.

Jose Peralta and Jabriel Caban

-We do cool experiments and fun activities. The bones were so much fun we didn't realize! We also met many new friends.

Angelika, Serenity Jade Frenanadez, Karla, and Marvi

- We like learning about Science and how math is part of it. It is a fun club after we are done with school. The fun activities help us stretch our brains!

Zachary Peaslee, Sarvagya Mandava, Dante Young, and Aneury Calderon Sano

-SMILE lets me learn about things I never even knew about. Animals, Jobs, bones, and how the food chain works! We get to do activities we don't do in school. I like learning about the environment and Scientists. We love the engineering part of the club. The friends we made are also great. Everyone in the club is kind and respectful!

Sophia Elese Doire, Fatoumatta Drammeh, and Lily Hennessy Mueller

CLUB UPDATES

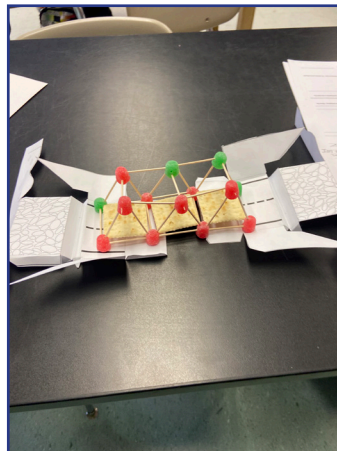
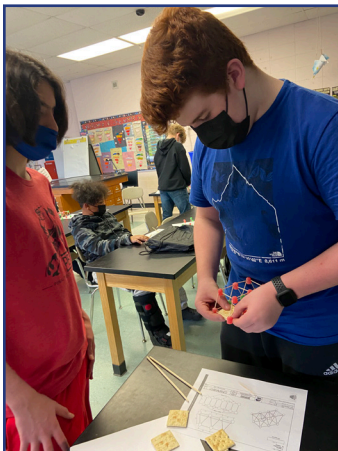
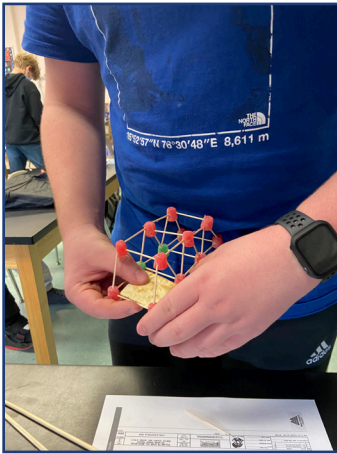
Curtis Corner Middle School, South Kingstown

Valerie Light, Anna Stewart-Viera

By Curtis Corner SMILE Club



The Curtis Corner Middle School SMILE Club has had a great year so far! Our visit to the URI school of Oceanography for a fantastic field trip where we got to observe the biological, geological, chemical and physical oceanography studies taking place at the Bay Campus was beyond our expectations. The focus this semester was bridges. We learned through experimental design how strong a bridge can be when using the truss design. The connection we made with all the SMILE clubs at the Engineering Challenge Day at URI Kingston Campus was an incredible experience post pandemic and was so nice to meet and team up with middle schoolers from around the state. Everyone is very grateful to be able to have SMILE club in person this year!

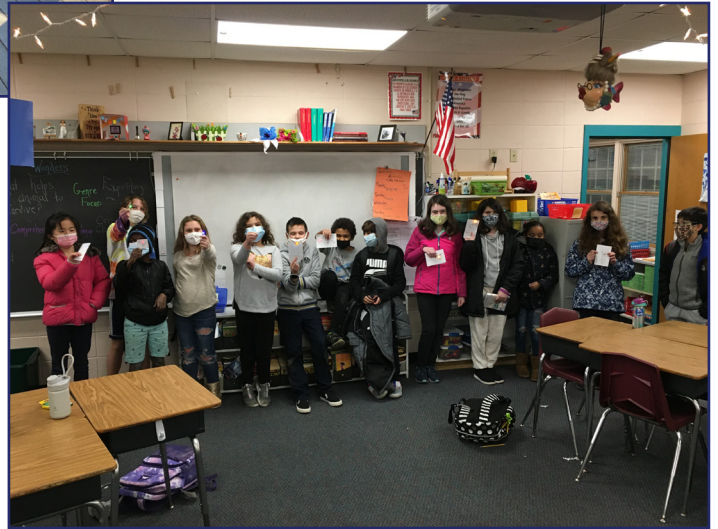
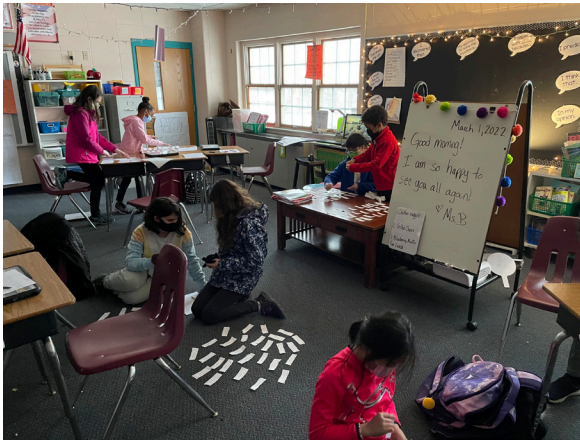


CLUB UPDATES

Peacedale Elementary School, South Kingstown

Victoria Wagner, Katie Nerstheimer

By Peacedale SMILE Club



This year, our club has been able to meet in person to explore different engineering and technology topics. In the first half of the year, our engineers designed and tested boat models, using foil, a particularly favorite activity in the whole club. As one fourth grader said, "I loved when we built the boats out of the foil to see how many pennies it could hold until it sank. It was really cool!" Other student engineers and ecologists have really enjoyed collaborating with peers to build a giant geodome after creating a model using simpler materials. Even though "it was hard, fun, and challenging, we did it as a team to solve the problem!" During our club meetings, students are constantly problem-solving and developing creative solutions to the complex questions presented. More students have enjoyed classifying ecosystem features as biotic or abiotic and creating paper circuits to illuminate LED bulbs. Within the past few weeks, students have also researched and presented about different scientists, broadening their understanding of who a scientist is and what topics scientists study.

Besides the academic topics, the students in our club have agreed that their favorite part of SMILE is meeting new people, learning about their teachers' and peers' hobbies outside of school, and, of course, the snacks. It has been an invaluable experience to introduce students to new science topics, but it has been even more amazing to see new friendships blossom and students' confidence in themselves spark and grow too. We are excited to learn even more this year -- about science and about each other!

CLUB UPDATES

Thompson Middle School, Newport

Candace Lewia

By Thompson SMILE Club



SMILE has faced some challenges the past couple of years but one constant has been a dedicated group of students who meet every Wednesday to complete an interesting and fun challenge. These challenges require students to use the engineering design process to figure out solutions to real world problems. For instance, one of our first tasks was to create a locker organizer from scrap materials. Other examples of challenges included creating boats, cranes and bridges. It is exciting to see how, when given the same criteria and materials, all groups designed and created products that were all very different and innovative. TMS students were also lucky to attend a field trip to the botanical gardens at Roger Williams Zoo. What an awesome experience for the students to check out the amazing greenhouses and learn about some ways in which plants adapt to their surroundings.

Much of what we had worked on in the first half of our club meetings prepared us for the URI challenge day. On March 4th, students traveled to URI and kept busy with the bridge challenge which required them to design and create a bridge that had a low mass but could hold a minimum of 40 lbs. Students were placed in teams consisting of students from different middle schools across RI and had to practice communication skills as well as problem solving strategies to complete this task. Besides the bridge building, students were given a campus tour as well as indulged in two of URI's dining halls.

One of our 8th graders (Kira P.) was part of the team that came in 1st place out of 17 total teams!

As you can see, Thompson SMILE students have been keeping busy!

SCIENTISTS IN THE FIELD



On March 9th, Central Falls High School SMILE students visited Roger Williams Botanical Garden for a hands-on experience learning about plants and invasive insects. This science field trip exploration was made possible through Dr. Evan Preisser and National Science Foundation.

PARTNERSHIPS

We would like to thank the following list of funders that have allowed SMILE to grow and continue to provide high quality after-school STEM programming to Rhode Island students:

CENTRAL FALLS

Calcutt 5th grade
Kelly Sierra
Molly MacDonald

Calcutt Middle School
Molly MacDonald
Kelly Sierra

Central Falls High School
Charles Fisher

NEWPORT

Thompson Middle School
Candace Lewia

Rogers High School
Elizabeth Letourneau
Brooke Anderson

SOUTH KINGSTOWN

Peacedale Elementary
Victoria Wagner
Katie Nerstheimer

Curtis Corner Middle School
Anna Stewart-Viera
Valerie Light

S.Kingstown High School
Christina Antaya-Dube
Amanda Varone

WESTERLY

Westerly Middle School
Carolyn Michaud
Robert Brennan

Westerly High School
Lesley Fastovsky

WEST WARWICK

Horgan Elementary School
Maria DePalma
Amy Horne

Deering Middle School
Eugene Gallo
Christopher Baccei

West Warwick High School
James Owen
Christopher Baccei

WOONSOCKET

Citizens Elementary School
James Bucci
Jodi Michienzi

Woonsocket Middle School (2 clubs)
Michaela Gormley
Ian Chernasky
Michelle Morin
Jenn Hardy

Woonsocket High School
Brigette Hernandez
Ethel Locke

Anonymous

Amgen Foundation

American Honda Foundation

Arnold Lumber

The Champlin Foundations

Connecting For
Children and Families

Constellation, an Exelon company

Dominion

Dassault Systemes

The Gerald Claude Kirby Trust

Graphic Expressions

Holiday Inn South Kingstown

June Rockwell Levy Foundation

Nordson Corporation Foundation

Ocean State Charities Trust

Pfizer

Ramsey McCluskey Family Foundation

Red Sox Foundation

Schneider Electric

SPIE

Steere Engineering

Toray Plastics, America, Inc.

University of Rhode Island

van Beuren Charitable Foundation

Verizon Foundation

YMCA of Greater
Providence

Central Falls School Department

Newport School Department

South Kingstown School
Department

Walmart Foundation

Westerly School
Department

West Warwick School
Department

Woonsocket School
Department

We would also like to thank our Individual Supporters, who are vital in helping The SMILE Program to continue its mission

SMILE STAFF

Carol Englander
Director

Claudia Hodderson
Curriculum
Specialist

Jo Ann Basel
Assistant Director

Cheryl Swartz
Accountant

Kaitlyn Czap
Development &
Publications Officer

Samantha Johnson
URI HS Coordinator

URI RESOURCE FACULTY

Kathy Collins,
Vice President for
Student Affairs

ENGINEERING

Manbir Sodhi

COLLEGE OF ENVIRONMENT & LIFE SCIENCES

Larry Englander
CELS, Plant Sciences
Evan Preisser
CELS-BIO
Tolani Olagundoye
CELS NRS

BOARD OF DIRECTORS

John Peterson, President
John McCray, Vice President
Ruth Jarrett, Treasurer
Malcolm Spaulding, Board Member
John Riendeau, Board Member
Glenda Kirby, Board Member
Neil Nachbar, Board Member
Augusto Gomes, Board Member
Fran Alexacos, Secretary
Bill Koconis, Board Member

The SMILE Program

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