

Delran Cubs STEAM Up Summer

Coming Summer 2016!

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PSE&G SPARK Grant

“The PSEG Foundation supports programs that spark curiosity and build a continued passion for science, technology, engineering and math learning. We consider proposals from out-of-school time providers, including afterschool, summer and youth development programs, to develop new or enhance existing STEM learning opportunities for their students. Maximum grant amount is \$20,000. Organizations must apply online between July 6 – August 14, 2015 by 5:00 p.m. EST.”

Erica & Mary Jo submitted an application for Delran on August 12, 2015, based on an idea for a STEM summer program suggested by Kim Hickson, Principal at DIS.

We were notified that we were funded in the amount of \$5,000 on October 16, 2015.

STEAM Camp: **WHAT & WHY?**

Science

A summer STEAM Camp experience will give students the opportunity to engage in extended activities that connect and apply principles across the STEAM disciplines: Science, Technology, Engineering, Art, and Math.

Technology

Engineering

This highly focused and extensive experience would not be possible within the confines of the regular school schedule, so a summer camp setting is ideal.

Arts

Math

WHAT: Themes & Topics: Preliminary Plans

3rd Grade Focus: Life Science Engineering

4th Grade Focus: Earth & Space Science Engineering

5th Grade Focus: Physical Science Engineering

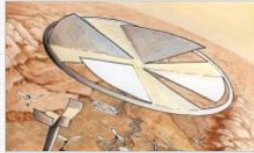
Boston Museum of Science's *Engineering is Elementary* curriculum

WHAT: Possible Curriculum Units

Engineering Adventures Curriculum Units

Choose from seven units with fun, hands-on engineering design challenges based on real events around the world

Flying Technologies



The Sky's the Limit

3-5



Grades

Afterschool

Aeronautical Engineering

Rockets and Rovers



Liftoff

3-5

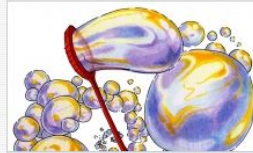


Grades

Afterschool

Aerospace Engineering

Bubble Wands



Bubble Bonanza

3-5



Grades

Afterschool

Materials Engineering

Aid Drop Packages



To the Rescue

3-5



Grades

Afterschool

Package Engineering

Earthquakes



Shake Things Up

3-5



Grades

Afterschool

Earthquake Engineering

Recycled Racers



Go Green

3-5



Grades

Afterschool

Green Engineering

Invasive Species



Hop to It

3-5



Grades

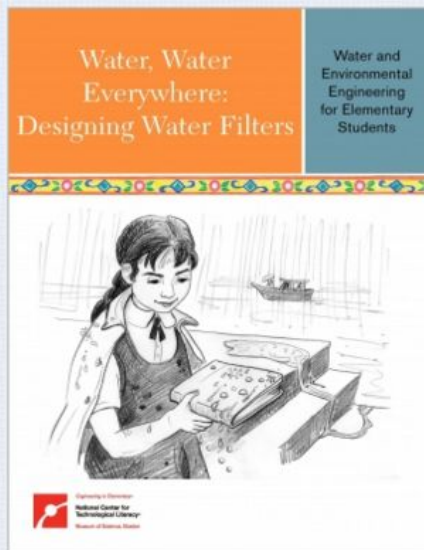
Afterschool

Mechanical Engineering

WHAT: Possible Curriculum Units

WATER

Water, Water Everywhere: Designing Water Filters



What's Included?

- One Storybook
- Preparatory Lesson
- Lessons 1-4
- Assessments



BUY THE UNIT

Unit at a Glance



Earth & Space
Science



Grades



Classroom

Engineering Field: Environmental Engineering

Unit Overview

The water you drink is clean and safe thanks to the environmental engineers who design and manage our water supply and water treatment systems. In this unit, the storybook *Saving Salila's Turtle* introduces students to the problem of water pollution—and to some solutions. Students will investigate the properties of filter materials, apply their knowledge of water, and think like environmental engineers as they plan, construct, test and improve their own water filters.

Are you considering *Water, Water Everywhere: Designing Water Filters* for your classroom? Curious about the resources and support the Teacher Guide provides?

Our teacher guides are designed to support you as you plan, prepare, and teach our engineering units. From introductory materials like background content, materials lists, and vocabulary lists, to lesson plans and duplication masters you'll find everything you need to confidently teach Engineering is Elementary.

WHO: STEAM Camp Target Audience

Summer 2016:

Students currently in Grades 3, 4, 5

20 students per grade; total of 60 students per week

2017 & Beyond:

Possible expansions K-12 depending on demand and the success of the program.

WHERE & WHEN?

Monday-Thursday 9:00 am - 1:00 pm

4 weeks July-August

*concurrent with the Extended School Year program

Located in our state-of-the-art science wing at DHS

Each week stands alone, with different themes/topics/problems

Students can register for one or more weeks

HOW MUCH: Registration & Cost

Preference will be given to Delran students - early registration deadline

Secondary deadline - first come, first served for anyone else

Cost is \$200 per week

*includes all materials/supplies and a camp t-shirt

*discounts given for multiple weeks or siblings

*comparable to the other STEM or science-themed camp in the area

*sliding scale for students with financial need (those who qualify for free/reduced lunch)

HOW MUCH: continued

Funding Sources:

PSE&G SPARKS Grant - \$5,000

Possible additional outside funding - TBD

Program Expenses:

*materials kits and curriculum resources

*teacher salaries - 3 teachers, plus one art teacher consultant

*t-shirts

More to come...

STEAM Camp planning is in the *very early stages*, as we just found out we got the PSE&G SPARK Grant about 2 weeks ago!

Erica & I would like to return to present to the Board of Education again in March, when we will have many more details finalized and will be prepared to share more information with you.