Summer Engineering Experience for Kids - Brooklyn, NY

Who: Brooklyn Public Schools and surrounding area students (3rd- 5th grade); targeting African American students. OPEN to ALL.

Where: P.S. 005 Dr. Ronald Mcnair. 820 HANCOCK STREET BROOKLYN, NY 11233

When:
July 22 – Aug 9, 2013

Cost: FREE - *MANDATORY ATTENDANCE AT PARENT ORIENTATION*

Hours:
8:30am- 3:30pm. FREE Lunch Provided

Overview:
The SEEK Program is designed to be a fun and engaging educational experience, led by NSBE engineering students and technical professionals dedicated to pursuing professional excellence and giving back to the community. The SEEK Program utilizes a hands-on design curriculum developed by SAE International (Society of Automotive Engineers). Campers will work in teams, using their knowledge to solve problems and create products while discovering the underlying math and science principles involved in these processes. Each week, the campers will take on a new project, culminating with a presentation and design competition that all parents are invited to attend.

This FREE three-week program will be open to students who are current 3rd through 5th grade. The program will be held at a local elementary school or middle school, and will include 100 students in each grade level, for a total of 300 students served per program. NSBE, SEEK employs fifty collegiate mentors to facilitate the program.

The camp is a commuter-based program for students, beginning at 8:30 am and ending at 3:30 pm daily. Mentors will reside on a near-by collegiate campus, arriving one week early for training and preparation.
SEEK Participants will:

- Be exposed to STEM through hands on engineering projects
- Be exposed to Collegiate STEM students
- Be exposed to the roles and responsibilities of engineers

Register Now: Parents/guardians should register their child, as soon as possible. Medical/dental insurance information is required on registration form. Acceptance to the program is on a rolling basis (first -come, first-served).

Go to: https://www.nsbe.org/seek.aspx to complete a registration form.

SEEK
summer engineering experience for kids

Summer Engineering Experience for Kids (SEEK) Brooklyn, NY:

SEEK Brooklyn is a free, fun, hands-on engineering program to help children develop math and science understanding that will help them in school and in a future career. Find out how and why to enroll, read more here.

"Through the diverse toys that students have been able to design, they gained a deep insight of what engineers do and how they work in teams in order to come up with the best outcome."- 2012 SEEK Detroit Mentor

"[My Daughter] loved every minute of [the program] and did not want it to end. One night at bedtime she was trying to design a solar fan, trying to think how it could be done. That is because of SEEK" – 2012 SEEK Parent

Our Children Need and will Benefit from STEM Skills

It is an undisputed fact that a significant disparity persists in the STEM (Science, Technology, Engineering, and Mathematics) participation rates among African Americans, as represented by data from the National Science Foundation (Hill, 2000; Hill & Johnson, 2004). African Americans continue to be marginalized in their preparation to compete with mainstream America for technical science and engineering jobs.

There is considerable national concern about America's current and future global competitiveness, arising out of the country's declining competitiveness in STEM fields. That concern has reached the highest levels of government, as exemplified by President Obama's Change the Equation initiative, a CEO-led effort to dramatically improve STEM education. The initiative is part of a broader White House Educate to Innovate campaign designed to lead American students to supremacy in science and math achievement over the next decade.

SEEK MISSION STATEMENT
To increase elementary school students' aptitude in math and science and their interest in pursuing STEM (science, technology, engineering, math) career fields, by having them engage in interactive, team-based engineering projects.

What is SEEK

The Summer Engineering Experience for Kids' program, (SEEK), is the National Society of Black Engineers' (NSBE) premiere solution to the horrible underrepresentation of African American students in the Science, Technology, Engineering, and Math (STEM) fields. The free, three week program is a STEM pipeline designed to expose African American children to STEM fields as early as the third grade. In addition, this exposure will be provided by utilizing NSBE members, who are young, Black, collegiate students, majoring in STEM fields. From its inception, NSBE's SEEK program quickly established itself as the largest STEM program for African American children and mentors in the nation!

SEEK was started in 2007 in Washington, DC with a grant from Battelle and has since expanded to 10 cities across the USA and has served more than 3,500 student's since it's inception.

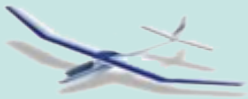
What Your Child Will Do and Learn with SEEK!

The SEEK Elementary School Curriculum

SEEK students learn science and math concepts related to three curriculum modules. Each week they construct a new "Toy" related to a new engineering topic as they learn about the engineering design process. At the end of each week, fun-filled competitions are held to test their projects.

Project 1– Glider

Students explore the relationship between force and motion and the effects of weight and lift on a glider. Students learn the relationships between data analysis and variable manipulations, and the importance of understanding consumer demands. The glider activity culminates in a book-signing event where each design team presents its prototype and the class presents its manuscripts to Mobility Press "representatives" and members of the local community. Provided by Society of Automotive Engineers (SAE) International, A World In Motion (AWIM)



Project 2 – Gravity Cruiser

Student teams design and construct a vehicle that is powered by gravity. A weighted lever connected to an axle by string rotates on its fulcrum; as the weight descends it causes the axle attached to the string to rotate, propelling the cruiser forward. Concepts explored include potential and kinetic energy, friction, inertia, momentum, diameter, circumference, measurement, graphing, and constructing a prototype. Provided by Society of Automotive Engineers (SAE) International, A World In Motion (AWIM)

Project 2 – Solar Car

Student teams will construct a Solar Powered Car using a predetermined kit. Each group will measure the speed of the car at different solar panel angles, track and record the speed of the car at different distances. Concepts explored will include voltage, current, solar power, motor and car body design. Provided by San Diego Gas and Electric (SDG&E)

To learn more about SEEK visit our website: http://www.nsbe.org/seek.