

# Elementary STEM Education: An Uncommon Plan

Barrington 220 is committed to providing a continuous culture of Science, Technology, Engineering and Math (STEM) education at all grade levels, from pre-K to 12. Programs like “Project Lead the Way” are an integral part of the curriculum at the middle and high school levels, and they align with the Board of Education’s strategic values. The district is preparing to bring that same caliber of learning to elementary students through an uncommon STEM initiative slated to begin next school year. QB talked with Dr. Brian Harris about the plans.

**QB: Why is STEM education important?**

**BH:** STEM education is growing rapidly across the world today. Engineering, science, and technology-related careers are in high demand. Teaching the essentials of STEM has typically been aimed at remaining competitive in the global market. STEM programs emphasize collaboration, communication, research, and critical-thinking in solving real-world problems. When students learn STEM, it not only prepares them for a potential future career, but also shapes intellectual development and their ability to problem solve.

**QB: How would the curriculum be integrated into the elementary level?**

**BH:** The goal is to develop and incorporate a STEM-based learning program into our elementary school day, so that all students would receive aligned, innovative STEM instruction each year.

Beginning in the 2015-2016 school year, a pilot program will be implemented in fourth and fifth grade classrooms at several Barrington 220 elementary schools. Each class will test out either LEGO robotics or Project Lead the Way curricula. During the first year, the teachers and administrators will determine which program is the most



A Hough Street School student works with robotics.

beneficial for our students. Moving forward, the selected curriculum will be introduced at all grade levels over the course of four years.

**QB: How is teaching STEM to elementary-aged children different from teaching middle or high school students?**

**BH:** Access to STEM programs at an elementary level raises interest, excitement, and motivation to continue learning about the scientific world and engineering practices. Studies clearly indicate that early and repeated exposure to STEM subjects is essential for cultivating both future interest and future aptitude in STEM subjects. The way our pilot program is designed, students will be introduced to STEM concepts through exploratory learning aimed to foster innovation, interaction, and discovery.

**QB: How is this initiative being funded?**

**BH:** The Barrington 220 Educational Foundation has been completely supportive of the STEM culture at the middle and high school levels. Just as they have funded Project Lead the Way at Barrington High School, and Gateway to Technology at our middle schools, the Foundation has enthusiastically embraced this project and will fund the start-up to our elementary initiative, too. The

STANFORD UNIVERSITY  
PSYCHOLOGIST AND BESTSELLING  
AUTHOR TO SPEAK AT BHS



Dr. Carol Dweck

Renowned Stanford University psychologist Dr. Carol Dweck has researched, identified, and defined critical skill sets for parents of school-age children. Her research points out that some of the best-intended efforts of parents, such as the well-intended over-praising of their children, may foster the opposite of a desired effect.

The bestselling author will speak at Barrington High School on April 27. Dr. Dweck will discuss her book, “Mindset: The New Psychology of Success,” and take questions from the audience. “Mindset” is an idea discovered by Dr. Dweck over decades of research on success and achievement. Teaching a “growth mindset” helps foster success in the fields of education, sports, business, and more. The event is sponsored by the Barrington 220 Educational Foundation and the PTO Presidents Council.

## Carol Dweck Event Details:

April 27, 2015

Time: Evening - TBD

Event is free to the public.

To R.S.V.P. go to:

<http://www.barrington220.org/CarolDweck>

Foundation will produce the hard costs to pilot the program and implement the selected materials and curriculum in years two, three, and four. The school district is partnering by allocating the staff and professional development costs. U



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