

Spring 2016

Lynbrook School News

A PUBLICATION OF THE LYNBROOK SCHOOL DISTRICT

BUILDING A Bright Future

As technology advances at an ever-quicken pace, the Lynbrook School District has been on the forefront of the STEAM movement, combining science, technology, engineering, the arts and mathematics to give students the skills they will need to be college- and career-ready. Armed with this strong foundation, students are being challenged to look beyond the borders of their classrooms, bridging the gap between book learning and authentic real-world experiences.

Beginning in the earliest grades, students are engaged in activities that encourage them to work collaboratively, think creatively and reason independently to solve problems and generate solutions. Elementary and middle school students have risen to the challenge

of designing bridges, engineering parachutes and writing code to program robots. Their scientific explorations have led them to build generators, gyroscopes and solar-powered ovens. At events such as career fairs, the young scholars interact with professionals in various fields, helping them better understand how the skills they acquire now in the classroom will be essential to future success.

At the high school level, design and engineering students are producing custom-made adaptive toys on 3-D printers, and graphic arts students are designing the packaging and marketing materials for the finished products. Virtual Enterprise students are launching their own businesses. AP Biology and AP Environmental Science students are working on field



Skills such as coding build a strong foundation for future success.

research that may help protect local estuaries. Music and art students are making personal connections with Broadway performers, New York Philharmonic musicians and world-famous visual artists. Senior seminar students are completing

internships in government, technology and business.

All across the district, students are amassing skills and experiences to fill their toolboxes with everything they will need to build a bright and promising future.



Teachers Michael Kunz (left), Paul Rotstein and Vincent Lentini brought attention to Lynbrook High School's innovative curriculum at the 2016 National School Boards Association Conference.

IN THE National Spotlight

Lynbrook High School students have been involved in a program so unique that their teachers were asked to make a presentation to fellow educators at the National School Boards Association 2016 annual conference in Boston on April 10.

The presentation, given by Superintendent Dr. Melissa Burak and teachers Vincent Lentini, Paul Rotstein and Michael Kunz, detailed a partnership that the school formed with St. Mary's Hospital for Children, in which Advanced Design and Engineering students used 3-D printing technology to create adaptive devices for disabled patients. Graphic design students teamed up with them to produce professional-quality branding materials, packaging and instruction labels for the finished products. This cooperative project gave students a chance to advance their design and engineering skills while improving the daily lives of the young patients.

"Our partnership with St. Mary's proved to be inspirational for other districts around the country," said Dr. Burak. "The design, development, packaging and branding skills our teachers provided their students put us on the map."



Scan this QR code to view a video about the St. Mary's Project.

Beyond the Boundaries of the Classroom

High school instruction is breaking free from the borders of the traditional classroom to give students authentic experiences that will help them prepare for careers in science, business, technology and the arts.

Making a SPLASH to Help Local Estuaries

Through a partnership with local environmental organization Operation SPLASH, Lynbrook High School AP Biology and AP Environmental Science students are conducting research that may help protect local estuaries. Combining forces with students from Mineola High School, the young researchers will be analyzing soil and water samples from the Bay Park and Cedar Creek waterways to study the effects of the Bay Park sewage treatment plant, which has no ocean outflow pipe, versus the Cedar Creek plant, which does. Through virtual meetings, students will create reports about their findings, which they will share with Nassau County government officials. The goal of the project is to help participants develop science engineering skills by becoming actively involved in local environmental issues.

Making It Big in the Virtual Business World

With an emphasis on college and career readiness, a Virtual Enterprise class was introduced into the high school curriculum in 2011. By developing, running and marketing their own virtual businesses, students hone skills in entrepreneurship, global business, problem-solving, communication, personal finance and technology. After developing a detailed business plan, this year's virtual entrepreneurs have launched a line of high-tech jewelry called Intelligems, which they have been



Art portfolio students met renowned artist Cayce Zavaglia (second from right) at her Chelsea opening.

marketing at Virtual Enterprise trade shows. One of the new product designs was produced using the high school's 3-D printers. Participants also meet with local business professionals to obtain further insights into the real world of business.

Connecting with Careers in the Arts

The high school chorus took part in a Disney educational workshop, working with Disney teaching artists to learn the vocals and choreography for the opening number of "Aladdin" on Broadway. They also attended the show and met with members of the cast. Interacting with Broadway singers, actors and dancers gave students an opportunity to learn firsthand about careers in the performing arts.

High school orchestra students explored the work world of professional musicians when they attended an open rehearsal of the New York Philharmonic and took a private tour of Lincoln Center. They also viewed a matinee performance of "The King and I,"

allowing them to connect more meaningfully with their own performance of a medley of songs from that show. The tour ended with a private Q&A with a group of pit orchestra musicians and cast members.

Students in the high school Video and Animation class stepped into the world of professional movie production at the Museum of the Moving Image's Behind the Screen tour. They learned how moving images are made, marketed and shown, while exploring careers in the moving-image industries. They created stop motion animations, recorded their own video flip books, viewed a demonstration on Foley sound editing and practiced dubbing their own voices over various movie scenes.

Seniors in the Art Portfolio Preparation class have been gaining personal insight into the working lives of practicing artists through the Visiting Professional Artist Series. They have been meeting virtually and in person with professional artists from around the world

to discuss their studio practices, techniques and influences, along with the challenges they have faced in the professional art world. Students attended the Chelsea gallery opening of internationally renowned embroidery artist Cayce Zavaglia, Skyped with Chicago artist Jennifer Cronin about her hyper-realistic graphite drawings, and met virtually with world-renowned muralist James Bullough from his studio in Berlin, Germany. Los Angeles tattoo artist and painter Luke Wessman visited the high school in person to explain how he uses social media to promote his creative brand. This year's Art Portfolio students have been offered more than \$1.5 million in scholarships.

Expanding Work Experience

Through the Senior Seminar internship program, seniors are gaining skills that will help them advance their education and be better prepared to enter the workforce. Participants are responsible for finding suitable internship placements in their chosen career paths, helping them better understand what it takes to be successful in the work world. Interns work closely with their mentors, logging a minimum of 50 hours at their job site. Participants forge connections to their community while gaining valuable work experience. Students interned this year in fields as varied as accounting, engineering, law, early childhood education, dentistry, marketing, real estate, fashion merchandising, catering, automotive mechanics, state government and law enforcement.



Orchestra students attended performances at Lincoln Center.

Making Middle School Career Connections

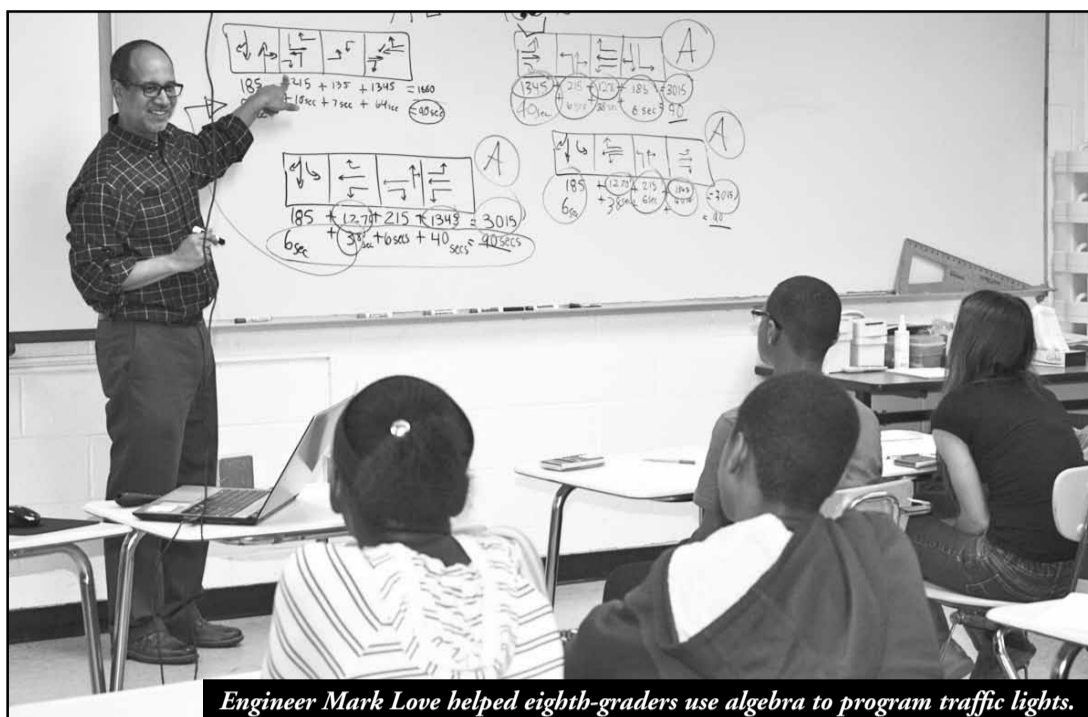
Each May, North and South middle schools join forces to host a career fair, to start students thinking concretely about the host of career options that await them. Local professionals from many walks of life speak about their educational backgrounds and skills and reveal details about a typical workday in their professions. They also talk about the most enjoyable and challenging parts of their jobs, giving students additional insights to consider when evaluating possible careers.

To get the most out of the experience, students complete an online career interest inventory, enabling them to explore careers that match their personality types. Guidance counselors speak to all eighth-grade classes to describe the careers of the presenting speakers, and distribute a packet of discussion questions to guide them in their inquiries. Students are also asked to complete evaluation forms to assess what they have learned from each presentation.

In addition to the annual career fair, both schools host other educational activities to help students make

meaningful and tangible connections between their classroom studies and real-world applications. For example, after a visit from traffic engineer Mark Love, all eighth-graders learned how he uses algebra in his profession to program traffic lights to increase traffic flow and decrease accidents. After explaining the basic principles of traffic engineering and helping students set up some equations, he sent them to work to program their own traffic lights. Students were tasked with computing timing of the lights to prevent cars from colliding, while increasing the traffic flow through a specific intersection from 1,400 to 1,450 vehicles per hour, a figure computed to significantly ease congestion.

Students were also able to gain more authentic career connections when both schools hosted their annual health fairs. In addition to gaining insight into healthy choices, they were able to envision firsthand the roles they might one day play as doctors, nurses, nutritionists, fitness instructors and other health care professionals.



Engineer Mark Love helped eighth-graders use algebra to program traffic lights.



Sixth-graders interacted with Molloy College nursing students at their school health fair.

Clearing the Path to Success

One of the main goals of a quality high school education is to prepare students for success in college and careers. Although planning for a promising future can sometimes seem overwhelming, Lynbrook High School guidance counselors and social workers are there to share their insights, help organize planning and support all students as they strive to become responsible, self-aware adults.

In addition to the individual counseling and support services students receive to aid with their college and career planning, a number of special events supply students and their parents with all the information they will need to plot a steady course. Beginning with orientation

programs for rising freshmen and their parents and culminating with the Senior-Parent College Planning and Financial Aid Night, students and their families are armed with knowledge every step of the way.

For students seeking entry into elite colleges, Selective College Night outlines specific details about what highly-selective schools look for in their applicants, addressing everything from essays, test scores and transcripts to extracurricular involvement and financial aid.

The SEPTA Transition Fair addresses the concerns of students receiving special services as they prepare to successfully navigate the

world beyond high school. Post-high school options such as employment, trade school, college and day programs are discussed. Workshops and booths include details about a number of state and federal programs, family support services, pre-vocational training and more.

Lynbrook students also benefit from the voice of experience when recent graduates take part in the Alumni Panel. The college students share valuable advice about everything from clubs, roommates and dining hall food to the rigors of academic life and the importance of taking personal responsibility for one's own work.

RIDING THE WAVE *of the Future*

Health care and technology are among the fastest-growing segments of the economy. Those prepared with a strong foundation in science and math will be one step closer to achieving success in top fields such as medicine, computer information, operations management and engineering. In the district's elementary schools, that strong foundation is being built in the classroom and reinforced with community and family support.

At elementary science fairs, students are going beyond the traditional baking soda volcanos. They are devising math formulas to calculate how many balloons it takes to lift a mass of one pound, building their own generators and exploring principles of aeronautical engineering and solar energy.

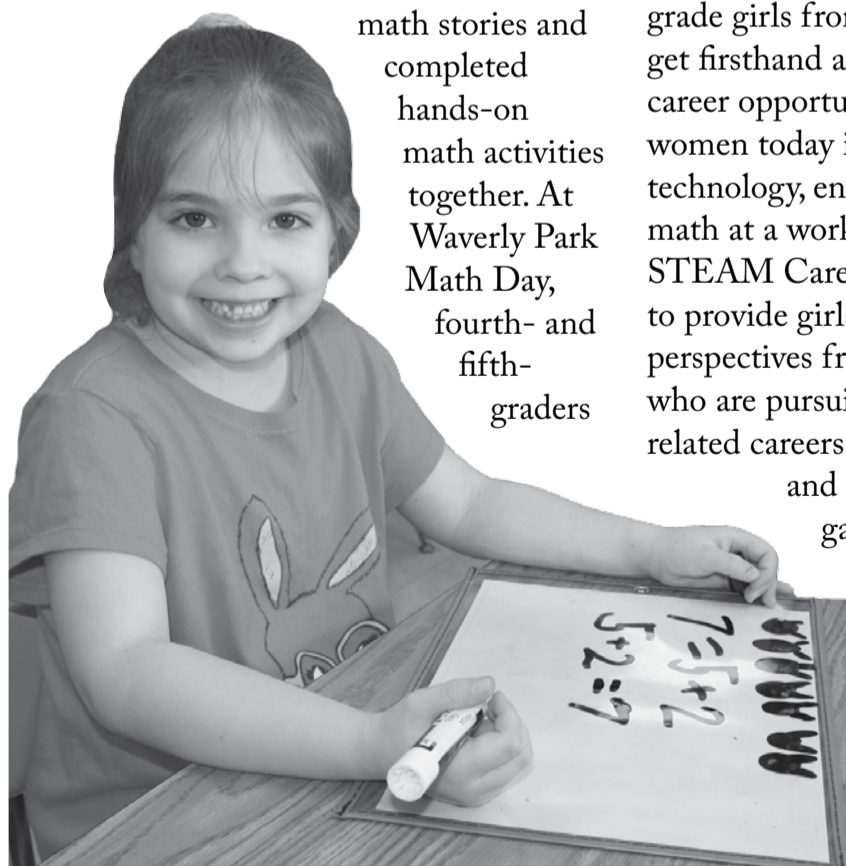
At West End School's Family Math Night, teachers volunteered to develop fun games for children in first through fifth grades to share with their parents. Activities were designed to encourage families to continue to play at home. Marion Street Math Night connected math to literature. Students in grades 1-3 invited a special grown-up to join them on a trip through 10 math stations, after which families

read interactive math stories and completed hands-on math activities together. At Waverly Park Math Day, fourth- and fifth-graders



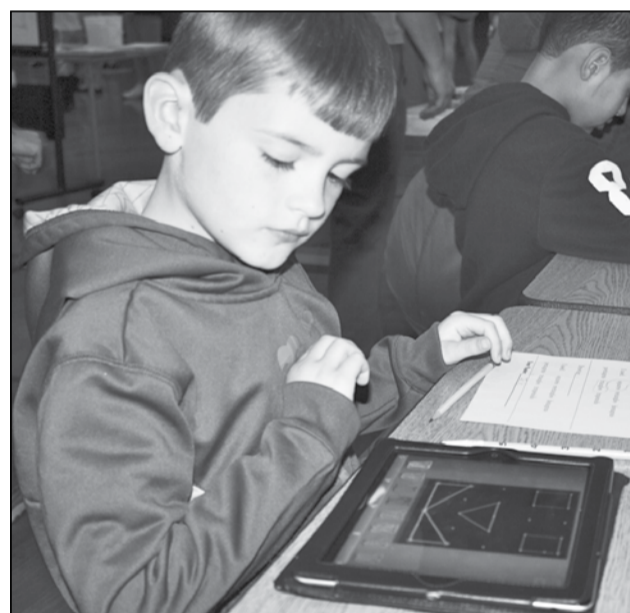
used the math concepts they have learned to create interactive games for students in first through third grades. The younger students practiced a different math concept at each game station.

Later in the year, fourth- and fifth-grade girls from around the district will get firsthand advice about the array of career opportunities that await young women today in the fields of science, technology, engineering, the arts and math at a workshop titled "Girls and STEAM Careers." The event was created to provide girls and their families with new perspectives from local female professionals who are pursuing rewarding STEAM-related careers in government, medicine and industry. Attendees will also gain insight from members of the high school Robotics Club and Science Research Program, as well as alumni who are pursuing degrees in industrial and biomedical engineering.



Lynbrook Public Schools
Lynbrook, NY 11563

NONPROFIT
U.S. POSTAGE
PAID
PERMIT No. 115
Lynbrook, NY
CAR-RT SORT



Communication Corner

Save the Date! June 21

10 a.m. KC Graduation @ HS
6 p.m. SM Graduation @ HS
8 p.m. NM Graduation @ HS

June 22

9 a.m. MS Moving Up
11 a.m. WP Graduation @ HS
1 p.m. WE Graduation @ HS
7 p.m. HS Senior Prom

June 23

6 p.m. HS Graduation @ MS

July 5

7:30 p.m. Board of Education
Reorganization Meeting @ AA



Lynbrook School News

A PUBLICATION OF THE LYNBROOK SCHOOL DISTRICT

BOARD OF EDUCATION

William Belmont, President • Ellen Marcus, Vice President
Heather Hanson, Secretary
Alicemarie Bresnihan, Lesli Deninno, Robert Paskoff, David Yaker
Melissa Burak, Ed.D., Superintendent of Schools