

# **STEAM Helps Realize the Dream**

Science, Technology, Engineering, Arts and Mathematics (STEAM)-based learning has been key in improving educational quality at our schools

The Miller Place School District has had an intense focus on STEAM offerings and opportunities for students in kindergarten through twelfth grade. Although STEAM experiences have been incorporated into classroom lessons and activities in the past, the District is committed to providing engaging classroom and extracurricular experiences that reinforce science and engineering practices through STEAM courses and events. These are unique, innovative learning experiences such as learning about how to keep bees alive and healthy and designing bridges out of KEVA Planks. Students are learning to think creatively and critically. STEAM learning incorporates fun activities, while teaching applicable skills necessary for future learning. The faculty and students are moving full STEAM ahead, and so is the administrative team.

For example, under the "T" component of STEAM (Technology), every school in the District has document cameras in either their art, science, technology, math, or elementary classrooms. Additionally, 3-D printers are accessible to students in both NCRMS and MPHS! Access to such technologies greatly expands the learning and teaching capabilities of the curriculum and instruction in our schools.

The success of STEAM is spilling beyond the classroom as well. Individual building STEAM nights and Expos were held this year at every school. In addition to activities and events, the STEAM nights also featured professionals from STEAM-related fields who engaged students, parents, and teachers in exciting STEAM discussions.

At the Andrew Muller Primary School's STEAM night, students participated in exciting teacher-led activities such as creating a hovercraft, building igloos out of marshmallows, making ice cream, and going on a dinosaur dig! Students also had the opportunity to explore the STEAM Expo Center where they learned about circuitry, robotics, how a green screen works, and even made slime! At the Laddie A. Decker Sound Beach School's STEAM Expo Center, hundreds of students explored various intriguing topics such as green screen technology, earthquakes,



making their own pinball machines, building towers from tennis balls, and creating rubber band race cars. The North Country Road Middle School's STEAM Expo Center was equally exciting, and included experiences in aerodynamics, construction, chemistry, electricity, physics, engineering, and programming. Students used cutting-edge technology to express themselves intellectually and creatively, pursuing their passion for the sciences and sharing their enthusiasm with parents, teachers, and peers.

STEAM education seems like a lot of fun because it is! It is also activating students' minds, and piques their interests in potential future careers in STEAM-related fields. The Miller Place School District is dedicated to enhancing educational experiences for our students, and will continue to move full STEAM ahead with this model of teaching!

SCHOOL BUDGET / ELECTION — REMEMBER TO VOTE May 15, 2018 • 6 AM to 9 PM • NCRMS GYMNASIUM

activities including

### A MESSAGE FROM THE SUPERINTENDENT



Dear Miller Place community,

This time of the school year is an exciting time for us. It's a time where we can look back at all of the great accomplishments that have already been made at the Miller Place School District, and it's a time where we can look forward to what lies ahead in the coming months. There's

wonderful awards programs scheduled, high school seniors are completing their college searches, and our athletes and performing arts students are in the midst of another successful season. I commend the students, as they have a propensity to constantly exceed our expectations in classrooms, labs, gyms, fields, and stages. I would also be remiss if I didn't mention our amazing educators and administrative staff who strive to improve the educational quality of education at our District, year after year.

The 2017-2018 school year has continued to bring to fruition what we imagined a STEAM-based education would look like. STEAM learning puts our District in a position to be forward-thinking by instilling essentials in students that they will need as they progress in their education and eventual careers. It's also fun; in this newsletter you'll read about Makerspace programs, where students can playfully apply hands-on learning. As educators, it gives us great satisfaction when our students show a willingness and passion for learning, something you'll see every day in our classrooms.

This school year has been a challenging one for our nation, as we struggle to cope with the senseless acts of violence plaguing schools. Every child should feel safe when attending school. One of the District's highest priorities is safety, and we will continue to devote resources to ensure a safe learning environment for our students, staff, and school community.

I invite you to read about all of the exciting things going on here in Miller Place, and I encourage your continued involvement in the education process of our children.

Thank you,

Dr. Marianne F. Cartisano Superintendent of Schools

### A MESSAGE FROM YOUR BOARD OF EDUCATION

With warm weather approaching, we are at the point in the school year where the tremendous achievements of the District's students are culminating into another successful year. Though only a few months remain, we know our students will not let up on their efforts, due in large part to the high academic standards set by our teachers, administrators, and support staff. They deserve much appreciation as they work tirelessly to help our students grow into mature, smart and kind, young adults. This effort is completed by the wonderful parental support at home, which remains vital to classroom achievements.

A hot topic in education is STEAM-based learning. STEAM programs set students ahead of the curve, and serve them greatly in their higher education and respective careers. As part of Miller Place's initiative, STEAM nights were held in each of our buildings. They were all well attended with great feedback. Miller Place hopes to continue STEAM nights.

The Board of Education wants to remind the community that there is no higher priority than the safety and wellness of the District's students. A child's daily concern—in fact their only concern—should be their educational and extracurricular activities. It is the District's responsibility to ensure their safety, and to do all that is possible to guarantee that they never arrive to the classroom with a thought or worry that they may be put in harm's way. The Board and District remain committed and focused on our students' wellness and the importance of mental health. Building positive connections, and making sure that students are supported for any of their social and emotional needs can go a long way toward academic and lifelong success.

Lastly we want to thank the community for their continued involvement in the budget process. Your participation is key, as you are helping build the future of your District. The Budget vote is scheduled for May 15, at North Country Road Middle School, and you are encouraged to let your voice be heard.

On behalf of the entire Board of Education, I thank the many community groups who support and enhance our programs. I look forward to the coming months of the school year and I applaud you for your continued support in the educational process.

Miller Place Proud!

Board of Education President Johanna Testa

# Makerspace Madness! The Innovative Learning Tool That is Driving STEAM Initiatives

### A look at how our school libraries are utilizing Makerspace labs to offer students engaging activities

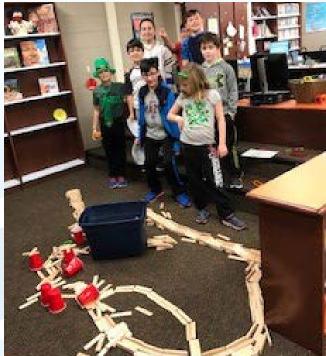
Everyone's riding the wave—the Makerspace wave! Makerspace is a facet of STEAM learning, and it uses various devices to do so. LEGOs, Tinker Toys, KEVA Planks and many more common toys and items are used to allow students to bring curriculum to life. Makerspace is truly astounding in its ability to let students have fun while activating different ways of thinking. Every one of our schools' libraries has its very own Makerspace lab, a place where students can participate in programs or attend on their free time!

Students at LADSBS have the opportunity once a week during recess to explore the library's Makerspace lab. Students can participate in the weekly challenge such as constructing a leprechaun trap using household items or working at one of the weekly centers. Nicole SanFilippo, LADSBS school librarian believes an Albert Einstein quote says it best about Makerspace: "The true sign of intelligence is not knowledge, but imagination."

During lunch periods at North Country Road Middle School, students come to the Library Media Center for more than just the chance to read or catch up on school work. On any given day, you can see students collaborating on how to build the tallest, strongest structure with KEVA Planks, or racing Sphero's around the space controlled by iPads. Sometimes you'll see students creating beautiful duct tape flower pens or using an iPad app to make the Dash robot play the xylophone. One student recently built a walking robot with the K'NEX Robotic building kit and another built a working "drawer alarm" with the Little Bits electronic circuits kit. From simple art projects to building with robotic parts, students are fully enjoying the opportunity to explore STEAM in all of its forms. "Our library media center has truly become a place where all of our students have the opportunity to have fun while exploring and learning at their own pace using resources that match their learning style," said Ronnie Farrell, school librarian.

At the high school, every Tuesday is designated as "Tinker Tuesday." The library puts out an item for students to "tinker" with during the day. "It is our belief that these activities allow students to create and express themselves with free-range thinking in a fail-safe environment where the end product won't be graded, judged or subject to a rubric," said Kate Lynch, school librarian. Some examples of the activities that have been executed on Tinker Tuesday are 3-D pens; Ozobots; Makey-Makey (a program where students make a keyboard using bananas, carrots and Play-doh); and a card-making station where students create thank you cards for soldiers that are sent them to them overseas. Ms. Lynch is convinced of the high level of student engagement with the Makerspace labs; one 10<sup>th</sup> grade student even admitted to not wanting to come to school that day because she did not feel well, but still came because it was Tinker Tuesday. "You just made my heart sing," Ms. Lynch said to the student.







# **AROUND OUR SCHOOLS**

### ANDREW MULLER PRIMARY SCHOOL

Makerspace is revolutionizing the way ideas are brought to life-from the educational sector all the way to the business world. It takes material from a two-dimensional book, or from a student's imagination and brings it physically to life in the form of a creation. Makerspace ideas are taking shape as we continue to develop 21<sup>st</sup>-century thinking. At Andrew Muller Primary School, the library is being transformed into a space where students can creatively engage with concepts presented in books using hands-on experiences. After hearing a story on a topic, students are given an idea or problem to solve. They work in groups honing



their creative, collaborative, and problem-solving skills. Once a week during their library class, the students read books and use KEVA Planks, K'Nex, LEGOs, and pattern books to construct people, places, or things that go along with the story.

Jacki Reduto, School Librarian, launched Makerspace units by reading an assortment of themed books. For example, during the "Fairytale Makerspace," she read *The Gingerbread Boy* by Paul Galdone, *The Gingerbread Cowboy* by Janet Squires, *The Story of the Frog Prince* by Nancy Loewen, *Goldilocks and the Three Bears* by James Marshall, *Goldilocks and the Three Dinosaurs* by Mo Willems, and *The True Story of the Three Little Pigs* by Jon Scieszka, among others. Afterward, students used their imaginations to solve challenges such as how to construct a bridge to help the gingerbread boy escape the fox, or how to build a house that the big, bad wolf couldn't blow down. Other units featured books such as *The Snowy Day* by Ezra Jack Keats, *The Mitten* by Jan Brett, *The Mitten* by Jim Aylesworth, and *Snowflake Bentley* by Jacqueline Briggs Martin. The students learned many snowflake facts, such as how every single one is unique. Using Tinker Toys, the students created their very own unique snowflakes in a very fun Makerspace activity!

### LADDIE A. DECKER SOUND BEACH SCHOOL

Jackie Robinson was one of the biggest heroes of the 20th century—he instrumentally changed the baseball landscape while becoming an influential leader in the civil rights movement. His story is one that should always be told, and whose lessons are transferable to all students in search of a role model.

Students at Laddie A. Decker Sound Beach School (LADSBS) recently had the chance to hear the inspirational story of the Brooklyn Dodgers legend. LADSBS hosted the Bright Star Children's Theatre, a performance group that specializes in curriculum shows for children. During the performance, professional actors dressed in elaborate costumes acted out Jackie Robinson's story, from growing up in rural Georgia to his ascent as a Major League Baseball Hall of Famer. Student volunteers from the audience also joined the actors onstage to learn about how to overcome bullying without fighting back, and at the end of the performance, students were made aware of the prejudicial struggles Jackie Robinson faced.

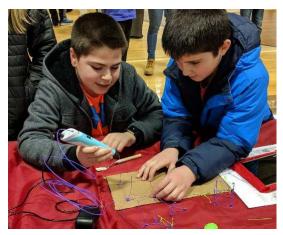


### NORTH COUNTRY ROAD MIDDLE SCHOOL

**North Country Road Middle School (NCRMS)** held its inaugural STEAM Night on Wednesday, January 17<sup>th</sup>. One of the goals of the night was to inspire the students of today to be the innovators of tomorrow—to go beyond the excitement of daily instruction in order to discover what students are curious about.

The highly anticipated event was expo-style—an open house of interactive workshops, activities, and challenges for students to experience the different disciplines of STEAM. The NCRMS School Improvement Team was charged with presenting this night of discovery, and welcomed teachers, local science and technology businesses, organizations, and community groups to collaborate with students and parents. Each of these organizations, with the help of several teachers from NCRMS, hosted a workshop in a classroom or an interactive exhibit in the gym.

Representatives from Tesla Science Center, Stony Brook Grads for Education and Outreach, Stony Brook Innovation Lab, Long Island Science Center, Microsoft, Brookhaven National Laboratory and Miller Place Robotics had exhibits in the gymnasium which included 3-D pens, Sphero Balls, VR equipment, diffractometers and robots. After students visited the expo, they were invited to participate with teachers, science club members (7<sup>th</sup> and 8<sup>th</sup> grade students) and representatives from Brookhaven National Laboratory and Microsoft who provided 12 hands-on activities, with over 100 students signing up in advance. Students were exposed to balancing art sculptures, Barre-Tique, Rube Goldberg Machines, circuitry, marble pipeline obstacle courses, Scratch





coding, Incredibox music creation, food science, paper towers, Arduino programming, nanotechnology, and Minecraft coding.

All in attendance for this night of exploration worked together to ignite the wonder of young minds and help our students discover STEAM subjects, concepts, and careers! We look forward to what's next in the varied fields of instruction and hope to expand the choices in the future.

### MILLER PLACE HIGH SCHOOL

Amyotrophic Lateral Sclerosis (ALS), also known as Lou Gehrig's Disease, is a neurodegenerative disease that claims 6,000 lives every year. Unfortunately there is currently no cure or effective treatment, however many organizations work hard every day to raise awareness and funds to help progress research for the disease. One of these organizations, Ride for Life, has been dedicated in

their efforts and puts a special emphasis on supporting families. They organize an event every May at which ALS patients ride their electric wheelchairs across Long Island as they are escorted by hundreds of students from local schools and community groups. The Ride has raised over \$4 million for research, patient services and awareness groups.

Miller Place High School (MPHS) recently held a special assembly to help raise awareness for ALS. The event featured a presentation by Ride for Life founder, Chris Pendergast. A local resident who is afflicted with ALS, Pendergast introduced students to Lou Gehrig's story, and discussed how Gehrig's perseverance and determination inspired Ride for Life. The students learned about ALS, and how students like themselves can help the cause. The assembly was part of the District's initiatives to mold students into communityoriented citizens outside of the classroom.



# ATHLETIC NEWS WINTER SEASON ATHLETICS BREAKDOWN



### **CHAMPIONS' CORNER**

- Cheerleading: Suffolk Country champions, D2-Medium Division
- Girls' Winter Track: League IV team champions

#### **TEAM HIGHLIGHTS**

- Boys' Basketball: 7-9 League VI record (6<sup>th</sup> place)
- Girls' Basketball: 5-11 League VI record (6<sup>th</sup> place)
- Cheerleading: UCA Nationals Qualifier

Jillian Paterson, Girls' Winter Track:

earned scholar-athlete awards

All-County honors

- Boys' Winter Track: 4x200m relay team placed 2<sup>nd</sup> in league championship race
- Girls' Winter Track: 4x200m relay team placed 2<sup>nd</sup> in league championship race
- Girls' Winter Track: 4x400m relay team placed 4<sup>th</sup> in league championship race

Charlie Shemet, Independent Girls' Swimming:

All six fall varsity teams earned scholar-athlete status

All independent athletes (Boys' Swimming and Fencing)

All-County and All-State honors, 200IM

Matt Hirdt, Boys' Basketball: All-League

- Girls' Winter Track: 4x800m relay team placed 2<sup>nd</sup> in league championship race
- Wrestling: 4-2 League VI record (3<sup>rd</sup> place)
- Wrestling: 5<sup>th</sup> place at league tournament
- Newfield/Miller Place combined fencing team: Finished 2<sup>nd</sup> in Suffolk County; team featured Miller Place 9<sup>th</sup> grader Leif Dalberg

#### **POSTSEASON AWARDS**

- Nice Savino, Boys' Basketball: Academic All-County
- Thomas Cirrito, Boys' Basketball: League VI Rookie of the Year
- Dani Humphrey and Hailey Syperski, Cheerleading: All-County honors
- Serena Mangino, Cheerleading: Academic All-County
- Ryan Grebe, Wrestling: All-County honors

#### **COLLEGE SIGNINGS**

- Tyler Ammirato, Marist College lacrosse
- Anthony Seymour, United States Military Academy at West Point lacrosse
- Anthony Filippetti, Marist College lacrosse
- Hailey Duchnowski, Long Island University Post lacrosse
- Briannagh Smith, Mercy College field hockey
- Ally Tarantino, Monmouth University field hockey

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HS Tri-M Music Honor Society participating in the HS STEAM Night.





8th grader Emily Stoessel's piece was included in the Colors of Long Island Show.



6th Grader John Caccavale; piece featured at West Field Mall.



8th Grade Giovanna Kalin; piece featured at West Field Mall.



8th Grade Kimberly Mascarella: piece featured at West Field Mall.



Heckscher Museum Long Island Best Young Artists Exhibition; Emma Walsh was selected to participate.



Andrew Muller Primary School Art Show, 3/8.



Laddie A Decker Sound Beach School and North Country Road Middle School in Division 1 SCMEA All-County ensembles.



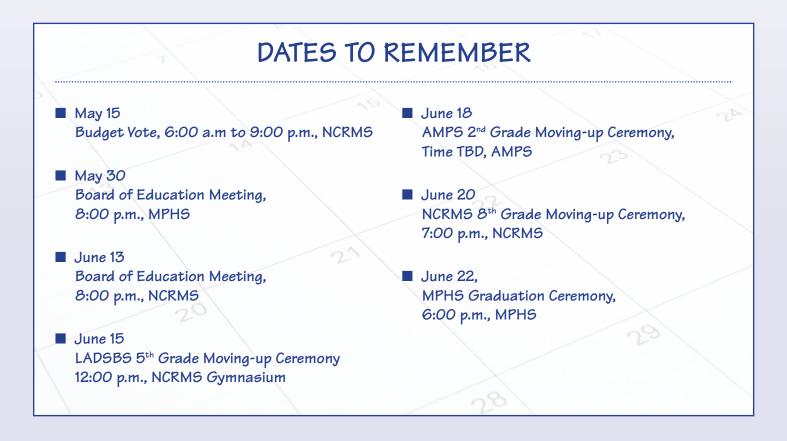
Parrish Museum Annual Student Exhibition. Gillian Cordes and Amanda Piecora were given Awards of Excellence.

# **REMEMBER TO VOTE!**

May 15, 2018 • 6:00 a.m. to 9:00 p.m. North Country Road Middle School

### **VOTER REGISTRATION**

You may register in the Office of the District Clerk, located within the Administration Building at 7 Memorial Drive in Miller Place, Monday through Friday (excluding holidays) between 9:00 a.m. and 3:00 p.m. Registration is for new residents or those residents who have not voted in the District or a Suffolk County election in the past four years. Proof of residency is required. The deadline to register to vote at the Administration Building is May 10, 2018, at 3:00 p.m. If you would like to register after May 10, 2018 for the May 15, 2018 budget vote, you must do so through the Board of Elections in Yaphank.



# MILLER PLACE UNION FREE SCHOOL DISTRICT

7 Memorial Drive, Miller Place, NY 11764

**Board of Education:** Johanna Testa, *President* • Richard Panico, *Vice President* Noelle Dunlop, *Trustee* • Keith Frank, *Trustee* • Lisa Reitan, *Trustee* • Jake Angelo, *Student Representative* 

Superintendent of Schools: Dr. Marianne F. Cartisano