Sayville High School's January Accolades

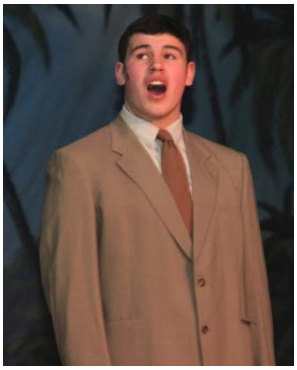
1. **Art Department**
   Samantha Stokes was a Silver Honorable Mention in this year's Cornell Fashion Design Competition.

   Samantha Mayo participated in the Bideawee Photography Competition (the voting is this week you can vote for her at http://www.bideawee.org/2015-Art-Expo-Photo-Contest)

2. **Guidance Department**
   Our Guidance Department has now met with every HS student and assisted them with their course selections for the 2015-2016 school year. These course selections can be seen on the parent portal.

3. **LOTE Department**
   French and Spanish classes celebrated "Three King's Day" on January 6th.
   - In the French tradition, the youngest in Mrs. Hoss' classes hid under a table with closed eyes to decide which student would get the next piece of cake in hope of the slice containing the "fève" (tiny plastic baby Jesus) baked within. The one boy and one girl receiving said slices wore a king's or queen's crown and were "in charge" for the day.
   - All ninth grade Spanish students in Ms. Rizzo-Shore's class got to wear crowns and sample authentic "Roscón" that she had purchased from a Hispanic bodega. Excitement ran high as cultures were compared.

4. **Math Department**
   On January 22nd, 17 students taking the Algebra II and Trigonometry Regents fulfilled their New York State requirement in Mathematics for a Regents Diploma with Advanced Designation. Congratulations to these students who put in countless hours of practice to achieve this goal.

5. **Music Department**
   
   The Sayville High School Music Department would like to congratulate Timothy Costorf for advancing to the National round of the Classical Singer Magazine's vocal competition. The regional round was held at Hofstra University and the competition was stiff. There were quite a few other contestants from all over the Island and New York City. Tim will be traveling to Chicago in May for the National rounds. There are monetary prizes as well as scholarships that can be offered from more than 85 colleges across the country. We're sure Tim will do wonderfully at the Nationals in May!!! Break a Leg Tim!!!!!

6. **Physical Education Department**

James Reilly will be competing in the New York State Championships in the 600 meter run. We also have the boys and girls basketball teams qualify for the playoffs.

7. **Science Department**

The Science Department's RISE program can boast not one but two Intel Semi-Finalists in Nick Cowan and Emily Faughnan.

8. **Social Studies Department**

Our Social Studies Department hosted a celebration of our 9th and 10th grades students' work on their National History Day Research projects. The evening was a tremendous success and we look forward to next year's second annual.

9. **Special Education**

The month of January brought in Brady Wilkens, Peconic Baykeeper to Sayville High School and Middle School as part of our ongoing Career Day Exploration. Students learned about careers related to occupations working in and around our waterways such as the Great South Bay. In addition to career options students learned about where our drinking water comes from, where waste water goes after we use it and how this has an impact on where they live on Long Island. Mr. Wilkens also introduced ideas for creating a Citizen Science Water Quality Monitoring Program and how students can become involved with the Waterkeeper Movement. Several students have already expressed an interest in getting involved with this program. We look forward to connecting with Brady Wilkens in the spring to be able to apply some of what we have learned as we explore the Connetquot River.

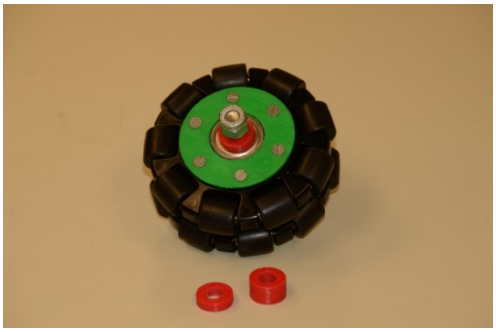
11. **Technology/Business Departments**

Every year students in the Sayville High School Robotics Team and their mentor, Mr. Coon, work to design and build a 130 pound robot in a six-week timeframe using a standard "kit of parts" and a common set of rules to compete in the First Robotics Competition at Hofstra University at the end of March. FIRST (For Inspiration and Recognition of Science and Technology) is a nation-wide program, founded in 1989 by inventor and entrepreneur, Dean Kamen, with an imperative, singular focus of exciting

more young people about the fun, accessibility, and importance of science and engineering as a career field.

The First Robotics Competition combines the excitement of a sport with the rigors of science and technology. Under strict rules, limited resources, and time limits, robotic teams from high schools across the country are challenged to build and program a robot to perform prescribed tasks against a field of competitors. It is as close to "real world" engineering as a student can get!

This year's challenge named the "Recycle Rush" is a recycling-themed game played by two alliances of three robots each. Robots score points by stacking storage bins on scoring platforms. To meet the challenge robots would be required to maneuver in very tight spaces to grasp and lift storage totes positioned closely together at the beginning of each match.



Omni wheel and shaft with the red and green wheel spacers designed by robotics team member Michael Nyman

The normal rubber and plastic wheels provided with the standard "kit of part" would not provide the level of maneuverability required to allow a robot to approach and lift storage totes placed in close proximity to each other. Students in the robotic club decided to utilize omni wheels (pictured below), that will allow the robot to easily move laterally in any direction with little effort for maximum maneuverability.

Making the decision to change from normal rubber based wheels to omni wheels posed a unique challenge due to the differences in the width across wheels hubs in relation to a wheel shaft designed to support rubber based wheels. To overcome this challenge Michael Nyman, a robotics team member, utilized 3D product design knowledge he learned in the Computer Aided Design (CAD) technology class to design custom spaces that would allow the onmi wheels to mount on a standards wheel shaft. After designing the 3 different wheel shaft spacers in SolidWorks Michel utilized the new 3D printer purchased to support CAD technology classes to print out the plastic wheel shaft spacers (picture below) used on this year's robot.

Michael Nyman with the omni wheel spacers he designed and printer on the MakerBot 3D printer