

# SCIENCE & ART CENTER

AUTHENTICITY | INDEPENDENCE | RESPECT | HONOR | GENEROSITY



Our Harborside Science and Art Center provides a platform and resources for students to engage in experiential learning, encourage unique interests, and examine their influence on the local environment. Our campus boasts beautiful shoreline access and 15 acres of wooded property, and we are grateful for the exceptional opportunity to utilize our surroundings as a forum for hands-on, project-based education. Our Living Classroom allows students to examine the interrelationship between facets of our local ecosystem, and how our local ecosystem impacts the world around us.

## STEAM Education

Our interdisciplinary education philosophy is best highlighted in STEAM (science, technology, engineering, art, math) programs. By integrating traditionally disparate ideas of inquiry, students recognize, understand, and appreciate the interconnectedness of our ever-evolving world and their potential for impact. Participants emerge confidently able to address problems that require multidimensional thinking.



### **Environmental Studies**

As they assume their roles as young stewards of our natural world, we seek to instill in our students a love and respect for nature, as well as a sense of **environmental consciousness and responsibility**. In our Environmental Studies program, students are immersed in nature and encouraged to explore humans' symbiotic relationship with the environment.

#### **Outdoor Education**

Our unique Outdoor Education curriculum focuses on the health of our environment, and the ways in which humans and nature interact and coexist. Students examine the trees on our campus through a scientific lens, learning concepts and vocabulary such as photosynthesis, transportation of nutrients, chlorophyll, roots, and root hairs, and studying a tree's parts and their respective functions on a cellular level. Young environmental detectives gather valuable and informative clues about a tree's present and fu-

ture, and how to track the history of an ecosystem through its layers.

Employing their five senses to gather information and form insightful hypotheses about the environment around us, learners further develop **observational**, **analytical**, **and critical reasoning skills** within nature. With nature as our classroom and laboratory, student scientists apply their learning to interpret and interact with their surroundings. Projects have included identifying and **locating** 

materials to construct a safe shelter, building and responsibly using a fire pit, and creating a hiking trail for future use in Outdoor Education.



#### Marine Studies

In our **Waterfront Program**, students observe ecological changes and document waterfront wildlife, harbor's water quality, weather patterns and marine anomalies. Over the course of the academic year, students experiment in the same body of water, using the constant variable to clearly indicate and more easily measure gradual changes.

Students witness firsthand **how an environment adjusts and adapts over time**, and specifically, our direct influence on its maintenance, health, and wellbeing. We hope to grow our Waterfront Program by building an observation dock for lessons, and creating a space for live-study of shellfish farming.



# Horticulture and Gardening

From sea to soil, students get their hands dirty in our Green Campus Project, experiencing firsthand the journey of their food from farm to table. Discussions of **sustainability**, **responsibility**, **and teamwork** impart in students a lifelong respect for where their food comes from, and the hard work and patience necessary to grow and sustain a healthy garden.



Further practicing our ability to mindfully coexist with our environment, our Native Navigation Program encourages students to collaborate and cooperate with nature. We embrace and appreciate the environment as it is, rather than what it could be for or provide to us after human adaptation/alteration. Learning skills such as foraging, safe fire building, and map reading, students acknowledge the value of our natural world for all its opportunity and adversity.





# Land Stewardship and Social Impact

Beyond our garden, students are involved in the upkeep of the wooded area across from our campus. After a visit and hike with LOLMS students, Deputy Commissioner of Suffolk County Dan McKay proposed LOLMS students become official stewards and caretakers of the land. Stewardship responsibilities include continued tracking of animals, care and maintenance of trails, and counting birds for the Audubon Society. To prepare for the colder months, earlier this year students helped to construct and distribute cages containing nest-building materials for birds and other creatures that have made the woods their home.

## Media and Technology

## Engineering

Our engineering program inspires students as creators, shifting their perspective from consumer to producer. A unique woodworking curriculum aims to revive interest in **craftsmanship and manual arts**, building a baseline of inquiry and skill as students transition into architectural studies. The hands-on nature of woodworking promotes problem-solving skills and encourages potentially new, abstract ways of thinking. Students are imbued with efficacy and empowered by personal agency; motivated to build and create with their hands, they are confident in their ability to address real world problems and fix what needs to be fixed.



#### Robotics

Experiencing the function of technology within other disciplines, students are driven to conceive, create, and innovate for positive change. In order to gain a deeper understanding of the importance of technology within scientific study, Love of Learning Montessori students are partnering with the Western Suffolk Board of Cooperative Educational Services (BOCES) Outdoor Environmental Education Program (OEEP) to create, design, construct and test Remotely Operated Vehicles (ROVs). Working collaboratively with the guidance of an OEEP instructor over the course of four days, learners will engage in problem-solving based learning through exploration of marine environments with their ROVs.



#### Good News Network

Good News Network has transformed from a temporary communication solution into a full-fledged media literacy and production course, presenting three news shows over the course of the academic year.

Good News Network (GNN) began as a collaborative community project during 2020 school closures, students eager to connect despite changes necessitated by the pandemic. Today, students experience in its entirety the process of developing media, required to plan, design, and execute their ideas across pre-production, production, and post-production. Creative and comprehensive, GNN explores media in its many aspects, including print, broadcast and digital media analysis, critique, technical video production (camera work, greenscreen, audio, and lighting).

GNN also encompasses photography, aesthetic principles, and technological fluency with a camera, skills students will



apply in their contribution to this year's yearbook design. Led by a veteran of television and news production and supplemented with visiting experts, GNN provides a rare insider perspective and behind-the-scenes look at the creation, dissemination, and reception of mediated content. Students learn not only how to generate compelling media, but how to critically evaluate media as an informed consumer.



# Journalism

During this program, young journalists explore critical ideas about how journalism can initiate and amplify impact through information accessibility. Students have proposed globally and locally important questions, and interviewed many prominent experts, including Dan Melleby, a former advisor to the Secretary of Defense on Russian-Ukraine relations, about the current war, and a lead educator at the New York Wolf Conservation Center about the federal protection status of wolves.

This program presents the opportunity for students to hone, apply, and expand further upon research and interview skills first developed in GNN, script and sketch writing experience priming learners to easily transition into journalistic writing, detailing news reports and current events. Due to their hard work and dedication, our students' journalism has garnered attention from Democracy Now! and News12 Long Island.



#### Creative Humanities

# Art Across All Disciplines

By appreciating and creating art, students reflect on prior learning, immerse themselves in the current moment, and look forward to future expression and inquiry.

Our school presents art not only as an avenue for creativity, but also as an explorative discovery process. Opportunities to create art are incorporated into every aspect of our curriculum, strengthening learners' comprehension, retention, and application of learning across all disciplines. Emphasizing the interconnectedness of art and science, students create art with beeswax, appreciating its beauty and artistic capabilities as well as exploring the scientific origins, properties, and purposes of the natural material. Cross-curricular connections and research aid in the transformation of technical information into meaningful knowledge, and from factual understanding into personal application. Interdisciplinary integration also improves confidence, decision-making skills, idea development and creative thinking, communication and problem solving, visual memory, and sustained attention.







#### Visual Arts

LOLMS utilizes the Reggio Emilia art instruction technique, using emergent, project-based learning to introduce concepts.

Curriculum encourages students to explore new curiosities and mediums, as well as further develop pre-existing interests. In lieu of pre-planned lessons, teachers observe students to mindfully select the most compelling subjects, projects, and ideas for their specific group of learners.

Topics of focus in art include diversity, inclusion, and equity, preservation and conservation, and respect for nature and wildlife. Students often create art as an homage to our environment, such as ab-

stract tree illustrations, pressed and hammered leaf cloth impressions, handmade nets, bark collages, and animal paintings.

Also emphasized are **cultural projects**, such as Japanese cord-making, painting in traditional styles to commemorate the Chinese New Year, and vibrantly decorated clay pots inspired by Esther Mahlangu, an Ndebele woman and internationally renowned South African artist. Creating art provides a unique opportunity to try new things without fear of failing, inviting learn-

ers to experiment with practices and ideas unfettered by concerns of what may or may not "work".

Student creations are annually displayed for our community to view and celebrate together. Instruction is accompanied and highlighted by museum field trips, guest speakers, and visiting artists, such as Toniann Bartscherer of the Huntington Public Art Advisory.



#### Colors of Us

Using a variety of skin toned paints, students used a process oriented drip and scrape method on their hearts. They finished these off by beading their chosen kind word along with some fun colorful beads.



#### Year of the Water Tiger

A cultural art lesson drawing from a photo reference and rendering in oil pastels. with a background in traditional Chinese colors of good fortune, red and gold.



#### Circle Weaving

Fiber arts with 4th-6th grade. Circular weaving seasonal pumpkns.

## Music And Performing Arts

Like art, music transcends the written word, and occupies a vital role in a well-rounded education.

Our music program introduces and educates our students on the creation and appreciation of various forms and structures of music, focusing not only on the finished product, but the **process of creating one's own musical composition**. With options including **ukulele**, **violin**, **piano**, **percussion and choir**, students are encouraged to use music as a means to express and explore themselves and the world around them.

Students discuss music they know, but more importantly, expand into music with which they are unfamiliar, studying types and methods of making music prevalent in and important to **other world traditions and customs.** During our study of Africa, our lens narrowed to investigate the origin, function, and importance of music in African cultures, and the permeation of music into other cherished social practices.

This year, student musicians have focused on rhythmic notation, music theory, basic composition, chord tablature, and instrumental arrangement. They are able to confidently and competently identify instrument components, describe instrument care and upkeep, and tune and play their chosen instrument; they have been practicing diligently in preparation for their Spring musical concert and hope to see you there.







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