The Village School

Montessori Education | est. 1977

Middle School
(12 to 14 years old)

The Middle School Program provides a challenging and supportive environment in which the adolescent may explore, question and formulate principles related to academic, personal and social growth. Critical thinking, decision- making and personal involvement are essential elements of learning in this intellectually stimulating environment.

A strong focus is placed on developing appropriate study skills that include effective note taking, test taking in a variety of formats, active listening, reading for meaning analysis, and learning to organize and manage time and information. Students utilize a three-week planner that outlines their assignments for this time period, providing practice with organization, planning and management of their time. Students learn to organize and review information to effectively study for quizzes, topic tests, midterm and final exams, all as preparation for high school and later in life.

Oral presentations that follow classroom research projects in History, Science and Language Arts, formal classroom debates and writing in a variety of formats help build self-confidence and strong communication skills, preparing students for all future school experiences. Reading and writing are closely integrated throughout all subject matter and emphasize detailed research and report writing skills.

Montessori Model United Nations is a wonderful elective program that provides interested students with the opportunity to serve as "delegates" of a given country as they learn about the workings of the United Nations, research their assigned country, write position papers for specific UN committee topics, and debate resolutions designed to solve global problems. A year of research, writing and preparation culminates in a four-day conference that involves collaboration with Montessori students from across the nation and around the world to address world challenges and propose solutions. Three days of conferencing and caucusing conclude at the United Nations, where students vote on the resolutions drafted by their fellow "delegates" during the conference.

Language Arts

The Middle School Language Arts curriculum comprises the areas of Grammar, Literature, Vocabulary, and Writing. Through these subjects, the students are exposed to and practice the concepts in a variety of manners, including small and large group discussions, note-taking through lectures, hands-on, experiential projects (independent and cooperative), presentations, and writing pieces.

Literature

Literature classes at the Middle School level are primarily discussion-based. Students are expected to read 5 to 6 novels per year, as well as one play and several short stories. Generally, the novels and stories share a common theme, several of which are directly related to the Science and/or History curricula. Students of a mixed 7th and 8th grade level group meet once per week to discuss assigned reading in greater depth, exploring relevant themes/motifs, symbolism, literary devices, author intention, character analysis/motivations, plot line, and inference. At the conclusion of each novel,

students complete one of the following: a test, a formal response essay, or a creative project as assigned by the teacher. Students are also sometimes exposed to film adaptations of the literature selections. The following is a compilation of reading selections that have been deemed appropriate for the Middle School level:

Novels/Plays

- *Fahrenheit 451* by Ray Bradbury
- *The Curious Incident of the Dog in the Night-Time* by Mark Haddon
- *Animal Farm* by George Orwell
- *Twelfth Night, The Merchant of Venice, & A Midsummer Night's Dream* by William Shakespeare
- *Night* by Elie Wiesel
- *Across Five Aprils* by Irene Hunt
- *My Brother Sam is Dead* by Collier & Collier
- *The Crucible* by Arthur Miller
- *Lost in Yonkers* by Neil Simon
- *The Evolution of Calpurnia Tate* by Jacqueline Kelly
- *A Separate Peace* by John Knowles
- *All Quiet on the Western Front* by Erich Maria Remarque
- *Lord of the Flies* by William Golding
- *Frankenstein* by Mary Shelley
- *The Chosen* by Chaim Potok
- *To Kill a Mockingbird* by Harper Lee

Short Fiction

- "A Sound of Thunder" by Ray Bradbury
- "All Summer in a Day" by Ray Bradbury
- "The Bet" by Anton Chekhov
- "The Curious Case of Benjamin Button" by F. Scott Fitzgerald
- "Everything that Rises Must Converge" by Flannery O'Connor
- "The Cask of Amontillado" by Edgar Allan Poe
- "A&P" by John Updike
- "Harrison Bergeron" by Kurt Vonnegut
- "The Mask of Red Death" by Edgar Allan Poe
- "The Story of an Hour" by Kate Chopin
- "The Lottery" by Shirley Jackson
- "The Lady or the Tiger" by Frank R. Stockton
- "A Small Good Thing" by Raymond Carver
- "Rip Van Winkle" by Washington Irving

Writing

Writing instruction at the Middle School level assumes many forms. Students study and practice formal essay writing organized in the standard five-paragraph format. During this period, they explore many topics ranging from those persuasive in nature to expository or informative. Students also develop response essays for the novels they have read. They learn about the writing process and practice following through with each of the essential outlined steps. They compose creative pieces in which they explore character development and dialogue, use an active voice, and develop setting, tone, and mood. Seventh year students are assigned a creative autobiography portfolio that is to be composed over the course of several months and comprises a variety of writing formats. During this time, eighth year students participate in NaNoWriMo (National Novel Writing Month). Focusing on meeting their independently chosen word count goals, students work towards completing a compelling novel by the

end of November. Subsequently, during the month of December, all students focus on editing and preparing their pieces for teacher submission.

Grammar

The primary goal in regard to Grammar is for students to be able to transfer their knowledge of concrete grammatical concepts to more abstract applications through their oral communication and writing pieces. This is implemented first through generating a basic understanding of the concept by means of a lesson that typically involves note taking and teacher modeling of the proper usage of the given concept. Then, students independently practice the concept through a relevant homework assignment, which leads to a larger-scale creative component, such as a group project to create a brochure, skit, poster, game, presentation, etc.

Because Grammar permeates many areas of a student's learning, it is revisited during Writing classes when the students are expected to reflect what they have learned in their writing. Topics covered during Middle School Grammar classes include the parts of speech, types of sentences (simple, compound, complex, compound-complex), clauses (independent & dependent), punctuation usage (commas, colons, semicolons, apostrophes), direct and indirect objects, appositives, participles, gerunds, & infinitives, sentence errors (fragments & run-ons), active vs. passive voice, homophones and common usage errors.

Vocabulary

Literature and Vocabulary are integrated through the selection of words that are drawn directly from the reading material. The manner of introduction to new vocabulary words varies. In some instances, students take notes on each new word and its definition, while at other times, they are provided the words in their context from the book and are asked to formulate definitions based upon the context given. Students are expected to explain their understanding of word meanings and to compare their thought process to that of their peers. It is through these discussions and practices that students familiarize themselves with previously unknown words. Emphasis is placed on applying newly learned words to student writing and speech, providing practice using new words with context clues and developing creative stories using the words appropriately.

Equally important to learning word meanings, is learning to use words correctly, according to their parts of speech, and acquiring a general understanding of word roots and parts. Through this instruction, students are able to gain critical knowledge that will not only serve to expand their vocabulary, but will also provide them with the necessary tools to decipher unknown words in the future. In addition to the aforementioned tasks, Middle School level, students are required to take Vocabulary assessments, which are typically administered on a biweekly basis. During review classes, students often practice applying the words through games and cooperative group activities.

History

History Curriculum Overview

The Middle School history curriculum is a two-year study of American History, designed to foster in depth study and hands-on involvement in research and creative projects. Oral presentation skills are practiced throughout the year as a follow-up to research activities. The course of study proceeds with the use of a variety of resources. Texts are used as only one type of resource; students learn to evaluate the degree of text objectivity and points of view as they read. Primary documents form a very important source of information for students, as they experience the writings and viewpoints of the people who shaped the time period they are studying. Visual materials, such as photographs, art of the specific periods, and documentary and other films provide additional dimensions for students to experience historical topics and events.

The format for the study of history involves presentation of background information on given topics, followed by class discussion and individual or partner research projects. This format provides students with opportunities to explore topics in-depth, using multiple resources. Students have the freedom to present their research in a variety of creative formats: PowerPoint presentations, creation of poster displays, three-dimensional representations, re-enacted interviews with historical personages involved in the topic, letters and journal writings, skits, and many others. All research projects involve presentations to the class, providing students with opportunities to teach and learn from their peers as they develop their presentation skills.

Present day foreign and domestic conflicts and challenges are explored within the larger framework of human decisions and patterns of behavior that impact the lives of others. Ethical questions and the changing role of government within the context of social, economic and political pressures and challenges are raised and discussed. This leads to a broader understanding of the forces that shape history and lead to higher order thinking in our students.

First Year of History Cycle
One year of the American History two-year cycle focuses on the first human settlements of the Americas, early European exploration and settlement of North America and its impact on native inhabitants, growth of settlement villages, growing identity of colonists as separate from their mother country and the Revolution that followed, development of the Constitution, the formation of a new government that met the separate and common needs of the newly formed states, expansion and the resulting changes in the nation, dissension and the struggle to keep a nation united as economic, social and cultural differences among geographical sections were tearing it apart, the Civil War that resulted, and the Reconstruction period.

Second Year of History Cycle
The second year of the cycle involves a study of the United States as an industrial, military, political, economic and social power within the framework of topics such as the rise of cities, growth of the Western United States, political and social reform during the turn of the 20th Century, US involvement in the affairs of other nations, financial growth, the Great Depression, the prominent role of government in the lives of its citizens during different time periods, the rise of dictatorships, America's involvement in foreign wars, the Holocaust, the Civil Rights movement, the Cold War and post-Cold War period. **Current events classes** also facilitate awareness of national and global developments, as well as provide opportunities to draw parallels between past and present human decisions and their outcomes.

Science

Science Curriculum Overview
Our Science curriculum follows a two-year cycle, with Physical Science as the focus during one year and Life Science the following year. Life Science and Physical Science are taught in an integrated manner and actively involve students in the process of observation on a microscopic and macroscopic scale, questioning information and ideas, developing new ideas and solutions, and experimenting with concepts being studied. Students work on individual and cooperative activities that provide opportunities to internalize new concepts, expand upon them through research, and creatively design and present them to their classmates. The importance of the scientific method as a systematic process in scientific inquiry is learned through practice, as are other manners of observing and making connections in science.

Physical Science
The Physical Science curriculum stresses the importance of observation and measurement through direct activities and experiments.

Topics of study include motion, forces, work and machines, energy, power, characteristics of waves and the electromagnetic spectrum, electricity and magnetism, the properties of matter, atoms and the Periodic Table, and chemical bonds and reactions. Students apply the abstract concepts being studied through projects they design and construct, including demonstrations of Newton's laws of motion, building roller coasters and constructing molecular models. Through the process of planning, constructing and testing students learn the importance of precise measurement and recording, the use of controls, distinguishing between dependent and independent variables, and drawing conclusions from observable and measurable results.

Life Science

The Life Science curriculum focuses on the overriding concept of adaptation as a framework in which all life forms are studied, from the simplest to most complex. The interrelatedness of biology and the physical sciences is stressed, as students learn about the life sustaining processes that take place in all cells. Classification of living organisms is studied within the context of the human need to organize and categorize organisms based, initially on observable characteristics, and subsequently including biotechnological findings. The study of the kingdoms of life involves an emphasis on levels of organization related to representative organisms in each group. The very concept of a kingdom of life is viewed, not as an absolute finality, but as a dynamic reflection of what science represents; changing information based on experimentation and new observations. Evolution is studied as change over time in response to changing environments and the possession of the necessary adaptations to ensure survival. The study of heredity and genetics provide a connection, on the cellular level, to the passing of inherited traits and the evolution of living organisms.

Lab work engages students in developing observation skills through a variety of means, observing directly with the naked eye, using compound and dissecting microscopes, making careful measurements and recording data objectively.

Mathematics

Math Curriculum Overview

The Middle School math curriculum includes Pre-algebra, Algebra, and Geometry. In all courses, students problem solve by investigating and exploring mathematical ideas and developing strategies for analyzing complex situations. In order to solidify their understanding, students analyze situations verbally, numerically, graphically, and symbolically. Student work independently, and in cooperative groups. They apply mathematical skills across content areas and make connections to real life experiences.

Pre-Algebra

In Pre-algebra, students extend their elementary skills and begin to learn Algebra concepts that serve as a transition to formal Algebra and Geometry. Students explore and develop confidence working with rational numbers and proportional relationships. They learn to think flexibly about relationships among fractions, decimals, and percents. Students learn to recognize and generate expressions and solve equations and inequalities.

Algebra

In Algebra, students develop fluency in working with linear equations. They extend their experiences with tables, graphs, and equations, solve linear equations and inequalities and systems of linear equations and inequalities. They generate equivalent expressions and use formulas. Students simplify polynomials and study quadratic relationships. Students use technology and models to investigate and explore mathematical ideas and relationships.

Geometry
In Geometry students develop understanding of Euclidean geometric structure and apply the resulting theorems and formulas to address meaningful problems. Students use experimentation and inductive reasoning to construct geometric concepts, discover geometric relationships, and formulate conjectures. Students employ deductive logic to prove theorems and justify conclusions.

Problem Solving
Middle school students participate in a Problem Solving class dedicated to investigating a variety of mathematical topics. Students work in an enquiry-orientated environment to construct an understanding of mathematical concepts by doing, creating, questioning, testing and verifying their ideas. Students may explore fractals and the chaos theory, the Konigsberg bridge problem, the Treasure Island problem, Caesar cipher, Rotational symmetry, logic puzzles, population modeling and predicting. They create math videos and lessons, utilizing and developing their problem solving skills and strategies in the process.

Field Trips
Adolescents, at this, more than any other developmental period, need to make relevant connections between their learning in school and the world outside. Topics of study in the classroom must be periodically experienced beyond the academic and abstract scope of study that takes place in school. Field trips provide experiences that connect, solidify and expand new and prior knowledge. They place students in a boader context of learning, cooperation and respectful interactions with people in a variety of social and educational settings. A minimum of two overnight trips of three to four days during the course of the school year, at the beginning and later in the spring, provide connections to specific areas of study and help develop bonding among peers.

Students visit a working farm, where they report for their assigned chores at daybreak and work productively and collaboratively throughout the day, as they directly experience the complexity of running a farm.

Part of our biology curriculum culminates in visit to a university marine science research station to learn, firsthand about the process involved in studying aquatic life forms in their natural environment. They learn to collect live specimens, set them up responsibly in the lab, observe, research and design an experiment to carry out during the course of their stay. Students learn about the ecosystem of a marine tidal environment from university instructors and graduate students. At the conclusion of their trip, they share their observations and conclusions fellow classmates, engaging in the process of communication within a scientific community.

Visits to historic locations in Boston, Philadelphia, Williamsburg, Gettysburg and Washington connect the places, people and events we study in class to a more concrete reality. As students listen to people who are knowledgeable about the historic site they are visiting and hear stories of the people who lived at the time, they experience history within a new and broader context.

Student trips to the MIT campus and the MIT Museum provide opportunities for them to engage in hands on projects, such as robotics programming, electric circuits, and building bridges.

Community Service
Through community service projects within the school and in the outside community students develop practical life and leadership skills while helping others. Service activities include coordination of our annual Pancake Breakfast to raise funds for national and international relief projects. This event is attended by families throughout our school community, with Middle School students engaged in all steps of the process. As the need has arisen, students have volunteered in food banks, organizing and

wrapping toys for children in foster care and created designs and sold t-shirts to raise emergency for tsunami survivors.

Serving others within the school community engages adolescents in relevant and purposeful work that builds a sense of belonging and value as members of their immediate classroom and school community. Household chores related to maintaining an orderly environment, care of plants and pets, serving as tour guides for school visitors, as well as conducting tours during Saturday Open Houses help students feel connected to their school in a positive and meaningful manner.