

Middle School High Ability Learner Program

Three levels of service for **High Ability Learners** are provided for identified middle school students in Millard Public Schools.

I. District-Level Service: This level of service consists of programs and curricula that are offered to students in all buildings, namely seminars and curriculum units in core classes. Seminar topics may change from year to year depending on availability of resources and content area expertise.

- **Orientation** - At the beginning of the school year, HAL students will meet to get acquainted with each other and the building HAL facilitator. An overview of the middle school HAL program will be presented.

6th Grade Seminars

- **Aquatic & Animal Studies**– Students travel to the Henry Doorly Zoo for this seminar to learn about oceans and marine life. This seminar includes an in depth and behind the scenes tour of the aquarium.
- **Biodiversity**- Students learn about similarities of animal and plant life and their impact on the earth's ecosystem. This seminar includes owl pellet dissection and flower dissection with a lesson on pollination.
- **Architecture** - This seminar provides a study of architectural styles and presentations by local architects.
- **Battle of the Books** – HAL students can choose to participate in this competition by reading books on a provided list and attending a local event to compete against students from other Millard middle schools.
- **Celebrate Creativity!** - Students attending this event at the Joslyn Art Museum choose from workshops presenting art, music, and drama activities sponsored by the Omaha Symphony.
- **Engineering** – Students will learn how forces, materials, loads, and shapes can impact the stability of structures.
- **Forensics CSI** - Students study crime scene investigative techniques and learn how science can help solve crimes.
- **Genetics** – Students will be introduced to principles of genetics. This includes learning about punnett squares and polygenic pedigrees to document how traits are passed from one generation to the next.
- **Quiz Bowl** - Students attend a local event to compete within a variety of academic topics against other Millard middle school students.

7th Grade Seminars

- **Battle of the Books** – HAL students can choose to participate in this competition by reading books on a provided list and attending a local event to compete against students from other Millard middle schools.
- **Celebrate Creativity!** - Students attending this event at the Joslyn Art Museum choose from workshops presenting art, music, and drama activities sponsored by the Omaha Symphony.

- **Ecosystems and Habitats** - Students travel to the Henry Doorly Zoo for this seminar. Rotations include an ethogram study of gorilla behavior, a tour of the conservation center for research, and rotations at both the Madagascar exhibit and the Desert Dome.
- **Engineering** – Participants will use their math skills and higher-level thinking skills to complete building activities related to engineering.
- **Forensics CSI** – Study crime scene investigative techniques and learn how science can help solve crimes. Guest speakers enhance the experience with visual presentations.
- **Genetics** – Students will learn about human genetics and inheritance of blood. They will perform a DNA extraction lab and participate in activities that demonstrate random selection of genetic traits.
- **Quiz Bowl** - Students attend a local event to compete within a variety of academic topics against other Millard middle school students.

8th Grade Seminars

- **Advanced Forensics** – Students will use skills of observation, problem solving, technology, medical science, mathematics, and communication to study the field of forensic science.
- **Advanced Genetics** – The seminar will lead students in an investigation of human genetics, inheritance of blood types and color blindness.
- **Battle of the Books** – HAL students can choose to participate in this competition by reading books on a provided list and attending a local event to compete against students from other Millard middle schools.
- **Celebrate Creativity!** - Students attending this event at the Joslyn Art Museum choose from workshops presenting art, music, and drama activities sponsored by the Omaha Symphony.
- **Engineering Day at UNL** - Students visit the University of Nebraska - Lincoln campus and meet with UNL College of Engineering students to learn how forces, materials, loads and shapes can impact the stability of engineering. Students also can participate in a discussion panel with University students.
- **Mock Trial** - Students spend their first day touring the federal courthouse and working with local attorneys to acquaint themselves with the process of a jury trial. On the second day, students prepare and present an actual mock trial case.
- **Quiz Bowl** - Students attend a local event to compete within a variety of academic topics against other Millard middle school students.
- **Conservation Seminar at the Wildlife Safari Park** – Students will explore similarities and differences of animal and plant life of prairie, woodland, and aquatic biomes at Henry Doorly Zoo’s Wildlife Safari Park.

II. Building Level Service: This level of service consists of programs offered to students at the building level. These can include clubs, contests, and competitions. These opportunities may vary per middle school, but could include some of the following:

Acting Workshops	SAT/ACT Vocabulary Building
Drama Club	Quiz Bowl
Science Club	Writing Club
Game Club	Math Counts
Craft Club	History Day
Youth-2-Youth	Language Club
John Hopkins CTY	Computer Club
Spelling Bee	Chess Club
Photography Club	Care Club
Volunteer Club	Yearbook

III. Classroom-Level Service: This level of service is provided in the classroom in a heterogeneous environment. Differentiation is an approach to planning and teaching that addresses the needs of all learners. Differentiation involves varied approaches to curriculum, instruction and assessment. Educators adapt content (what is taught), process (how it is taught), and product (what the student does) to the unique learning needs, readiness, interest and learning style of each student.

Curriculum Units:

Language Arts: Students may qualify for participation in the middle school HAL language arts program through previous HAL identification and/or recommendation. The program consists of curriculum extensions based on the existing language arts curriculum in reading nonfiction, writing, reading literature, and grammar that is delivered as a pull out model also incorporating Depth & Complexity Questioning and literature circles.

Accelerated Math Courses: Students qualify for middle school accelerated math courses with qualifying scores on Millard’s Mathematics Placement Test and the MPS Algebra Aptitude Assessment given in the 5th grade at the student's elementary building. In addition, elementary buildings administer the MAP Growth assessment three times per year which provides placement data. NSCAS results are also reviewed, as well as teacher recommendation. (The MPS Algebra Aptitude Assessment measures aptitude, a prediction of a student's readiness to learn algebra. This aptitude test has proven to be a better predictor of appropriate placement than previous methods.) The accelerated math courses are as follows:

- **Integrated Math II:** Students will study operations of fractions, decimals and integers through the study of algebraic equations and expressions. In addition, students will study two-step equations and inequalities and theoretical/experimental probability. Application of percents, ratios, proportions, and two- and three-dimensional geometry will also be studied while comparing measurements, applying mathematical formulas, and analyzing data.

- **Integrated Math III:** Students will learn to solve multi-step and linear equations and inequalities using rational number operations (pre-algebra applications). They will also study number theory, exponents, square roots, geometric concepts and relationships. Application of real number operations, data representation, and proportions will be extended from Integrated Math II. Justification and application of the Pythagorean Theorem will also be learned.
- **Algebra I:** Students will explore linear, quadratic, and exponential equations in depth. They will also study probability concepts as an extension of the middle school courses: Integrated Math II and III. Algebra I is designed for students who have a strong understanding of the basics of arithmetic, demonstrated algebraic readiness, and who understand mathematics in a more abstract form.
- **Honors Geometry:** Students learn traditional geometric facts, applications of those facts, and the axiomatic method used to derive those facts. Students will apply algebraic skills to geometric concepts and build upon previously learned mathematical concepts. This course includes proof of geometric theorems and descriptive statistics topics such as measures of central tendency, dispersion, and sampling methods.

Science and Social Studies Enrichment: Through preassessments and/or interest surveys for each unit in the curriculum, students may qualify for extension opportunities. These opportunities consist of activities and labs that go beyond the general classroom learning to enhance concepts and skills to stretch learners.