# EC Bloomington Montessori

**Learner Outcome Benchmarks** 

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# Rationale

From 2018 to 2020, Bloomington Montessori School worked with Grow Wise Consulting to develop school-wide benchmarks related to our learner outcomes. The goals of this project included:

- clear communication of learner outcomes to parents
- tools to communicate effectively between teachers and other educational professionals regarding student expectations and progress
- development of benchmarks that authentically reflect Montessori philosophy and BMS's holistic learner outcomes
- to aid in the effective collection of data at the student, classroom, and school levels for the purpose of informing instruction and to ensure accountability
- to help ensure consistency between classrooms and smooth transitions between program levels within the school
- to create consensus around goals for typical students and help facilitate discussions around implementation of student services for those who need extra support

We wanted to reflect holistic benchmarks that represented application opportunities instead of isolated skills, and that honored the complete development of a child (not only academics). Data is collected to help us assess and track benchmark progress. Data sources in a Montessori environment include:

- student work (projects, research, work journals, portfolios)
- observation
- teacher records
- cumulative student files
- informal assessments
- standardized tests (annual for grades 3-6)

It is important to note that these benchmarks are written to represent the classroom goals for a "typical" child in their third year of each program level. It is not cause for alarm if a child is still working on a few of the benchmarks at the end of the three year cycle. It simply informs the next teacher regarding where to focus learning. However, if a child is struggling to demonstrate competency with a significant number of benchmarks, this may be a reason for teachers and parents to begin discussions about the need for additional classroom supports, an Accommodation Plan, or Individualized Service Plan (see Student Services in the BMS Parent Handbook). Please remember that continual teamwork and communication is the best support for the success of any student.

Our curriculum can be discussed as integration of both skill-based lessons and experiential lessons.

Skill-based lessons are those, typically in the areas of language and math, that must be mastered before the next lessons on a given concept can be taught. Beginning skills are foundational to later skills. It is essential that children are provided extra support and time to master these concepts, and they are most often taught at the individual or small-group level. These skill-based lessons are assessed throughout a child's time in the classroom and data is used to inform future teaching.

Additionally, Montessori believed that we should "give children the Universe", and we have an expansive curriculum of integrated cultural (science, geography, and history) and social (interpersonal, intrapersonal, social responsibility) lessons. These lessons are laid out in a spiral, building deeper and deeper layers of knowledge each year throughout the three-year classroom cycles. We present much more information on every topic each year than we expect children to retain long term. Instead, the goal is to spark their interest and introduce them to the immenseness of the Universe and the limitless possibilities of learning. Children then choose passion projects to dive deeper into the areas that most spark their interest. Social skills listed are introduced with explicit lessons and guided practice, though we recognize mastery of these skills is lifelong work for all of us.

# **Learner Outcomes**

In our effort to offer the highest quality Montessori educational experience, Bloomington Montessori has adopted the following Learner Outcomes (as outlined by the American Montessori Society [Standard 4.2]). These Learner Outcomes serve as a framework with which to discuss our vision for and efforts toward the holistic development of the children we serve.

It is important for our collaborators to be aware of these Learner Outcomes for many reasons, including:

- To better understand the mission of Bloomington Montessori School and the role it serves in our community
- To prepare families for BMS's expectation of support by families in the development of these skills and values
- To better understand the context within which teachers will be discussing a child's progress through our curriculum

These six learner outcomes are complex topics, each involving multiple stages of growth and learning. Our goal, through our spiraling curriculum, is to develop these skills to an age-appropriate level throughout a child's nine year experience here. Graduates of Bloomington Montessori build the tools necessary to continue this developmental journey long after graduation.

### **Autonomy and Independence**

The word "autonomy" finds its roots in the concept of "self-governing". In a Montessori context, this includes the ability to maintain control over one's actions, feel confident making independent choices, and have a strong sense of self.

#### Confidence and Competence

The self-assurance that comes from recognizing and having faith in one's own abilities and talents is one of the most empowering tools we can offer children. Through a greater sense of ownership of their own achievements, children become energized by their own capability.

### Academic Preparation

As in most schools, we have a strong belief in children's need to be prepared with knowledge and skills that will enable them to navigate education and life successfully. This includes a well-rounded curriculum of language, mathematics, biology, physical science, geography, and history. Additionally, we focus on process-centered goals such as the development of critical thinking skills, problem-solving, work habits, and creativity. (See Scope and Sequence for detailed information.)

#### **Intrinsic Motivation**

To find the work of life internally satisfying creates a drive that propels children toward productivity and success in all areas as they grow. By avoiding extrinsic motivations (such as rewards and punishments), we leave space for this vital inner development of the child.

### Social Responsibility

The idea that we each should strive to benefit society and care for ourselves, each other, and the Earth instills children with a sense of stewardship. Our Cosmic Curriculum explores the interconnection of all living things, encouraging the development of environmentally aware global citizens.

#### Spiritual Awareness

Spiritual awareness is a process by which we explore our own being and thoughts. We help children develop a sense of mindfulness, purpose, and possibility. This includes development of growth mindset and comfort with self-reflection.

# BENCHMARK GUIDES

# INTERPERSONAL SKILLS

# Early Childhood

# Social Responsibility

In Early Childhood, we practice:

(Care of others)

- addressing conflicts by identifying the trigger and using words to communicate feelings.
- demonstrating sympathy for children who are upset or hurt by asking if they are okay or offering to help.
- helping children who ask for help.
- taking turns speaking in conversations.
- following agreements of the classroom intended to respect ourselves, each other, and the physical environment.

### **Social Justice**

In Early Childhood, we practice:

- listening to and discussing age-appropriate stories about people from a variety of backgrounds, races, ethnicities, religions, family structures, etc.
- noticing and discussing that we all have different eyes, smiles, skin tones, and hair; we are all beautiful, and we are part of the tapestry of our personal stories.

### Global Citizenship

In Early Childhood, we practice:

 listening to and discuss stories about people from a variety of geographic, religious, and political backgrounds.

### Environmental Stewardship

In Early Childhood, we practice:

(Care of Environment)

• working to care for our classroom by cleaning up after ourselves and volunteering to help with communal tasks.

(Appreciation for Nature)

- demonstrating interest in and respect for nature.
- helping care for classroom plants or pets.
- reducing waste by recycling and/or composting.

### INTRAPERSONAL

# Early Childhood

### Autonomy & Independence

In Early Childhood, we practice:

(Emotional Self-Regulation)

- identifying when we are upset and expressing this verbally to a peer or teacher.
- demonstrating self-soothing strategies when upset.

# (Self-Control)

- using appropriate body and voice for a variety of situations (group, outside play, lunch, work time).
- waiting patiently for snack or materials.
- resisting aggressive urges.

### (Independent Choices)

- transitioning from one choice to the next independently.
- making work choices based on interests.
- demonstrating creativity through extensions beyond the basic use of materials.

# (Care of Self)

- Gaining autonomy with meeting one's needs (dressing, blowing nose, tying shoe)
- Advocating for oneself appropriately when needing assistance to fulfill needs

### Confidence & Competence

In Early Childhood, we practice:

(Work Habits)

• consistently completing a successful work cycle (choose a work, do the work, put the work away).

(Self-Advocacy)

• asking "three before me" to demonstrate the ability to seek help.

(Strong Self-Concept)

• naming some things we are good at and some things at which we would like to be better.

### **Intrinsic Motivation**

In Early Childhood, we practice:

(Growth Mindset)

- verbalizing the importance of trying hard and the knowledge that it will make us stronger.
- expressing growth mindset through use of the word "yet". ("I don't know how to do that yet.")

# (Embracing Challenge)

- choosing challenging works and persisting, problem solving, and persevering. (Flow/Concentration)
  - regularly demonstrating concentration in activities.
  - demonstrating curiosity and engagement with specific topics of interest.

### **Spiritual Awareness**

In Early Childhood, we practice:

(Mindfulness)

• reflecting verbally on our actions.

(Interdependence)

- helping our community and receiving help from our community.
- collaborating in positive relationships with adults

(Awe and Reverence)

• demonstrating a love for nature through interest in playing outside and examination of natural objects.

# COSMIC EDUCATION

# Early Childhood

Maria Montessori urged us to give children a "vision of the universe" to help them discover how all of its parts are interconnected and interdependent, and to help them understand their place in society and the world...through [the integration] of astronomy, chemistry, biology, geography, and history. These lessons help children become aware of their own roles and responsibilities as humans and as members of society, and help them explore their "cosmic task"—their unique, meaningful purpose in the world.'

### <u>History</u>

In Early Childhood, we practice:

- understanding the passage of time by using words such as "last year, yesterday, tomorrow".
- participating in birthday celebrations that demonstrate that each year of life is an orbit of Earth around the Sun and how the child has changed over time.

### Geography

In Early Childhood, we practice:

- our "cosmic address".
- the continents and special facts about each continent.
- celebrating with customs and songs from a variety of cultures.
- identifying landforms and waterforms with hands-on materials
- naming 8 planets in order from the Sun.
- creating maps of the continents and oceans of the world.
- creating a map of a continent and its countries.
- identifying the current season and its characteristics and that seasons change and are a cycle, and appropriate clothing for each season.
- identify morning, day, afternoon, evening, and night and that this is a cycle.

### **Biology**

In Early Childhood, we practice:

 classifying picture cards as living/non-living, plant/animal/mineral, and vertebrate/invertebrate.

<sup>&</sup>lt;sup>1</sup> American Montessori Society, "Montessori Terminology" https://amshq.org/About-Montessori/What-Is-Montessori/Terminology

- sorting picture cards into 5 classes of vertebrates.
- identifying the external parts of animals from different classes, including correct nomenclature.
- identifying the external parts of trees, flowers, and leaves, including correct nomenclature.
- actively engaging in hands-on experiences in nature as a touchstone for new academic knowledge
- learning lifecycles of plants and animals

### **Physical Science**

In Early Childhood, we practice:

• making observations, predictions, and drawing conclusions through activities designed around a variety of scientific concepts (such as float/sink, magnetism, and balances).

### **Engineering**

- designing and constructing a structure that embodies pattern, symmetry, and balance.
- building with a variety of materials with different weights, shapes, and dimensions.

# READING

# Early Childhood

# **Concepts of Print**

After our third year in a BMS Early Childhood classroom, we can:

- Demonstrate understanding that print moves from left to right and top to bottom by tracking with our eyes or finger
- Verbally differentiate between a letter, word, and sentence when shown and explain that words are made of letters and sentences are made of words
- List the vowels of the alphabet
- Uses picture and context clues to aid in understanding of texts
- Identify the title, author, and illustrator of a book and their purposes
- Differentiate between fiction and nonfiction

### Phonemic Awareness

After our third year in a BMS Early Childhood classroom, we can:

- Verbally identify and produce rhyming words
- Verbally manipulate words by changing, adding, or deleting the initial, medial, final sound or rime of a given word
- Name and identify the sounds most commonly associated with the letters of the alphabet when shown both upper and lower case letters
- Identify the number of sounds, order of sounds, and isolated sounds of words with three phonemes when shown a word or picture
- Identify short vowel sounds associated with each vowel

# **Decoding**

- Blend CVC three-letter words when shown the word in print
- Break down a three-phoneme word into sounds and represent with appropriate letters in writing when given a picture or verbal word
- Read emergent reader texts (F&P level D) with appropriate pace and demonstrating self-correction and comprehension strategies
- Verbally read 20 high-frequency sight words when shown the word in a list (<a href="https://lincs.ed.gov/readingprofiles/Dolch\_Basic.pdf">https://lincs.ed.gov/readingprofiles/Dolch\_Basic.pdf</a>)

# **Fluency**

After our third year in a BMS Early Childhood classroom, we can:

- Read emergent texts (F&P level D) in 2-3 word phrases, such as with pattern reading
- Reflect awareness of sentences in reading by pausing at ending punctuation

# Comprehension

- Discuss stories read together or aloud including asking and answering questions about key details, retelling stories, identifying elements (such as characters, setting, problem, solution, events, nonfiction concepts), making predictions, and comparing stories
- identify supporting details of an idea in a nonfiction text.

# LANGUAGE ARTS

# Early Childhood

### **Letter Formation**

After our third year in a BMS Early Childhood classroom, we can:

- legibly write in manuscript, including both capital and lowercase letters.
- write from left to right and top to bottom.

### Mechanics

After our third year in a BMS Early Childhood classroom, we can:

- capitalize the first letter of a sentence and names.
- end sentences with a period.

### Word Study

After our third year in a BMS Early Childhood classroom, we can:

 spell three letter short-vowel words when shown a picture or given a word verbally.

### Grammar

• describe the role of a noun and verb, identify the part of speech of given familiar nouns and verbs, and generate their own examples.

### Writing Structure

After our third year in a BMS Early Childhood classroom, we can:

• write original and paraphrased sentences that include a subject and predicate, with inventive spelling, demonstrating knowledge of letter sounds.

### Writing for a Purpose

- paraphrase text resources and lessons to generate short non-fiction writing about a research topic.
- journal using a combination of sentences, pictures, and words.
- create posters to convey information on a given topic.
- tell stories that go along with a drawn or given picture that include characters and events.
- with support, complete simple revisions to written work.

### **ARITHMETIC**

# Early Childhood

#### Numeration

After our third year in a BMS Early Childhood classroom, we can:

- demonstrate concept of "zero" with counters.
- combine and count items to demonstrate understanding of + and =.
- compare two sets of numbers, identifying "larger" and "smaller" quantities.
- read and copy a number up to 9,999 represented with materials/numerals.
- count verbally and write legibly numbers 1-20.
- identify, order, and name numbers up to 100 with materials.
- skip count by 10's to 100, 2's to 20, and 5's to 50.

#### Place Value

After our third year in a BMS Early Childhood classroom, we can:

- exchange materials for equivalent quantities within place values of units through thousands.
- given number cards, we can provide the associated quantity (with materials) of the numeral of any number up to 9,999.

#### Operations

After our third year in a BMS Early Childhood classroom, we can:

- we can accurately complete static addition with the golden bead materials.
- we can explain or demonstrate that multiplication is adding sets of a number (with materials).
- we can explain or demonstrate that subtraction is "taking away" (with materials).
- we find addition facts up to 10 +10 with materials and recognize combinations of 10.

#### Maal Mathmatical Mind

After our third year in a BMS Early Childhood classroom, we can:

- demonstrate willingness to estimate answers to math problems.
- complete the pattern, count on, or identify "one more" or "one less" when given a set of numbers.

### **Applied Mathematics**

After our third year in a BMS Early Childhood classroom, we can:

• count everyday objects and answer "how many".

#### Fractions, Decimals, and Percents

After our third year in a BMS Early Childhood classroom, we can:

- demonstrate with materials that a fraction is <u>less than a whole.</u>
- name fractions up to one fourth when shown a material representation.

#### **Money**

After our third year in a BMS Early Childhood classroom, we can:

• identify the name and value of a penny, nickel, dime, quarter, and one dollar bill.

### **Radicals and Exponents**

After our third year in a BMS Early Childhood classroom, we can:

- identify the relationship demonstrated by the squaring chains (ie 7 sevens).
- manipulate the square and cube chains of the bead cabinet to create a square or stack a cube.

### **Data and Graphing**

After our third year in a BMS Early Childhood classroom, we can:

- differentiate materials by length.
- manipulate materials laid out in a grid.

### Algebra

After our third year in a BMS Early Childhood classroom, we can:

• sensorially solve the binomial and trinomial cube puzzles.

#### **Measurement**

After our third year in a BMS Early Childhood classroom, we can:

- demonstrate understanding that various qualities of an object or set of objects can be measured by use of an appropriate tool.
- read numerals on the digital thermometer and associate them with weather-appropriate clothing.
- identify which of two items is "longer" or "shorter" using visual discrimination.
- identify which of two items is "heavier" or "lighter" using our hands or a balance.

#### **Time**

- differentiate between day and night or morning and afternoon.
- associate changes in temperate forest (local) nature with the seasons.
- verbally tell time to the hour when looking at an analog or digital clock face.
- name the months of the year, days of the week, and four seasons in order.

# **GEOMETRY**

# Early Childhood

### Sensorial (Essential Foundational Skills)

Maria Montessori (1967, p.145) said that sensorial training "makes a man an observer." Neuroscientist Dee Coulter (2007) asserts that what makes a person brilliant is his or her ability to pay attention to details that others have missed...If the refined senses allow us to observe astutely and completely, it is clear that this is an integral part of the development of the mind. The sensorial area is perhaps the most distinct part of the Montessori classroom...it is based on Montessori's theory that refinement of the senses is integral to future education (Montessori, 1967).

These essential foundational skills nurtured through the sensorial curriculum build a sense of organization that helps children make sense of their world, and are the precursors to more complex categorization, gradation, differentiation, and matching necessary in many studies. These observational skills must be developed before more advanced categorization of one's world (biology, geometry, grammar, etc.) can be effectively learned.<sup>2</sup>

### Dimension

In Early Childhood, we practice:

• differentiation, gradation, matching, and combination of dimension by manipulating a variety of objects (such as the pink tower, brown stair, and knobless cylinders).

### Visual

In Early Childhood, we practice:

• matching and grading color hues.

### Auditory

- differentiating, grading, and matching sounds.
- using bells or other instruments to create, match, and grade pitches.
- making and observing silence.

<sup>&</sup>lt;sup>2</sup> Eve Cusack, "Sensorial Rationale", 2007

### **Tactile**

In Early Childhood, we practice:

- differentiating and grading objects by texture, temperature, and weight.
- identifying familiar objects using only the sense of touch (stereognostics).

# **Olfactory** and Gustatory

In Early Childhood, we practice:

- matching samples by scent or taste.
- categorizing samples by taste.

# **Geometric Shape**

In Early Childhood, we practice:

• exploration of shapes and combinations of shapes with geometry boxes (such as the triangle, hexagon, and rectangular boxes).

### **Geometric Form**

- naming geometric solids.
- building the binomial cube.

# **FINE ARTS**

# Early Childhood

### Music

In Early Childhood, we practice:

- Creating higher and lower pitches in a limited range with instruments and voice when guided with example sounds
- echoing, creating, and playing melodic patterns with voice and instruments
- echoing, creating, and playing 4-beat rhythmic patterns with body percussion or instruments
- maintaining a steady beat in a group
- singing short memorized songs
- experiencing a variety of live and recorded music

### **Visual Arts**

In Early Childhood, we practice:

- discussing (with appropriate vocabulary) a variety of visual arts
- expressing personal ideas, interests, and feelings through art
- demonstrating thoughtfulness and care when creating art
- manipulating a variety of tools such as brushes, scissors, and glue applicators to create art
- using a variety of mediums to create art
- identifing shapes and form in art (2D, 3D)
- experimenting with and discussing color relationships (primary and secondary colors)

### Performance Arts

- experiencing live theater
- performing a skit or song for a group
- using movement to enhance a song