

## **Montessori at Mountain School: Practical Life Curriculum**

### *Overview:*

Practical Life includes pre-academic exercises that prepare the child to work effectively in the Montessori environment by refining movement, teaching sequences, introducing left-to-right processes and providing a foundation in early learning attitudes and dispositions. Practical Life exercises also provide children with a sense of accomplishment as they engage in real, meaningful work with tangible results. The familiar home-like environment of the Practical Life corner allows children to gain independence and confidence as they carry out thoughtfully prepared activities, similar to those a child would participate in at home.

Preliminary exercises include walking around furniture, rolling out a rug, pushing in a chair, opening and closing a door and carrying a chair or table. These exercises enable the child to maneuver gracefully in the environment and develop gross motor coordination and control. Other exercises focus on care of the self and environment; hand-washing, dressing frames?, polishing silver, vegetable preparation, sweeping, and other practical skills prepare the child for more advanced work and develop positive attitudes and dispositions that are useful to the child as his work grows more academic. Young children frequently repeat these activities and thus develop concentration and learn to enjoy completing tasks.

Another aspect of the Practical Life curriculum is lessons in grace and courtesy. Through modeling, children learn conventional polite behaviors such as how to serve food, how to greet a person, how to excuse one's self and how to make introductions. Further lessons revolve around the language and process of problem-solving. Children at Montessori at Mountain School learn to identify feelings and needs, state problems and propose solutions using non-violent communication, predict results, and implement what they consider the best solution.

Some practical life lessons such as care of the self and care of the environment are given individually, while lessons in grace and courtesy and problem-solving are best delivered at line time where the entire group can learn a lesson at the same time. Most children enjoy group lessons at line time and use the modeled behavior immediately.

### *Curriculum outline:*

#### Preliminary exercises and movement

- walking in the classroom
- managing tables and chairs
- carrying materials
- silence (cessation of movement)

#### Care of self and environment

- dressing
- polishing
- hand-washing
- dusting
- food-preparation

#### Grace and Courtesy and Problem Solving

- social greetings and conventions
- introductions
- problem-solving strategies
- non-violent communication

## Montessori at Mountain School Curriculum: Culture and Afternoon Enrichment

### *Overview:*

Montessori at Mountain School's cultural curriculum includes a mosaic of activities that explore the full range of human cultural studies and activities, from art to zoology. Teachers and assistants organize group cultural activities during the afternoon enrichment period. In addition to learning about numerous topics and enjoying thoughtfully prepared hands-on/minds-on activities, children in the enrichment program socialize, talk informally, have fun together and learn to work in a group. In contrast to the morning session, the enrichment program features large group, teacher-led instruction and activities, and thus provides experience and practice with skills and dispositions needed for the more teacher-centered classrooms of the Lower School.

Cultural activities and materials are also available for independent exploration in the classroom during the primary (morning) program. Thus, students who have enjoyed a lesson in yoga may take a break from their other work and remove the yoga cards from the shelves to practice *asana* during the morning. Similarly, there are independent activities related to art, music, geography and science that may be selected during the morning primary session.

The school year is divided into seven short terms, with cultural activities, themes and materials rotating with each period. Typically, each week will feature four or five different activities, including one or two afternoons of art instruction; a foreign language session; a unit on movement, such as creative dance, yoga or obstacle courses; and a selection from a range of other activities from cooking to science experiments. Additionally, during each term children consider a different continent, and enrichment program extends the lessons of physical and cultural geography that are also integrated in the primary program. For example, during a recent "Africa" term, students had weaving lessons, made *papier mache* African animals, enjoyed cooking and eating a traditional *bobotie*, listened to African music, made clay mask pendants and learned to count to ten in Swahili. Local specialists, such as Mark Galbo of the Telluride Rock and Roll Academy, Telluride Dance Academy instructors and Jen Nyman-Julia, children's theater producer for the Sheridan Arts Foundation Other visiting teachers and volunteer parents enliven the program with their special skills and enthusiasm.

The visitor program complements the cultural curriculum as visitors attend school during the morning to make short presentations to the children about different cultural topics. This year, the school hosted a parent-biologist who shared her knowledge of the wildlife of Papua New Guinea; others who came in the past year offered insights to art, food, costumes, pictures and stories from Switzerland, Bolivia, Australia, Czechoslovakia, Germany, Italy, England, Ireland, Costa Rica and Kenya.

### *Curriculum Outline:*

- Art, including two- and three-dimensional representations, and art appreciation
- Foreign language study, including Spanish instruction
- Cultural and Physical Geography
- Movement, including dance, creative movement, yoga and skiing
- Science, including hands-on experiments related to earth, life and physical sciences
- Theater, including puppetry, dramatic expression and storybook theater
- Music, including performance, notation and music appreciation
- Cooking and other activities
- Visitor's program

## **Montessori at Mountain School: Math Curriculum**

### *Overview:*

Montessori at Mountain School's math curriculum is designed to support children's natural interest in math and provide a strong foundation in numbers through the use of specially designed, hands-on/minds-on math materials. Through concrete mathematical experiences, the youngest children learn about dimension, size, number, shape and sequence. Then, with the use of increasingly abstract materials, children make the passage from concrete experience to paper-and-pencil exercises. Each math concept is taught with corresponding materials.

At Montessori at Mountain School, young children typically begin their exploration of math concepts through the use of the sensorial materials, which are pre-academic in nature and give a sensory impression of quantity, dimension, shape, size and other physical qualities. Next come more abstract and formal mathematic concepts, such as number-symbol correspondence and place value, which children first explore with the use of number rods, counters, beads, bars, squares and cubes. Once the concepts of quantity and place value are established through the repeated use of hands-on/minds-on materials, the child begins work with numeric operations and practices all four operations with the use of increasingly abstract materials. When a division problem results in a remainder, and the child asks about how to split it up, he or she is ready for fractions and more advanced mathematics.

Each child progresses at his or her own pace through the math curriculum and learns through individual presentations from the teacher, presentations from older children and by observing more experienced children working with the math materials. Teachers gently encourage those children not exhibiting a natural inclination toward math to work with the materials, and kindergartners complete weekly work plans that include daily math practice to ensure adequate exposure. While there are some general expectations as to when most children will advance to each part of the curriculum, there is variability depending on the individual's readiness, interest and ability. Most children finishing kindergarten will use all four numeric operations, with and without exchanging with numbers up to four digits, while those with a strong for math will also work with advanced math concepts.

### *Curriculum Outline:*

- Association of Quantity and Symbol for numbers 1-10
- Linear Counting and Number Combinations to 10
- Geometric Shapes, Forms and Nomenclature
- Fundamentals of the Decimal System: Understanding Numbers to 9,999
- Static and Dynamic Numeric Operations
- Advanced Math including Fractions; Operations with Fractions; Abacus for Static and Dynamic Operations; Larger Numbers; Missing Factors

## Montessori at Mountain School: Sensorial Curriculum

### *Overview:*

Maria Montessori believed that young children learn through direct manipulation of learning materials, and sensorial materials are designed to teach the senses. Largely pre-academic in nature, the sensorial curriculum provides early experiences for children in discrimination of size, dimension, texture, weight, sound, smell, color, taste and temperature. Along with refining a child's senses, the exercises introduce precise vocabulary and concepts of comparison. Once a child has worked with an introductory material, there are opportunities for progressive exercises in sorting and classifying. The curriculum also introduces concepts related to math and geometry, including plane shapes and geometric solids. Physical geography is an additional component of the sensorial curriculum.

Each child progresses at his or her own pace through the sensorial curriculum and learns through individual presentations from the teacher, presentations from older children and by observing more experienced children working with the materials. Many of the introductory materials appeal to the youngest children, and, along with practical life exercises, they spend a large portion of their day exploring the materials and exercises on the sensorial shelves.

### *Curriculum outline:*

#### Visual

- dimension
- size
- color
- shapes
  - Geometry
    - regular plane shapes through decagon
    - irregular plane shapes
    - geometric solids
    - constructive triangles
    - binomial and trinomial cubes
    - table of Pythagoras
    - superimposed geometric figures
  - Botany
    - leaf forms

#### Auditory

- sound boxes
- bells

#### Olfactory

- smelling boxes

#### Gustatory

- tasting bottles

#### Tactile

- rough and smooth boards
- thermic tablets
- baric tablets

Stereognostic (muscular and tactile mixed)

- mystery bag
- bean bowl

Physical Geography

- globes
- puzzle maps
- land and water forms

## **Montessori at Mountain School: Language Curriculum**

### *Overview*

Children ages three to six are particularly receptive to acquiring language, and the Montessori environment is filled with a range of hands-on/minds-on learning materials and activities designed to support the natural development of language skills. In particular, the materials and activities encourage the refinement of sensory discrimination and the acquisition of precise vocabulary, which together form the basis of personal and academic expression.

The language curriculum sequence first emphasizes the development of spoken language and the acquisition of vocabulary through stories and poems, naming objects and classroom materials, social conversations and lessons in both grace and courtesy and problem solving. Simultaneously, the teacher presents work that provides indirect preparation for reading and writing with activities that develop fine motor control and spatial and sequential perceptions, including left to right activities that instill a sense of direction for written language. In addition, the teacher models correct spoken language and provides a consistent source of new and interesting information through his or her own speech and through rotating materials and activities in the classroom. Word games, rhymes and word study of initial and final sounds help to develop phonemic awareness.

Direct preparation for reading and writing begins as the child establishes sound-symbol correspondence and a sense of the shape of letters by moving his fingers on the sandpaper letters. Shortly, he or she wants to construct language with letters, and, before the hand is ready to write, he or she manipulates movable letters to synthesize short written words. This is the beginning of writing, which usually precedes the ability to read by some months. As the child gains confidence in forming words, he or she begins to analyze individual sounds and recombine them, thus beginning to read. Children develop control for handwriting through the practice of numerous fine motor activities before finally writing with a pencil.

Montessori students progress at their own pace through the language curriculum and learn through individual presentations from the teacher and by observing more experienced children using the language materials. Most children exhibit a natural interest in forming words with letters by about age four to four-and-a-half and begin to sound out words by age five to five-and-a-half, though some variability exists. Once the child has learned the mechanics of writing and reading, a range of language activities exists in the classroom from journals, to phonetic readers, to labeling, to short books on many topics and children's research materials, such as atlases and graphic dictionaries. Most children completing the kindergarten year in the Montessori at Mountain School program will be able to read and write short phonetic words with blends and digraphs, read short phonetic primers with some common sight words and enjoy an assortment of language activities, including using language for practical purposes-- from filling needs to solving problems; to conversing socially; to listening to and enjoying stories, poems and books that are read aloud.

### Curriculum Outline:

#### Indirect Preparation for reading and writing:

- Practical Life exercises that provide left-to-right movement and sequences
- Cylinder blocks and metal insets to prepare hand for handwriting
- Geometry, botany and geography materials to develop sense of shape and direction
- Spoken language skills and vocabulary development
- Word games leading to phonemic awareness

Reading Mechanics:

- Sound-Symbol correspondence
- Phonograms
- Phonetic words
- Sight words
- Reading nomenclature from classroom studies

Language Study:

- Function of words (parts of speech)
- Word study (prefixes, suffixes, synonyms, singular and plural forms)
- Advanced language study: syntax, interpretive reading, and language extensions

Writing Mechanics

- Sound-Symbol correspondence
- Forming letters without writing
- Cursive alphabet- lower case (D'Nealian on request)
- Captions and labels
- Journal keeping

Comprehension

- Listen purposefully and enjoy a range of literary forms
- Identify and describe characters and their feelings
- Indicate chronological order of events
- Recount plot or information from texts
- Make reasonable predictions about what will happen next in a story
- Participate in group discussions