Klahanie School Curriculum Scope and Sequence

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Year Round ~ Vashon Island ~ Montessori Antibias Early Childhood School

Table of Contents

Introduction

This document was created to help the reader understand the scope and sequence of the Klahanie School Montessori Antibias curriculum. It is designed to demonstrate the continuum of knowledge from one developmental level to the next and to illustrate the depth of each subject area.

At Klahanie School Montessori Antibias, we prepare our students for life by offering them a joyful, collaborative, concentration focused program that develops important skills for success such as confidence, creativity, innovation, communication, critical thinking, independence, and resilience. Dr. Montessori referred to this approach as “Educating the Whole Child,” that is, to nurture and follow each student’s cognitive, physical, emotional, spiritual, and moral development. Montessori’s developmental approach recognizes that each child reaches certain milestones at different stages. As such, the Montessori lessons are presented to students when they are developmentally ready and have mastered certain prerequisite activities.

We hope that this Curriculum Scope and Sequence document also provides you with a common language for Montessori exercises to better communicate and understand the work your child is doing in the classroom, leading to more robust conversations between students, parents, and faculty.

Dr. Montessori’s Five Great Lessons

Dr. Montessori uses the Five Great Lessons at the elementary levels, and foundations as an introduction to all topics for our multi age 2.5yrs-6 yrs class, providing a “big picture” to demonstrate how the sciences, art, the past for our earth, mathmatics, language, and geography are interrelated. Students are then introduced to increasing levels of detail and complexity within these broad areas.

THE STORY OF CREATION OF THE UNIVERSE describes how minerals and chemicals formed the elements; how matter transforms to three states of solid, liquid, and gas; how particles joined together and formed the earth; how heavier particles sank to earth’s core and volcanoes erupted; how mountains were formed and the atmosphere condensed into rain, creating oceans, lakes, and rivers. Students are introduced to lessons in physics, astronomy, geology, and chemistry. For example, they learn about light, heat, convection currents, gravity, galaxies, planetary systems, Earth’s crust, volcanoes, erosion, climate, and physical geography.

THE STORY OF THE COMING OF LIFE explains how single-cell and multi-cell forms of life became embedded in the bottom of the sea and formed fossils. The Paleozoic, Mesozoic, and Cenozoic periods are traced beginning with the kingdom of trilobites and ending with human beings. A timeline shows the beginning of invertebrates, followed by fish and plants, then amphibians, reptiles, and birds and mammals. This is the basis for lessons in chemistry, nutrition, categories of animals and plants, care and requirements of different animals, and their

interrelationship within an ecological system. Students are introduced to the formal scientific language of zoology, botany, and anthropology.

THE STORY OF HUMANS introduces human beings and their unique endowments of intellect and will. The aim is for the children to imagine what life was like for early humans. This is the basis for lessons in prehistory and the emergence of ancient civilizations. Students are introduced to an analytical tool to compare cultures, and how climate and topography influence culture and political geography.

THE STORY OF LANGUAGE describes the origin, structure and types of writing and speaking. It begins with a discussion of the Egyptians, who had two kinds of symbols – one for ideas and one for sounds. A consistent acknowlegment of Indigenous languages and small, first peoples languages were diverse in sounds, geography. The study of the origin of English words from other languages, the meanings of prefixes and suffixes, and different forms of writing such as poetry, narratives, and plays. Children are exposed to the study of Egyptian hieroglyphics and First Nations Indigenous picture writing.

THE STORY OF NUMBERS emphasizes how human beings needed a language for their inventions to convey measurement and how things were made. The story describes how the Sumerians and Babylonians had a number system based on 60, which is the reason for our 60-second minute and 60-minute hour. Greek, Roman, and Chinese numbers are introduced, and how Arabic numerals are similar to numbers found in a cave in India from 2,000 years ago. The Indian numerals had something that no other number system had, the zero. This is the basis for learning mathematics, which is integrated into all studies. For example, large numbers are needed when measuring time and space in astronomy, negative numbers are needed when measuring temperature changes, and triangulation was needed to reestablish property boundaries after the Nile flooded Ancient Egypt.

Developmental Characteristics

Birth-3

6-36 months: First Plane of Development

During this stage of development, children have a unique ability to absorb knowledge quickly and effortlessly. Maria Montessori referred to this as the “absorbent mind.” These children are sensorial explorers and learn through the senses; therefore all experiences within the classroom are hands- on. This concrete experience of learning by doing is essential to the child’s development as it enriches his understanding of new concepts. Also during this stage, the child has a natural passion to want to be engaged in an activity that will be meaningful and purposeful. The child wants to be an active participant within his community of family and classmates.

3-6

3-6 year-old: First Plane of Development

In the 3-6 classroom, the ultimate goal for each individual is to achieve concentration, self-regulated behavior, independence, confidence, and an interest in learning about our world. During this time of development, children continue to be in the stage of the “absorbent mind,” what Maria Montessori referred to as a child’s unique ability to absorb knowledge quickly and effortlessly. Children take great joy and pride in real and purposeful work, and in their ability to contribute to their community as active and helpful participants.

These children continue to learn through the senses. All experiences within the classroom engage use of the hands, are purposeful and are accompanied by mental concentration. Social development is fostered in the Montessori environment with children of at least three ages (3- 6 year olds), allowing them to develop helping, caring, and sympathetic relationships with others in natural, real-life situations.

Practical Life

Birth-3

Practical life activities link the home environment to the school environment and develop everyday life skills through real and purposeful work. Practical life lessons are interesting to the child, who takes pride in meaningful work, contributing to the development of meeting her own needs and the needs of the community. These lessons are designed to meet developmental goals for the child such as refining fine motor skills, helping gain greater control over movements, fostering a sense of order, building concentration, and promoting independence.

Practical life exercises include learning: CARE FOR ONESELF

• Dressing / undressing
• Preparing a snack
• Pouring water
• Practicing with utensils
• Practicing independent use of the toilet

CARE FOR THE ENVIRONMENT

- Sweeping
- Mopping
- Setting a table
- Flower arranging
- Folding fabric

ETIQUETTE & PRACTICE POLITE SOCIAL INTERACTIONS, KNOWN AS GRACE AND COURTESY LESSONS

• How to appropriately get someone’s attention

• How to let someone know how you are feeling

• How to ask for help, how to receive help

3-6

Practical life activities continue to build on the home-school continuum, as the child develops everyday life skills through real and purposeful work. These activities form the foundation for all other work in the environment. The goals of practical life lessons are to promote the development of a child's concentration, coordination, independence, and sense of order.

Practical life activities further aid in a child's development of logical thought, ability to sequence and explore spatial relationships, and promote cultural awareness and adaptation. Practical life exercises are indirectly preparing children for later exercises in reading and writing.

Practical life exercises include learning: CARE FOR ONESELF

• Dressing / undressing • Hand washing
• Food preparation
• Sewing

CARE FOR THE ENVIRONMENT
• Table scrubbing
• Polishing

• Dusting, Cleaning, Washing
• Flower arranging

ETIQUETTE & PRACTICE POLITE SOCIAL INTERACTIONS, KNOWN AS GRACE AND COURTESY LESSONS

• How to greet someone
• How to ask for help
• How to ask to join in a game
• How to problem-solve and form positive social interactions

Sensorial

Birth-3

The sensorial materials are hands-on activities that allow the child to explore the world in a concrete way through the various senses. The sensorial materials help develop a child's hand-eye coordination, fine/large motor skills, spatial awareness, object permanence, and classification skills.

The materials help to refine a child's senses so that he can better clarify, classify, and define the materials and experiences within his various environments. These sensorial experiences deepen a child's understanding of his world.

Sensorial exercises include:

- Puzzles
- Block manipulatives (pink tower,brown stairs, cylinder blocks)
- Sorting exercises
- Gardening
- Color exploration
- Sound exploration

3-6

The sensorial curriculum engages a child's natural tendency to explore the physical world around him through the involvement of all his senses. The sensorial materials are puzzle-like materials that allow the child to refine the many sensorial impressions that they have experienced.

These impressions are classified and organized in the mind. The goal of the sensorial area is to aid in the refinement of the five senses through manipulation and exploration of concrete materials, so the child will have a better understanding of his world.

Sensorial activities focus on and include:

- Visual sense: visual discrimination of dimension, form and color through block manipulatives, color tablets, geometric shapes

- Tactile sense: discrimination of texture, temperature and weight through sorting, matching, and measuring activities

- Auditory sense: discrimination of volume and pitch through sound cylinders

- Sense of taste: discrimination of tastes such as sour, sweet, bitter, and salty through food preparation and specific lessons on taste

- Sense of smell: discrimination of smell through natural elements such as herbs, food, and flowers through food preparation, from the Klahanie School Garden, and specific lessons on smell.

Many of the 0-6 sensorial materials lay a foundation for later work in Geometry, a subset of Mathematics, which is presented at the 6-9, 9-12, and 12-14 levels.

Mathematics & Geometry

Birth-3

Math is learned indirectly at this level through one to one correspondence activities, such as counting out place settings for snacks. Some children may work with additional activities that build a greater understanding of quantity and symbol (1-10).

3-6

The Montessori math curriculum is presented to children first through concrete materials that allow for hands-on exploration of a concept. The goals of the math curriculum are quite extensive, beginning with an understanding of quantity and symbol, progressing to place value and experiences with the four operations of mathematics (addition, subtraction, multiplication, and division). When children at this level demonstrate a concrete understanding of these math concepts, they may be ready to move on to the more advanced exercises in memorization, abstraction, and fraction work.

NUMBERS 1-10

One to one correspondence, quantity, symbol and sequence of numbers one through ten are taught through the use of materials such as rods, spindles, and cards/counters (numeration with objects).

DECIMAL SYSTEM

Categories of unit, ten, hundred, and thousand are introduced with bead materials. The processes of addition, subtraction, multiplication, and division are experienced with the manipulation of the materials, giving the impression of the four operations in math.

TEENS AND TENS

The teens are introduced through the manipulation of gold beads, colored beads, and cards to represent quantities and symbols of numbers 11 through 19. Numbers in the tens are explored with the emphasis on the change from nine to the next ten (e.g., 39-40) by building the numbers with beads and cards. Bead chains provide concrete practice in counting and recognizing numbers and patterns. Exercises using the chains include the introduction to multiples of numbers and the concept of squaring and cubing.

MEMORIZATION WORK

The exploration of math facts occurs through a series of beads and boards work, offering repetition. Further understanding of math facts occurs as children memorize math facts in addition, subtraction, multiplication, and division.

PASSAGE TO ABSTRACTION

Some children move to abstraction in math through the use of an abacus-like bead frame, enabling the child to perform math operations with very large numbers.

FRACTIONS

Students may begin manipulation and exploration of fraction inset materials through introduction to the language and writing of fractions and their relationships to each other.

Language

Birth-3

In the parent/infant and toddler communities, we focus on receptive and expressive language. Receptive language refers to what the child can understand, such as following directions. Expressive language refers to what the child is able to communicate with words and/or gestures. Language is found in all areas of the environment; however, we have a specific language area that focuses on several goals to aid in the child's development.

The curriculum is designed to enrich a child's vocabulary and bring awareness to the structure of language. The language materials aid in independence, helping students learn how to use language appropriately and have their needs and thoughts understood. Language is also enriched through music, stories, and poems.

Language Exercises Include:

- Reading books
- Singing songs
- Naming language objects and picture cards
- Matching objects to corresponding pictures
- Daily conversations
- In 2.5 yr community: initial sound recognition, practice with sandpaper letters, awareness to the relationship between sound and symbol

3-6

The language curriculum supports a child's development in three aspects: spoken, written, and reading. The language curriculum is quite extensive, with various goals in each of these subsets. Spoken language curriculum helps the child perfect his ability to communicate and express himself appropriately with others. Written language curriculum goals are to develop a child's ability to analyze sounds, recall their associated symbol, and formulate words. Cursive writing is taught at the 3-6 level, and cursive letters are presented to students through various language materials. The goals of the reading curriculum are to break down the symbols into sounds, and find meaning and context through deciphering words, sentences and eventually short stories.

Spoken Language Lessons Include:
• Enrichment of vocabulary: learn new names of objects and classify them through tangible objects and picture cards

• Lessons to practice and simulate social situations dramatically

• Stories, songs, and poems to give the child opportunity to appreciate literature

• Oral sound games: initial sounds, ending sounds, middle sounds, words with objects

Written Language Lessons Include:
• Sandpaper letters: beginning with consonants and vowels then progressing to phonograms

• Written sound games: initial sounds, ending sounds, middle sounds with the moveable alphabet

• Constructing words with letters, then phrases and sentences, and finally paragraphs and stories

• Preparation of the hand through progression of materials: metal insets, chalkboards, unlined word-paper, lined word-paper, lined sentence-paper, lined story-paper

Reading Lessons Include:

• Phonetic reading through matching object games, command games, and reading various materials (i.e., cards, sentences, books) • Phonograms: writing, reading, and spelling
• Puzzle words (sight words)
• Grammar and parts of speech through the use of concrete objects and games
• Word study: antonyms, synonyms, homonyms, singular and plural
• Sentence analysis: exploring how the order and placement of phrases affects the meaning

Study of Time

Birth-3

History is introduced indirectly through books and by learning the daily schedule. Children are very much in the present moment at this age and flourish with predictable schedules and routines.

3-6

For the young child, the focus is on developing awareness and understanding of the concept of the “passing of time.”

Activities include:
• Introduction to calendar • Awareness of seasonal changes

• Beginning of clock study: o'clock, half-past, quarter till, quarter past
• Introduction to the three fundamental tenses: past/present/future
• Experience of personal history via birthday celebrations/ personal timelines

Geography

Birth-3

Geography is introduced indirectly at this level through activities such as exploring a globe ball, singing cultural songs, reading books, and making cultural snacks or celebrating cultural traditions of classmates.

3-6

The goal of the geography curriculum at this level is to bring an awareness to children of the physical features of the earth, through presentations of land/water formations and concrete exploration of maps. Also, the curriculum brings an awareness of other cultures around the world through pictures, objects, and stories.

PHYSICAL GEOGRAPHY

• Study of land and water forms, such as lakes, islands, peninsulas, gulfs, isthmus', and straits

EXPLORATION OF GLOBES, MAPS, AND FLAGS

• Naming and distinguishing shapes and placement of continents, countries, states, and oceans

• Making of maps and books of flags to encourage repetition and familiarization with the geography materials

CULTURAL GEOGRAPHY

• Children/families of the classroom are encouraged to share their own cultural stories and/or experiences with their classmates

• Connections between physical and cultural geography are made through pictures, objects, and stories of other people, places, products, plants, animals, homes, clothing, transportation, arts, and crafts

Science

Birth-3

Science is introduced indirectly at this level through activities such as cooking, books, picture cards, exploring living/non-living, magnetic works, and weather.

3-6

The goals of the science curriculum are to offer concrete exploration of the physical and life sciences to further classify the child's understanding of our earth.

PHYSICAL SCIENCE LESSONS INCLUDE

- Magnetism
- Buoyancy

- Weather

LIFE SCIENCE LESSONS

- Scientific classification: living/non-living, plant/animal, vertebrate/invertebrate
- Introduction to invertebrates and the animal kingdom: mammal, reptile, amphibian, fish, bird

- Observation and care of classroom pets
- Botany: naming and experiences with leaf shapes, plants, trees, and flowers

- Observations and care of classroom plants

Fine Arts

Birth-3

Art and Music are introduced at this level in stimulating and creative ways, both in small groups with music and individual lessons with art. The goals of the art and music curriculum foster self expression, concentration, development of gross/fine motor skills, and refinement of the senses.

Music activities include:

- Singing songs
- Listening to music
- Exploration with musical instruments

Art exercises include:

- Painting: watercolor (fine motor) and easel (large motor)

- Drawing
- Gluing
- Cutting

- Clay work

• Sewing
• Weaving

3-6

Art and Music appreciation continues at the 3-6 level through both creative opportunities and through formal lessons. Music is offered through singing songs, listening to a variety of music, and more formal lessons are introduced through rhythm instruments. The art materials offered allow students to explore and work at their own pace, using a variety of media to stimulate choice and innovation.

Music activities include:

• Rhythm: introduction to beat of music through instruments and/or composed music; children work with rhythm sticks or simple instruments.

• Various World and Peace-Equity Making Musicians

Art exercises include:

EXPLORING AND CREATING, CREATIVE INNOVATION

• Exploration and creative expression are fostered through various media available in the classroom: coloring, drawing, painting at an easel, watercolor painting, clay/sculpture, collage, sewing, and weaving.

APPRECIATION- GRATITUDE
• Children are encouraged to look at their own work and appreciate the art works of known artists as well.

Physical Education & Movement

Birth-3

Children at this age need many opportunities to learn how to move their bodies and work towards refinement of large muscle control and small muscle control, with the goal of attaining more coordinated movements, independence, and confidence.

LARGE MOVEMENT EXERCISES
• Dance
• Walking across a balance beam

• Carrying heavy objects

• Walking carefully around the classroom and work spaces

FINE MOTOR MOVEMENTS

• Various activities exercising pincer grasp

• Squeezing works exercising whole hand

DEVELOPMENTAL GYM

• Occasionally, toddler children may visit this program for large motor, and circuit exercises

3-6

At the 3-6 level, children continue to be given numerous opportunities for movement throughout the day. They are given the experiences to develop and refine their movements in the classroom and also through our Developmental Gym program on a daily basis in the garden on ropes, climbing equipment..

Weekly, children attend a Brain Dance session to foster mind-body exercises. Through these various experiences, children's self-image, personal, and social development are fostered. Also, children are building an awareness of their body in space through parallel play and group play, building self- control to regulate their behavior appropriately for success in community life: taking turns, following directions, sharing, listening, and safety of self and others.

CLASSROOM ACTIVITIES TO REFINE CONTROL OF MOVEMENT

• "The line" in the classroom allows children to practice control of various movements such as: hopping, balancing, galloping, marching/walking in different directions, starting/stopping on command.

• In small or large group gatherings, children may explore rhythm in relation to physical education through clapping and moving to a specific beat.

• Children develop hand-eye coordination and fine motor skills through various curricular areas in the classroom.

DEVELOPMENTAL GYM ACTIVITIES TO REFINE CONTROL OF MOVEMENT

• Through a circuit of activities, children are refining hand-eye coordination and large motor skills. Such exercises include: stretching, ball work (throwing, catching, tossing, kicking), and cross-lateral movement exercises.

BRAIN & FUN DANCE/ DANCE PARTY

• Third year students take part once a week in a 45-minute class of dance and movement, focusing on cross-lateral coordination, motor refinement, and body control.

Klahanie School Garden Classroom & Sustainability

Birth-3

Students are introduced to sustainable practices through their daily routines in the classroom environment, instilling early stewardship to the care of our earth.

GREEN ACTIVITIES

• Students recycle materials such as paper and plastic.

• Teachers plant seeds with the students.

• Students see the cycle of organic material from consumption to seeds to plants and back again to food.

• Through snack time, students learn about compostable materials and compost foods.

• Consistent observing and tending to plants' needs for watering are part of the children's daily experiences.

3-6

Students adhere to sustainable practices in the everyday life of the classroom, broadening their awareness and sense of responsibility and relationship to the earth. The ultimate goal is for students to become active stewards of the earth and to gain a greater understanding and appreciation for our relationship to the larger ecological environment.

GREEN ACTIVITIES

• Maintaining a vermiculture box /worm bin
• Contributing snack and lunch refuse to compost bins
• Recycling
• Conservation of water and raw materials
• Bird feeders
• Consistent observing and tending to plants' needs for watering are part of the students' daily experiences.

Klahanie School Garden Explorations: Science Space We Co-Create

• Compost from classrooms used in planting projects.

• Vegetable seeds are planted and grown for use during the school year.
• Bulbs planted by the children in the fall at school are used for enjoyment and education in the spring.

Diversity & Inclusion

Diversity, in its most simple form, means difference. At Klahanie School Montessori Antibias, diversity includes race, ethnicity, religion, family composition, family traditions, culture, identity, ability, and socioeconomic status.

While we seek to respect all differences that community members find meaningful, we ultimately believe that our diversity at Klahanie School Montessori Antibias is possible because of a key similarity: shared values. All students of different religions, race, and ability experience equity in

education because of a shared respect for learning and an environment in which ideas are freely exchanged.

At Klahanie School Montessori Antibias we seek to understand diversity through the eyes of a child. We offer each child "windows" and "mirrors." Windows are those moments that allow us to understand and acknowledge the realities of others' experiences. An environment of windows allows community members to interact with and form deep bonds with people who are different from themselves, allowing them to explore beyond their own experiences. Mirrors are those moments in which we see our own lives, experiences, preferences, and culture reflected back to us. An environment of mirrors, in which all members of our community experience the validation and security of interacting with others who are similar to them, is part of what creates the relaxed environment so important to learning and building community.

Windows and mirrors support the Montessori practice of educating through practice, experience, exploration and collaboration, and further the Montessori ideal of education as a path to global equity, justice and ultimate peace. We also work with the idea of being allies to one another in the classroom and in the school. This can take many forms, such as speaking up when anti-social remarks are made or resolving conflicts in thoughtful ways. Students as allies demonstrate and value diversity and inclusion.

Working with each age group according to their developmental readiness, topics of diversity and anti-bias curriculum are introduced. Topics also arise spontaneously from the students' own interactions and independent studies. Teachers build on these opportunities, supporting the children's development of cross- cultural competence.

What is important about diversity is that it offers a way to affirm the self and a way to understand others. The following goals were developed by Louise Derman- Sparks in her book, *Anti-Bias Curriculum*. They are a starting point for the 3-6 classrooms that begin with 2.5yr olds at Klahanie School exploring the ideas of equity, respect, justice and activism.

GOALS OF ANTI-BIAS CURRICULUM

GOAL 1
Each child will demonstrate awareness, confidence, family pride, and positive social identities.

GOAL 2
Each child will express comfort and joy with human diversity; accurate language for human differences; and deep, caring human connections.

GOAL 3
Each child will increasingly recognize unfairness, have language to describe unfairness, inequity, unjust and understand that unfairness hurts.

GOAL 4
Each child will demonstrate empowerment and the skills to act as an ally, with others or alone, against prejudice and/or discriminatory actions.

As the students get older and move into the classroom helper ages of 9-12 and 12- 14, the curriculum includes projects that focus on the history and causes of oppression and of social justice movements. Such work for this age group can be formative in their growing identity as members of the wider society.