



## CURRICULUM SCOPE & SEQUENCE



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# Introduction

This document was created to help the reader understand the scope and sequence of the White Light Montessori School(WLMS) 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 WLMS, we prepare our students for life by offering them a rigorous academic program that develops important skills for success such as creativity, communication, critical thinking, independence, confidence, and resilience. Dr. Montessori referred to this approach as “Educating the Whole Child,” that is, catering to each student’s academic, physical, emotional, spiritual, and moral development. Montessori’s developmental approach recognises 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/will be doing in the classroom, leading to more robust conversations between students, parents, and faculty.

# Developmental Characteristics

## 0-3 CLASS (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 activity that will be meaningful and purposeful. The child wants to be an active participant within his community of family and classmates.

## 3-6 CLASS (3-6 YEAR-OLD)

### *Second Plane of Development*

In the 3-6 classroom, the ultimate goal for each individual is to achieve concentration, self-regulated behaviour, independence, confidence, and an interest in learning about his/ her 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



## 0-3 CLASS (6-36 MONTHS)

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.

### *Developing Skills:*

- Large Motor (running, climbing, pushing, catching, throwing)
- Fine Motor (grasping, wrist motion)
- Cognitive (order, following directions, cause/effect, problem solving)
- Social/Emotional (separation, trust, empathy, conflict resolution, expression of emotions,

relations with others)

- Care of Self and Environment

***Practical life exercises include learning:***

### **HOW TO CARE FOR ONESELF**

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

### **HOW TO CARE FOR THE ENVIRONMENT**

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

### **HOW TO 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

### **3-6 CLASS (3-6 YEAR-OLD)**

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.

#### ***Developing Skills***

- Respect of each other and environment
- Development of intrinsic desire to refine skills • Penmanship
- Overall responsibility
- Cooperation

- Visual and kinaesthetic awareness
- Coordination
- Independence and self-direction

*Practical life exercises include learning:*

#### **HOW TO CARE FOR ONESELF**

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

#### **HOW TO CARE FOR THE ENVIRONMENT**

- Table scrubbing
- Polishing
- Dusting
- Flower arranging
- Dish washing

#### **HOW TO 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 an activity
- How to problem-solve and form positive social interactions

#### **GROSS MOTOR CONTROL**

- carrying and balance

#### **FINE MOTOR CONTROL**

- scooping
- squeezing
- pouring
- spooning
- tweezing

# Sensorial



## 0-3 CLASS (6-36 MONTHS)

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.

### *Developing Skills:*

- Sequencing
- Visual Discrimination
- Auditory Discrimination • Tactile Discrimination
- Eye-Hand Coordination
- Spatial Awareness



- Object Permanence
- Gustatory Discrimination

***Sensorial exercises include:***

- Puzzles
- Block manipulative (pink tower, brown stairs, cylinder blocks)
- Color exploration
- Sound exploration
- Sorting exercises
- Rough/Smooth objects
- Smell exploration
- Matching work
- Food-tasting activities
- • Object permanence boxes

### **3-6 CLASS (3-6 YEAR-OLD)**

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 organised 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.

***Developing Skills:***

- Reasoning
- Discrimination
- Discovery
- Observation
- Comparisons
- Decision Making
- Problem Solving
- Large/Small Muscle Control • Spatial reasoning/awareness • Sound awareness

***Sensorial activities focus on and include:***

- Visual sense: visual discrimination of dimension, form and colour through block manipulatives, colour 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, “Farmessori” visits, 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



## **0-3 CLASS (6-36 MONTHS)**

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

## **3-6 CLASS (3-6 YEAR-OLD)**

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 memorisation, abstraction, and fraction work.

### **INTRO TO NUMBERS**

- One-to-one correspondence, numerical names, quantity, symbol and sequence of numbers one through ten sequencing, writing numbers, odd/even.

## **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.

## **LINEAR AND SKIP COUNTING**

- Place value, tens, teens, greater than/less than, exposure to multiplication

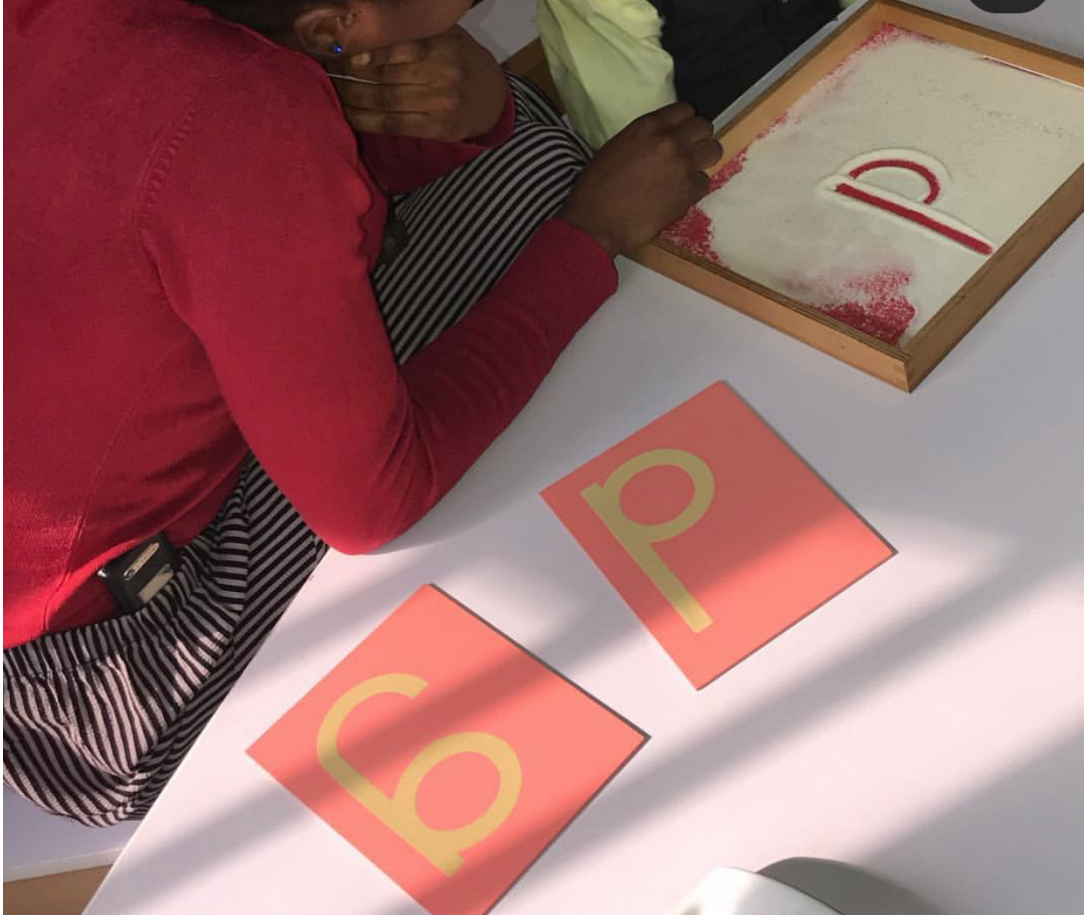
## **MEASUREMENT**

- Introduction to standard and nonstandard units, length, weight, use of a balance scale  
Supplemental math: fractions, time, money, graphing
- Introduction to fractions of a whole (whole, half, thirds, fourths)
- Understanding place value, exchanging, matching, understanding 4 digit numbers, using 0 as a placeholder

## **OPERATIONS AND MATH FACTS**

- Addition, Multiplication, Subtraction, Division
- Names and symbols for coin and dollar value as well as equivalencies for money
- Introduction to the passage of time (month, day, week, year)
- Symbols for reading an analog clock (hour, half hour, quarter of and quarter after, minutes)
- Exposure to different types of graphs, collecting data and making predictions

# Language



## **0-3 CLASS (6-36 MONTHS)**

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.

### ***Developing Skills:***

- Conversations
- Left to Right Orientation

***Language Exercises Include:***

- Reading books aloud
- Guided Questions
- Syntax
- Speaking
- Peer Modeling
- Books
- Language cards
- Object/picture matching
- Puzzles
- Picture sequencing
- Classifying
- Singing songs
- Naming language objects and picture cards
- Daily conversations
- In toddler community: initial sound recognition, practice with sandpaper letters, awareness to the relationship between sound and symbol

**3-6 CLASS (3-6 YEAR-OLD)**

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 analyse 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.

**RECEPTIVE AND EXPRESSIVE LANGUAGE**

- Enhance spoken language development
- Development of vocabulary
- Communication
- Listen to stories and songs
- Student is able to retell and describe stories • Ask/answer questions
- Training the ear for sound



## **PRE-READING SKILLS**

- Developing content, comprehension and self-expression
- Sequencing
- Sound manipulation, classification • Rhyming and sound segmentation
- Modelling main idea concepts

## **COMPOSITION/CREATIVE WRITING**

- Share thoughts and ideas orally and through pictures
- Movable Alphabet to express thoughts and ideas to story format

## **READING**

- Auditory discrimination of sounds to words with object boxes, blends
- Association of symbols with sounds of letters via muscular, tactile, visual/ auditory senses
- Decoding
- Develop sight word vocabulary

## **HANDWRITING**

- Association of symbol with sound the Sandpaper Letters and Movable Alphabet
- Motor/muscular memory of upper/ lowercase letter formation
- Development of penmanship skills through Metal Insets and Chalkboard
- Writing name, recognising the alphabet

## **GRAMMAR**

- Article, Noun, Adjective, Verb
- Alphabetical Order

# Science



## **0-3 CLASS (6-36 MONTHS)**

Science themed lessons give Young Child students the ability to recognise relationships and understand their role in the world, how we impact and shape what is around us, and the interconnectedness of living systems and nonliving matter. Science is taught indirectly as a preparation for further instruction later. Students are exposed to science through sensorial, language and interdisciplinary activities such as books, songs, movement games and finger plays.

## **3-6 CLASS (3-6 YEAR-OLD)**

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 his world.

### **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**

- Root Systems and functions
- Identifying common flowers, trees, shrubs • Classification
- Types of roots, fruits, and seeds

## **ZOOLOGY**

Integrates with Practical Life and provides the children with multi-sensory impressions of the people, lands, and cultures of other nations

- Animal routines
- Animal sounds
- Advanced classification
- Basic needs of animals
- Adaptations
- Parts of animals
- life cycles

# History



## **3-6 CLASS (3-6 YEAR-OLD)**

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



## **0-3 CLASS (6-36 MONTHS)**

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 CLASS (3-6 YEAR-OLD)**

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 familiarisation 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.

## Technology (0-3, 3-6)



While technology was not a part of Dr. Montessori's curriculum when it was developed over 100 years ago, today it has become an important tool in the lives of our students today. Our goal is to educate children so that they reach their inherent potential and prepare our students for life; therefore, it is incumbent upon us to review technology as a tool in the Montessori classroom.

Students at the 0-3 and 3-6 levels are developing skills critical to healthy brain function, such as eye-hand coordination, motor planning, memory, and understanding the nuances of non-verbal cues. All of these skills are best mastered through real and concrete learning experiences. In addition, the young child learns best when all senses are engaged in learning and experiences are both real and reciprocal in nature. For these reasons, use of technology is limited in the classroom.

# Fine Arts



## 0-3 CLASS (6-36 MONTHS)

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: water-colour (fine motor) and easel (large motor)
- Drawing
- Gluing
- Cutting
- Clay work
- Sewing
- Weaving

### **3-6 CLASS (3-6 YEAR-OLD)**

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 the bells and other 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:***

- Bells: use of the Montessori bells in the classroom environment for tone matching and composition.
- Rhythm: introduction to beat of music through instruments and/or composed music; children work with rhythm sticks or simple instruments.

Art exercises include:

#### **EXPLORING AND CREATING**

- Exploration and creative expression are fostered through various media available in the classroom: colouring, drawing, painting at an easel, water-colour painting, clay/sculpture, collage, sewing, and weaving.

#### **APPRECIATION**

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



# Physical Education & Movement



## **0-3 CLASS (6-36 MONTHS)**

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 CLASS (3-6 YEAR-OLD)**

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.

Weekly, third year children attend a Brain Dance class 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 behaviour 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 DANCE**

- 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.

# Greenessori & Sustainability



## **0-3 CLASS (6-36 MONTHS)**

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.
- 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.
- Photographs of combustible materials and of recyclables are new materials for the toddler program.
- Laminated picture cards and vocabulary cards are inserted in fabric sleeves, and directors can use them to connect with the actual use of recyclables in the classroom and what the students can put into their compost buckets after snack and lunches.
- Teachers plant seeds with the students and utilise the school's compost for those plantings.

## **3-6 CLASS (3-6 YEAR-OLD)**

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 vermin culture 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.
- Sustainable landscaping
- No-Waste Lunch Program
- Green Architecture and Facility Management
- Vegetable seeds are planted and grown for use during the school year.
- Bulbs planted by the children at school are used for enjoyment and education when harvested.

# Diversity & Inclusion



Diversity, in its most simple form, means difference. At WLMS, diversity includes race, ethnicity, religion, family composition, family traditions, ability, and socioeconomic status.

While we seek to respect all differences that community members find meaningful, we ultimately believe that our diversity at WLMS 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 WLMS 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 experience, exploration and collaboration, and further the Montessori ideal of education as a path to

global justice and 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 toddler and 3-6 classrooms.

## **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 recognise unfairness, have language to describe unfairness, 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.

Such work for this age group can be formative in their growing identity as members of the wider society.