

**A Montessori Guide for Use with the  
Early Childhood Environmental Rating Scale Revised**

**Charis E. Sharp**

**Christine I. Lowry**

## **Senior Authors**

Charis E. Sharp, PhD., Head of School for Cedar River Montessori

Christine I. Lowry, M.Ed., Coordinator for the Montessori Public Policy Initiative - AMS and AMI/USA

## **Primary Contributors**

Heather Gerker, M.Ed., Program Director of the Greater Cincinnati center for Montessori Education

Marci Martindale, BS, AMS 3-12 certified, Founding Head of The Children's Tree Montessori School, Old Saybrook, CT

## **Acknowledgments**

Efforts to increase the understanding of the Montessori philosophy are only possible with the input of many perspectives and experiences. The following people generously offered their words, questions, and ideas for which we are deeply grateful.

Bonnie Beste, Executive Director – Association Montessori International/USA

Sharon Damore Ed.D., Executive Director of the Association of Illinois Montessori Schools and adjunct Professor at DePaul University

Anna Perry Ed.M., Executive Director – Seton Montessori Institute and Schools

Sara Wilson M.Ed., Director of Accreditation and School Improvement – American Montessori Society

Jerri King, Head of School – Springmont: Atlanta's First Montessori School

## Introduction

As a society, we are growing to recognize and acknowledge the importance of early learning. Early learning professionals are continually exploring and refining the definition of quality early education. Early learning providers are now seeing the direct impact of this work on their own practice, particularly as they are asked to reflect on their practice through multiple lenses and submit to quality rating systems.

The Montessori community is interested in the rating instruments used in evaluating the programs, particularly, in this case, in the Early Childhood Environmental Rating Scale Revised (ECERS-R). There is concern that high quality Montessori classrooms will have a difficult time achieving a score that is reflective of their actual quality, especially if the rater is unfamiliar with the Montessori method.

The purpose of this document is to provide a context for the Montessori classroom for ECERS-R raters, particularly those who have had no previous exposure to Montessori classrooms. Most of the intended results of items or elements sought in the rating are also included in a quality Montessori classroom, they just may be approached differently and may not be readily apparent to one who is unfamiliar with Montessori learning environments.

One of the issues at hand is that any school can use the term *Montessori* in their name. There is no single agency responsible for overseeing all Montessori schools and the name *Montessori* is in the public domain. There is little to no state or federal regulation regarding the use of the term *Montessori* (barring a couple of states that are making strides in that direction). So, there is no guarantee that all Montessori classrooms have the necessary materials and employ the approaches that we detail in this guide. With this in mind, this guide was created with the standard of a high quality Montessori classroom as defined by the American Montessori Society (AMS) accreditation standards and criteria and the recognition of AMI schools by Association of Montessori International USA (AMI/USA).

The Montessori community is committed to providing high quality early learning to every child. We agree with the aim of the Quality Rating Improvement. The Montessori Guide for Use with the ECRS-R provides additional *Notes for Clarification* to help identify and explain elements of the Montessori classroom and approach. While we do not guarantee that every Montessori classroom will reflect what is here, we believe that most will. Our intent is that this guide will enable more accurate ratings and higher levels of understanding of the environment by the raters and encourage raters to seek clarification if an element appears to be missing or unclear during evaluation.

## Table of Contents

Introduction.....	3
General Notes for the Montessori Prepared Environment.....	5
Specific Notes for Clarification of Elements of the Montessori Environment.....	8
Space and Furnishings.....	8
1. Indoor space.....	8
3. Furnishings for relaxation and comfort.....	8
4. Room arrangement for play.....	9
5. Space for privacy.....	9
6. Child-related display.....	9
Personal Care Routines.....	11
9. Greeting/departing.....	11
10. Meals/snacks.....	11
Language-Reasoning.....	11
15. Books and pictures.....	11
17. Using language to develop reasoning skills.....	12
18. Informal Use of Language:.....	12
Activities.....	12
19. Fine Motor.....	12
22. Blocks.....	13
23. Sand/water:.....	13
24. Dramatic play.....	13
26. Math/number.....	13
28. Promoting acceptance of diversity:.....	14
Interaction.....	14
30. General supervision of children (other than gross motor).....	14
Program Structure.....	14
34. Schedule and 35. Free play.....	14
Glossary of Montessori Terms.....	15
Bibliography.....	<b>Error! Bookmark not defined.</b>

## General Notes for the Montessori Prepared Environment

These General Notes for understanding how best practice goals are met in the high quality Montessori classroom are based on Montessori philosophy, pedagogy, and curriculum. This tool is to be used to recognize the materials, activities, teacher-child interactions, and overall program structure and environment that aligns with the goals of high quality early childhood education.

### Space and Furnishing

- A carefully and thoughtfully prepared classroom will be clean, bright with natural light, well-ventilated, free from clutter, and aesthetically pleasing. The curriculum areas include practical life, sensorial, language, math, science, geography, and art & music. All Montessori classrooms will have a quiet corner and/or reading corner furnished with soft items and allowing for private, alone time while still easily supervised by teacher.
- Shelves in each curriculum area include developmentally appropriate activities, referred to as *works* or *jobs*, for the multi-age range of children and are easily accessed by each child. Each activity has its own tray or container, with all items included that are needed to engage in that activity. Activities are sequenced from simple to complex and shelves are purposely arranged for the child to make independent choices and to develop coordination, concentration, and a sense of order. Written labels are not needed because of the well-ordered and visually organized sequence of materials and because of the carefully presented lessons by the teacher, providing guidance and reordering as necessary.
- The Montessori classroom is always responsive to the needs of each child. Activities, units of study, and visual displays are dynamic to meet the changing needs and interests of the children but are limited so that the environment is not over stimulating. Fine art prints, maps, photos, and natural and cultural objects provide interest and beauty. Children's art may be displayed, however, an effort is made to maintain an environment that is not overly stimulating.
- Children may choose to engage in activities at tables or may choose to sit on the floor with an individual rug or mat. This mat designates that child's space. Lessons of grace and courtesy include how and when to interrupt a friend who is working, and how to move around the classroom without disrupting the work on the floor. A child engaged in an activity at a rug or table is assured that he will be able to work independently for as long as he wants without interruption or disturbance.
- Stuffed animals and other soft toys will not be found in a Montessori classroom. There are, however, numerous activities for exploring textiles and tactile sensations as well as multiple ways for children to self-soothe if they are upset. The room arrangement includes several areas with soft furnishings, areas for privacy and quiet, and opportunities for being comforted.
- The outdoor environment is just as carefully prepared and will include a variety of gross motor activities, equipment appropriate for the developmental age range of the children, and activities to develop the child's appreciation of nature.

## Personal Care Routines

- Montessori philosophy teaches respect for each individual child and family. Although the drop off and pick up of children may not occur in the classroom, each child and her accompanying adult is spoken to warmly in all interactions at school. Communication between teachers and families is integral to this team-based approach in raising happy, well-adjusted children. Parents are encouraged to observe in the classroom, and may be invited to participate in the life of the classroom in a variety of ways.

## Language and Reasoning

- Although a Montessori classroom does have a designated area for a wide variety and range of language activities, language experiences and reasoning are integral to the philosophy and pedagogy and are integrated into all aspects of the day.
- Montessori classrooms have a “hum of activity” as children interact with one another and/or the teacher. Lessons in grace and courtesy, positive conflict resolution, and problem solving encourage conversation skills and active listening.
- Many lessons are initially given by the teacher using a minimum of language to focus on the one concept, skill, or goal. This isolates the purpose of the activity and does not divide the child’s attention between focusing on the verbal directions and the physical actions being demonstrated. As the child then explores, makes discoveries, asks and solves questions, and develops mastery, the child becomes the facilitator of his own learning.

## Activities

- The *prepared environment* of the Montessori classroom includes distinct curriculum areas (including practical life activities, sensorial materials, language, math, science, geography, and art) each containing developmentally appropriate activities in a carefully sequenced arrangement that encourages coordination (fine and gross motor), concentration, order, and independence. Shelves and containers do not need written labels as it is clear from the arrangement and placement of the tray or container what the activity is and where it belongs on the shelf. This dynamic environment both expands and changes to meet the changing needs of the children in the class.
- Most Montessori materials include a built-in *control of error*. Materials are designed so that the child receives feedback as he works, allowing him to recognize, correct, and learn from his mistakes without adult assistance. This encourages the development of self-esteem and motivation.

- The concept of self-help that develops the independence resulting in confidence and positive self-esteem is one of the design components of every activity and material, and of the Montessori classroom as a whole. All materials and activities provide direct, indirect, and experiential opportunities for growth and learning. For example: a food preparation activity in the practical life area teaches fine motor skills as the child uses particular tools or skills such as pouring, spooning, or measuring; gives the child the opportunity to engage in an activity he sees adults doing; encourages the development of executive functioning (sequencing, working memory, problem solving, sustained attention); and develops social skills as the child shares what he has prepared with a friend. The sensorial materials (pink tower, broad stair, red rods, etc.), are designed to teach concepts such as size, width, or length comparisons, and provide an impression of the base 10 system (there are 10 of each), and may be used for creatively designing and building structures.
- Every material and activity in the Montessori classroom either directly or indirectly develops fine motor skills.
- The number of similar activities is intentionally limited to support independence in children. The child must learn to wait for her turn, choosing another activity instead, supporting the development of resilience and self-awareness and to naturally broaden her interests.

# Specific Notes for Clarification of Elements of the Montessori Environment

## Space and Furnishings

### 1. Indoor space

*5.1 Ample indoor space that allows children and adults to move around freely (Ex. furnishings do not limit children's movement; sufficient space for equipment needed by children with disabilities).*

**M** As children are free to choose their independent work spaces with rugs or small tables, there can be times when some classroom areas are more densely populated than others. A large part of the children's work in social graces teaches them how and where to lay rugs to be considerate of others, and how to navigate congested areas carefully and considerately.

### 2. Furniture for routine care, play and learning

*7.2 Woodwork bench, sand/water table or easel used.*

**M** Although many Montessori classrooms will not have a specific sand/water table, all will have numerous activities which provide experience and experimentation with spooning, pouring, measuring, sifting, and using a variety of tools with both dry materials and liquids. Both structured (development of fine motor skills) and unstructured (free, imaginative, experimental play) use of materials will be observed.

### 3. Furnishings for relaxation and comfort

*1.2 No soft toys accessible to children.*

**M** Montessori classrooms have a variety ways for children to self-comfort or soothe. There are spaces for quiet time such as a reading corner with soft furnishings and an area for observing the outdoors or the classroom. Montessori classrooms will not generally contain soft plush toys unless they are part of a unit study.

*5.1 Cozy area accessible to children for a substantial portion of the day.*

**M** In addition to the classroom areas listed in 1.2, Montessori classrooms may include a *peace corner* or *table* where two or three children can resolve a conflict with one another, and/or a quiet space for a child to be alone, reflect quietly, or rest.

*7.1 Soft furnishings in addition to cozy area accessible to children (Ex. cushions in dramatic play area, several rug areas or wall- to-wall carpeting).*



**M** While a typical Montessori classroom will most likely have both hard floor and carpeting or large area rugs, all Montessori classrooms have small rugs or mats to designate a child's work space. There are also many soft textile materials in the sensorial area (touch boxes) and in the practical life area (dressing frames).

#### **4. Room arrangement for play**

*7.2 Centers are organized for independent use by children (Ex. labeled open shelves; labeled containers for toys; open shelves are not over-crowded; play space near toy storage).*

**M** Materials are not labeled by name, as children learn the name of an activity when they receive a lesson on it and because the organization of the classroom does not necessitate labels in order for children to know where the materials belong. Children may choose appropriate places to work regardless of where they access the materials.

#### **5. Space for privacy**

*5.1 Space set aside for one or two children to play, protected from intrusion by others (Ex. No interruption rule; small space protected by shelves).*

*7.1 More than one space available for privacy.*

**M** Mats or tables are used by children to define their workspaces. One-person tables are a choice for a child who wants to work alone. Learning to respect other people's work spaces is a regular practice in the Montessori classroom. See note for Standard 3, 1.2 and 5.1.

#### **6. Child-related display**

*3.1 Appropriate materials for predominant age group (Ex. photos of children; nursery rhymes; beginning reading and math for older preschoolers and kindergartners; seasonal displays).*

**M** Visual displays are limited so as not to provide an environment that is overly stimulating or draws the child's attention away from his work. Visual displays may include, fine art prints, photographic images, and natural objects (such as shells, plants, rocks).

*5.2 Most of the display is work done by the children.*

*7.2 Three-dimensional child-created work (Ex. play dough, clay, carpentry) displayed as well as flat work.*

**M** Student work may be posted when the child requests it and may be posted in an area dedicated to display of child art work.

## **M**

### **Personal Care Routines**

#### **9. Greeting/departing**

*1.3 Parents not allowed to bring children into the classroom.*

*7.3 Staff use greeting and departure as information sharing time with parents.*

**M** Montessori classrooms are designed for the child, so many Montessori schools have a designated drop off area outside the room and encourage children to enter their classroom independently. This develops confidence and self-reliance. Parents are encouraged to visit their child's classroom for observations, parent education meetings, and as special guests to share an area of expertise.

#### **10. Meals/snacks**

*5.1: Most staff sit with children during meals and group snacks.*

**M** Although an appropriate number of staff members are always in the classroom, they may not sit at a table with a child. Most Montessori classes offer snack as a choice throughout the morning work cycle. Children can be found serving themselves snack and sitting at a table with one or more peers to eat. Meal times support the development of independence and positive social interactions and supervision and guidance are provided to ensure they are pleasant times for all children.

### **Language-Reasoning**

#### **15. Books and pictures**

*5.1 A wide selection of books is accessible for a substantial portion of the day.*

**M** When there are intentionally limited numbers of a particular item in a Montessori classroom, it gives children the opportunity to learn patience and practice sharing with others.

*5.2 Some additional language materials used daily.*

**M** Montessori materials are available on the shelves at all times and include: pre-reading (rhyming games, visual matching, and story sequence cards), letter name and sound recognition (object boxes), and emergent to competent reading and writing activities and materials (phonetic object boxes, the movable alphabet, etc., which are often contained in a box with a lid and may not be readily observable to the rater.)

## **17. Using language to develop reasoning skills**

*5.1 Staff talks about logical relationships while children play with materials that stimulate reasoning.*

**M** Staff usually observes children who are working in an effort to encourage concentration and not divert attention with conversation. Regular conversation about learning tends to happen more when a teacher is giving a lesson to a child, checking for mastery, or in small group lessons or activities.

## **18. Informal Use of Language:**

*5.1 Many staff-child conversations during free play and routines.*

*5.2 Language is primarily used by staff to exchange information with children and for social interaction.*

*7.1 Staff have individual conversations with most of the children.*

**M** Many lessons are given with a minimum of language, enabling the child to concentrate on the concept or skill involved in the lesson or material. Children may initiate conversation with peers and teachers at any time. Teacher-child conversation is a regular part of the daily routine.

## **Activities**

### **19. Fine Motor**

*3.1 Some developmentally appropriate fine motor materials of each type accessible.*

**M** With the exception of art, the list of recommended materials in three of the four areas of fine motor materials (small building toys, art materials, manipulatives and puzzles) may not be easily recognized in a Montessori classroom. However, nearly all materials in the classroom have direct or indirect application for fine motor skill development. Children may build with sensorial materials, there are many manipulatives in math and other curriculum areas, and puzzle maps will be found in the geography area.

*7.1 Materials rotated to maintain interest (Ex. Materials that are no longer of interest put away, different materials brought out).*

**M** Montessori early childhood or primary classrooms typically include children between the ages of 3 to 6. Therefore, classrooms include a wide range of developmentally appropriate materials. The materials have many extensions for increased complexity and concept development. When ready for the next level of difficulty, children are re-introduced to the material. Some materials

may be regularly rotated while others will be re-applied and re-taught.

*7.2 Containers and accessible storage shelves have labels to encourage self-help (Ex. pictures or shapes used as labels on containers and shelves: world labels for older children).*

**M** The classroom is designed for independent use by each child in the classroom. All activities are grouped according to curriculum area and are sequenced by difficulty from left to right and top to bottom, mimicking the order used for reading, on easily accessed shelves. Thus, labels will not usually be found in a Montessori classroom.

## **22. Blocks**

*3.1 Enough blocks and accessories are accessible for at least two children to build independent structures at the same time.*

**M** The sensorial materials include a variety of activities similar to open-ended blocks such as the pink tower, broad stair, knobbed and knobless cylinders. They are designed to teach concepts such as size, width, and length. In addition, each set indirectly introduces the base 10 system with 10 blocks in each set. After initial introduction to the concept, these materials may be combined in any number of ways by an individual or small group to create designs of their own imagination.

## **23. Sand/water:**

**M** Although a Montessori classroom may not have a specific table for sand/water exploration, there are many activities in the Practical Life curriculum that provide experiences for pouring, spooning, container exchange, measurement, and using tools such as a funnel, or whisk, as well as those for water use such as flower arranging, hand washing, table scrubbing, plant watering, leaf cleaning, and sand and water activities in the geography and science areas. These activities are available for free choice by children at all times during the day.

## **24. Dramatic play**

*1.1 No materials or equipment accessible for dress up or dramatic play.*

**M** Montessori environments provide activities that allow children to explore real-life activities, roles, and themes. Rather than toys to represent themes and adult roles, real materials and tools are used for children's experimentation and exploration (e.g. child-sized brooms to sweep). The activities which meet this need for exploration in young children use materials from the child's home life and community and are not based on fantasy (e.g. themed dress-up clothes).

## **26. Math/number**

*7.2 Materials are rotated as a means to maintain interest.*

**M** Most of the math materials have multiple lessons, becoming more complex and building upon the child's previous understanding. Based on observations by the teacher, materials and activities can be changed to maintain interest and expand knowledge.

## **28. Promoting acceptance of diversity:**

**M** Montessori philosophy is rooted in respect. Respect for the individual, for others, and for the environment. The cultural materials provide the child with ample opportunity to explore a variety of diverse cultures, different languages, family models, religions, and races.

## **Interaction**

### **30. General supervision of children (other than gross motor)**

**M** All interactions are based on the needs of the individual. All children are given lessons based on their expressed interest, their specific developmental level, and their observed need. A child who is deeply concentrated on an activity will not be interrupted by a teacher.

## **Program Structure**

### **34. Schedule and 35. Free play**

**M** A long, uninterrupted block of time for a child's free choice is provided daily. Children may choose their own activities, ask for a lesson from a teacher or a peer, move freely between areas of the classroom, and work alone or in a group. Raters may hear the terms *works*, *jobs*, or *work time*.

Montessori teachers interact with all parents as partners. This is of particular importance with the parents of a child with special needs. The teacher, the parents, and the professionals working with the child interact to provide the child with the necessary modifications needed for successful and full integration into the classroom setting. Ongoing observable assessments are integral to the understanding of the child so that all may contribute to continued growth and positive development.

## Glossary of Montessori Terms

**Control of error** – Montessori materials are designed so that the child receives feedback as he works, allowing him to recognize, correct, and learn from his mistakes. This strengthens his self-esteem and self-motivation as well as his learning.

**Friends** – The term Montessorians may use when referring to children and that children often use to refer to each other.

**Grace and courtesy** – Lessons in grace and courtesy include saying “please” and “thank you,” engaging in conversation, interrupting conversations politely, requesting rather than demanding assistance.

**Mixed-age classroom** – A mixed-age classroom for children ages 2.5 or 3 – 6 years (at the early childhood or primary level).

**Montessori** – a comprehensive "whole-child" pedagogy based on the scientific observations of Dr. Maria Montessori. Over the past 106 years, Montessori schools have grown to become the predominate independent school model worldwide. Independent, peer reviewed research has demonstrated the benefits of the pedagogy to children and families.

**Observation** – An integral role of the Montessori teacher is to watch the classroom with an eye both to the class as a whole and to individual children to assess progress, plan lessons, next steps or changes, determine new student interest (or disinterest) in materials, as well as monitoring the classroom, intervening when needed for safety, health, or conflict resolution.

**Open work time** – The uninterrupted block of work time, usually 2-3 hours.

**Practical life area** – Children in Montessori classrooms learn self-care and care of the environment through activities such as hand washing, dusting, mopping, and plant and animal care. These activities help children learn to work independently, develop concentration.

**Prepared environment** – The teacher prepares the environment of the Montessori classroom with carefully selected, aesthetically pleasing, and purposefully arranged materials that are presented sequentially to meet the developmental needs of the children in the classroom. Well-prepared Montessori environments contain appropriately sized furniture, a full complement of Montessori materials, and enough space to allow children to work.

**Sensorial area** – These activities develop and refine the five senses—seeing, hearing, touching, tasting, and smelling.

**Work or job** – Montessori teachers often refer to a child’s play as his or her *work* or *job*.

## Bibliography

### Montessori Standards

- Howell, L., Sulak, T., Bagby, J., Diaz, C. and Thompson, L. (2013) "Preparation for Life: How the Montessori Classroom Facilitates the Development of Executive Function Skills." *Montessori Life*, Vol. 25, No.1, p. 14-17  
<http://amshq.org/Publications-and-Research/Research-Library/Position-and-White-Papers.aspx>
- Lillard, A., "Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs," *Journal of School Psychology* 50:379-401 (June 2012)  
<http://public-montessori.org/sites/default/files/resources/Lillard%20%282012%29.pdf>
- Lillard, A.S. and Else-Quest, N. "Evaluating Montessori Education," *Science* 131:1893-94 (Sept.29, 2006)  
[http://public-montessori.org/sites/default/files/resources/Lillard\\_science\\_article\\_9\\_29\\_2006.pdf](http://public-montessori.org/sites/default/files/resources/Lillard_science_article_9_29_2006.pdf)
- Diamond, A., "The Evidence Base for Improving School Outcomes by Addressing the Whole Child and by Addressing Skills and Attitudes, Not Just Content." *Early Education and Development*, 2:780-793 (2010)  
[http://montessori.org/sites/default/files/resources/Diamond\\_Evidence...Outcomes...Whole\\_Child.pdf](http://montessori.org/sites/default/files/resources/Diamond_Evidence...Outcomes...Whole_Child.pdf)
- Lillard, A., "What Belongs in a Montessori Primary Classroom? Results from a Survey of AMI and AMS Teacher Trainers" AMI/USA Monograph. (Feb. 2011).  
[http://montessori-science.org/Lillard\\_montessori\\_primary\\_classroom\\_survey\\_AMI\\_AMS\\_teacher\\_trainers.pdf](http://montessori-science.org/Lillard_montessori_primary_classroom_survey_AMI_AMS_teacher_trainers.pdf)
- Essential Elements of Successful Montessori Schools in the Public School Sector.  
[http://amshq.org/school-Resources/Public.aspx Essential Elements\\_public\\_sector.pdf](http://amshq.org/school-Resources/Public.aspx Essential Elements_public_sector.pdf)
- Standards for AMI Montessori Classrooms  
<http://amiusa.org/school-standards/>
- Creech, F., "Matching Curriculum Standards to Your Montessori Early Childhood Program. AMS Annual Conference, 2011  
[http://amshq.org/Events/AMS-Annual-Conference/Past-Conferences/2011-Annual-conference/Creech\\_Primary\\_MontessoriCAD.doc](http://amshq.org/Events/AMS-Annual-Conference/Past-Conferences/2011-Annual-conference/Creech_Primary_MontessoriCAD.doc)



## Outcomes

Murray, A.K., "Overview of Research on Montessori Education: An Evidence-Based Curriculum" (2010)  
<http://amshq.org/Publications-and-Research/Research-Library/Position-and-White-Papers.aspx>

Bagby, J. and Jones, N. (2010) "Montessori Education and Practice: A Review of the Literature, 2007-2009." Montessori Life, Vol. 22, No.1, pp.44-48  
<http://amshq.org/Publications-and-Research/Research-Library/Position-and-White-Papers.aspx>

Dohrman, K., "Outcomes for Students in a Montessori Program: A Longitudinal Study of the Experience in the Milwaukee Public Schools" (AMI/USA May, 2003)  
[www.montessori-ami.org/research/outcomes.pdf](http://www.montessori-ami.org/research/outcomes.pdf)