TEACHSTONE®

CLASS®

# CLASS® OBSERVATION SUPPORT FOR MONTESSORI ENVIRONMENTS

# Table of Contents


**Table of Contents** . . . . . 2

**Introduction** . . . . . 3

**Characteristics of Montessori Settings** . . . . . 4

**Recognizing Our Mental Frameworks** . . . . . 5

**Strategies to Recognize and Reduce Bias** . . . . . 6

Elements You May Observe in Montessori Settings . . . . . 7

Applying the CLASS Lens in Montessori Settings . . . . . 8

**Observation Strategies in Montessori Settings** . . . . . 10

Broad Strategies for Observing in Montessori Settings . . . . . 10

Take a "Wide-Angle" View . . . . . 10

Look for "Embedded" Interactions . . . . . 11

Observe for Dimension/Indicator Intent . . . . . 13

Recognizing & Coding Specific Variations in Montessori Settings . . . . . 14

Triangular Interactions . . . . . 14

Educator Sensitivity/Responsiveness . . . . . 14

Language Modeling . . . . . 15

Coding Activity Settings . . . . . 16

Format: Independent/small group work vs. centers . . . . . 16

Identifying content areas of Montessori Materials . . . . . 16

**A Quick Guide to Montessori Materials** . . . . . 17

Primary (Ages 3-6 Classroom) Materials . . . . . 17

Primary Practical Life Shelf . . . . . 17

Primary Sensorial Shelf . . . . . 18

Primary Language Shelf . . . . . 19

Primary Math Shelf . . . . . 20

Primary Cultural Shelf . . . . . 21

Primary Art Shelf . . . . . 22

Lower Elementary (1st-3rd grade) Materials . . . . . 23

Lower Elementary Language Area . . . . . 23

Lower Elementary Math Area . . . . . 24

Lower Elementary Geometry Area . . . . . 25

Lower Elementary Art Area . . . . . 26

Lower Elementary Biology Area . . . . . 27

Lower Elementary Geography Area . . . . . 28

Lower Elementary History Area . . . . . 29

# Introduction

Welcome to the CLASS® Observational Support for Montessori Settings. This tool helps CLASS observers apply what they have learned about CLASS observations in diverse settings to the uniquely structured environments of Montessori classrooms.

According to the National Center for Montessori in the Public Sector, there are over 3,000 Montessori schools in the United States. The CLASS® tool, which measures the effectiveness of educator-child interactions, is one of the most widely used observational tools in state and local early childhood systems. Today, many Montessori classrooms are undergoing CLASS observations. As a result, both CLASS observers and Montessori educators often have questions or concerns about how to reliably use the CLASS tool while ensuring that the richness of Montessori education is captured during the observation.

In classrooms that fully implement the Montessori model, observers will notice that children engage in a great deal of independent work, and educators interact directly with children less frequently than in learning settings where there is a greater emphasis on direct instruction. While the strategies Montessori educators use might *look* different from those in traditional learning settings, they still align with the *intent* of CLASS indicators and dimensions.

We developed this tool in response to the questions and concerns of CLASS observers and Montessori educators. Our goal is for both groups to understand the intersection of the CLASS® framework and Montessori and to feel confident that interactions can be recognized and accurately coded in Montessori settings.

This support tool can be used as an addendum to either the CLASS® 2008 or CLASS® 2nd Edition frameworks, as it was written in response to the updates and revisions of the CLASS® 2nd Edition tool by Montessori experts. Montessori experts consulted for this resource recommend that any CLASS observer working in Montessori settings update their certification to CLASS 2nd Edition and familiarize themselves with this observational support to understand better the alignment between the CLASS® 2nd Edition framework and Montessori.

Thank you for your dedication to continuous improvement and for furthering your understanding of CLASS observations in diverse settings.

# Characteristics of Montessori Settings

Montessori education is a coherent, whole-school approach and curriculum designed over 100 years ago by the Italian physician Maria Montessori. Dr. Montessori based her method on detailed, scientific observations of the characteristics and needs of growing children and adolescents. In Montessori classrooms, each child can learn at their own pace and explore their interests as they develop cognitively, socially, emotionally, and physically. Specially trained adults guide the children, focusing on the child's independence, exploration, and discovery.

Schools that fully implement the Montessori method share a consistent set of structures, materials, and processes defined by the approach's pedagogy and curriculum. These include the following:

- A comprehensive set of Montessori materials for each age group.
- An educator holding a Montessori credential,
- Extended periods (2-3 hours) of open work time during which children have the freedom to choose activities and explore materials (small group or one-on-one instruction takes place throughout),
- Close observation and detailed record keeping, which is used as the basis for instructional decisions and environmental modifications, and
- A 3-year mixed-age classroom.

However, it is essential to note that the term "Montessori" has never been trademarked. This means that anyone is free to call their program "Montessori," and not all schools using the name will reflect the approach. ***Observers should therefore gain a basic familiarity with the setting before each observation, as the principles in this tool are most applicable in settings that closely follow Montessori practices.*** Questions to consider before observing at a Montessori school:

- Do the directors consider their program to be fully implementing the Montessori model?
- Does the director state that most (or all) of the five above characteristics are present in their program?

If you determine that a given setting uses the word "Montessori" but does not follow Montessori practices, the specific focus and strategies described here may be less relevant to your observation. In that case, you can rely on the general strategies learned during initial CLASS certification.

# Recognizing Our Mental Frameworks

Our notions of how a learning setting should "work" or "look" are heavily shaped by our personal, professional, and educational experiences. Early memories of our first learning settings and educators, for instance, provide a framework for understanding how schools are structured. That framework can be reinforced, shaped, or challenged by later educational experiences, our college studies, and/or our professional experiences in learning setting environments. If you are a parent, perhaps selecting and supporting your child in their early childhood education experience has shaped your ideas and expectations of what an early childhood learning setting looks like or how it functions.

Learning environments serving a high proportion of children from low-income families and children of color are less likely to offer highly child-centered, constructivist approaches, such as the Montessori method. Montessori has largely been available in the US for families able to afford private school tuition. As a result, observers may sometimes hold preconceptions regarding who Montessori is "for," or which children will benefit from it.

There is no way to eliminate all assumptions or preconceptions. All people have personal inclinations, preferences, and preconceived ideas. But remaining unaware of these ideas or beliefs can affect our ability to observe objectively, as it can affect what we notice, what we miss, our judgments about the effectiveness of interactions, and how we assign CLASS scores. In turn, subjective CLASS scores impact learning environments, educators, and children. It is, therefore, essential to learn the skills of recognizing and interrogating our assumptions so that these beliefs or judgments (Teachstone typically uses this form of the word) do not influence (either positively or negatively) the way we interpret or score interactions.

It can be challenging to remain objective when there are similarities or differences in social and cultural characteristics among observers, educators, and children such as (race, ethnicity, gender, age, disability status, language, and accent). Alternatively, assumptions can stem from individuals' personalities, beliefs, likes, and dislikes, or from characteristics of the settings where the observation occurs such as (geography, quality of materials, setting size, organizational affiliations, and curriculum).

While not exhaustive, the *CLASS Observation Support for Montessori Environments* is designed to provide observers with less experience or familiarity with Montessori settings with examples of relevant, CLASS-aligned behavioral markers that may be observed in these settings, as well as tips for recognizing and coding such behaviors.

# Strategies to Recognize and Reduce Bias

Observers should take active steps to recognize and reduce the impact of biases that may arise during their observations in a particular setting. They should be especially aware of how their own personal, professional, and educational experiences may shape their expectations and affect their observations. This will help them better anticipate interaction variations and more intentionally recognize and challenge biases throughout the observation process.

Teachstone recommends the following strategies to help reduce the impact of bias on CLASS observations:

| Build Awareness | Recognize Bias |
| --- | --- |
| + What are your expectations of a classroom that come from your personal, educational, and professional background?<br>+ How familiar or unfamiliar does this setting feel to you?<br>+ Have you heard of or learned about Montessori before?<br>+ Is there anything about a Montessori setting that triggers your biases (either positively or negatively)?<br>+ How might Montessori programs be comfortable for children in these settings? | + Notice when you experience feelings, thoughts, and sensations (positive and negative) in response to what is happening in the learning setting.<br>+ Notice when you start to think about what could be done differently or how you might respond or do something in a similar moment.<br>+ As you notice these feelings, thoughts, and sensations, acknowledge that there is potential for bias to impact your observation via judgments and assumptions.<br>+ Take action to reduce the impact of bias as quickly as possible. |

## Reduce the Impact of Bias

| Strategies During an Observation | Strategies After the Observation |
|---|---|
| + Take a deep breath and remind yourself to write only notes of facts you see and hear.<br>+ Intentionally focus on the children so you can document their reactions and ground yourself in capturing their experience (the facts) rather than your own internal responses.<br>+ Sometimes it helps to briefly focus only on the children to allow your emotions about the educator's actions or responses to subside.<br>+ Take a brief moment to write down how you are feeling and thinking (somewhere other than on the score sheet) to help process and release the feelings and thoughts. You could use sticky notes or even a separate journal.<br>+ Finish the observation cycle and revisit your notes during the coding period | + Apply the CLASS coding process (NICE).<br>+ Reorient to the CLASS dimensions and indicators.<br>+ Reorient to the experiences of the child(ren).<br>+ Ensure notes capture facts (not feelings).<br>+ Return to the note(s) of your feelings and thoughts, and ask yourself, What did I see or hear that led me to have that feeling or thought? Then add any clarifying or more objective notes into the corresponding dimensions on the score sheet. |

## Elements You May Observe in Montessori Classrooms

There are several examples of structures and processes that you may observe in Montessori classrooms that vary from commonly held ideas about how school "looks" or "works." These varying structures and processes, in turn, may influence the ways that interactions take place in a Montessori setting (more on that below). As you read, take note of which, if any, of these variations may trigger biases (either positive or negative) that could influence your overall impressions of a setting:

**Mixed-age groups:** You may see children of varying ages (typically a 3-year span) in the same classroom. Children aged PK3 through Kindergarten will usually be grouped in the same classroom, as will children in grades 1-3.

**Larger class sizes/higher ratios:** You may see larger class sizes and/or higher child-to-educator ratios than what might be found in a typical learning setting. While Montessori classrooms usually operate within the same regulatory systems as other programs, it is not unusual for Montessori classrooms to serve the highest number of children per educator that policy allows. Additionally, given the pedagogical approach of Montessori, some state and local systems exempt Montessori programs from following established educator-to-child ratios.

**Open, unstructured work periods:** The predominant learning format of a Montessori classroom is typically open work, during which children engage with materials individually or in pairs/small groups. You may observe minimal or no large or whole-group instruction, and the educator may not interact with every child during an observation.

**High degrees of child freedom, choice, and autonomy:** Children will typically have a high degree of freedom and choice in a Montessori classroom, including deciding what to work on, when, where, with whom, and for how long.

**Educator as facilitator:** You may notice that Montessori educators behave more like "facilitators" than "teachers." Their lessons may be brief and delivered to only one or two children, they may "guide" more than "instruct," and they may spend some portion of their time observing and notetaking rather than interacting directly with children.

**A range of activity and volume levels:** Between or within cycles of observation, you may observe a wide variation in the levels of movement and sound in a Montessori classroom. A Montessori educator may prioritize adapting and responding to child-initiated choices over directing. As a result, there may be times when the classroom is nearly silent, as children work independently while educators observe. At other times, collaborative projects and hands-on lessons may contribute to a bustling classroom environment with an audible hum of activity throughout.

Remember that effective interactions can vary across people, cultures, and educational settings. You may be intrigued, confused, or troubled by certain Montessori structures and processes. Montessori classrooms may align with, or diverge from, what you believe to be appropriate in ECE settings. It's important these impressions do not distract you from objectively recognizing and coding CLASS interactions in Montessori settings.

## The CLASS Lens in Montessori Settings

As noted in the *CLASS® 2nd Edition Pre-K–3rd Observer Field Guide*, observers must engage in an ongoing process to deepen and broaden their understanding of effective interactions and to intentionally connect that understanding to concrete practices during their observations.

In general, those recommendations entail understanding variation in program settings and models, observing the experiences of every child, and remaining grounded in the definitions for each dimension and indicator. Remember that while Teachstone provides several scenarios of behavioral markers that align with each indicator and dimension, the list is not meant to be exhaustive. In diverse settings, like Montessori, interactions that align with a given indicator may vary.

### Understand Variation

- **Expand understanding of effective interactions:** Observers should expand their understanding of effective interactions to be inclusive of diverse settings and approaches.
- **Learn about variability among settings:** Observers should be familiar with the contexts and communities in which they plan to observe. Although it is possible to observe Montessori settings without prior knowledge of the approach, the more observers know about it, the better prepared they will be to capture potential variations in interactions.
- **Check for biases:** Observers should take active steps to recognize and reduce the impact of biases that may arise during observations. In the case of Montessori settings, observers may want to pay particular attention to how their own personal, professional, and educational experiences shape their expectations of an educational setting, as well as their assumptions about which children are likely to benefit from specific approaches.

## Observe Every Child

- **Note the experiences of every child:** Every child should have access to, interact with, and benefit from their learning environment. During a cycle of observation, educators will not necessarily interact with every child; however, observers should shift their attention throughout the classroom to note whether all children are able to engage effectively with learning activities and opportunities. If this is not the case, it should be noted and scored appropriately.
- **Observe how children respond:** Montessori educators may vary in the ways they provide support and interact with children. For instance, a Montessori educator may occasionally choose to adjust an element of the *environment* to meet a child's needs, rather than interacting directly with the child. As a result, observers should attend to each child's response (to interactions with the educator, the environment, and/or peers) to determine whether a specific interaction is effective.

## Align with CLASS® Framework

- **Reference dimension and indicator definitions:** Descriptions and behavioral markers provide some examples of what interactions may look like for each dimension and indicator. However, these are not the only ways that effective interactions can look and sound. When observers notice an interaction that is not described by a familiar behavioral marker, they should focus on the intent of the indicator or dimension described by the definitions and ask whether the observed activities and interactions meet that intent. This is important in all contexts, but it takes on particular significance in Montessori classrooms.
- **Look for nonverbal interactions and behaviors:** Both educators and children may use nonverbal strategies to connect, regulate, engage, think, and communicate. Children may also demonstrate understanding and skill through nonverbal behavior. Observers should note the body language, facial expressions, gestures, use of materials or visual supports, and physical contact of both educators and children. Observers should also note children's physical participation in activities, including imitating educator actions, manipulating materials, or observing quietly.

# Observation Strategies in Montessori Settings

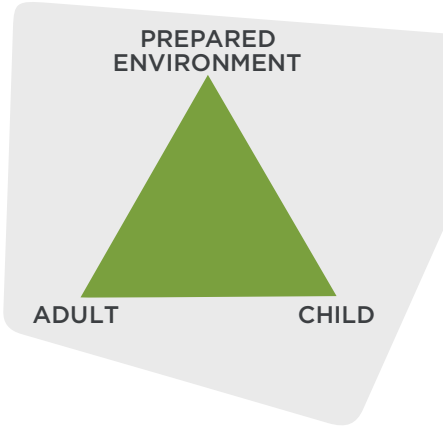
Here, you'll find concrete tools for applying what you have learned to your observation practice when working in Montessori environments. We will first provide some general advice for approaching a Montessori classroom, and then we will "zoom in" to offer more detailed instructions for specific dimensions. The intention here is to address particular tensions and questions that CLASS observers have brought to our attention when working in Montessori classrooms.

## Broad Strategies for Observing in Montessori Settings

To ensure your observation is responsive to the general structure and processes of a Montessori classroom, we suggest taking a "wide-angle" view, looking for "embedded" interactions, and observing for dimension or educator intent."

### Take a "Wide-Angle" View

It can be easy to favor educator-child interactions over other types of interactions occurring in the room. Some observers may adjust their location, for instance, to keep educators within sight and sound, and the results may be notetaking that is weighted toward educator behaviors and verbalizations. In a Montessori classroom, remember that learning is believed to take place through a triangular relationship between the child, the adult, and the environment (which includes peers).




Therefore, taking a "wide-angle" view is particularly important when observing a Montessori setting. This means balancing attention and notetaking between the three different types of interactions that may be occurring in the room: educator-child, educator-environment, and child-environment (which includes peers). Remember that both other children and the environment can be authentic sources of CLASS-aligned interactions. Take the scenarios below as examples.

**Scenario 1 (Language Modeling):** Two children in an early childhood classroom, one older and one younger, work with a set of language cards. The younger selects the label "sweatshirt" to match their photograph. The older says, "This one is open in the front, with buttons. It's a cardigan," and points to the correct label for the picture.

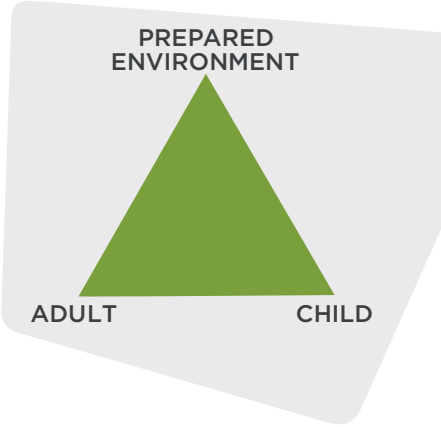
**Scenario 2 (Quality of Feedback):** A lower elementary child works with a pin map for quite some time, placing small, flagged pins on a wooden map to label each country in Africa. When they finish, the child walks to a nearby shelf, gets a "control map", and brings it back to compare with their pins. After discovering a couple of errors, the child corrects the pins before choosing to write out the country names on a paper map of the continent.

Note that in these scenarios, no direct educator-child interaction took place. In the first, advanced language was modeled by an older child. In the second, the environment provided the child with the feedback necessary to correct and then extend their own work. In both cases, children's needs were met via CLASS-aligned supports. Additionally, in both cases, an observer would need to take a wide-angle view (balancing observation between on- and off-teacher activities) to capture the interaction.

Many Montessori environments have two dedicated educators present: a lead educator and an assistant. When this is the case, there is often a division of roles between the two adults. One may deliver all the formal instruction, while the other follows up to support children as they work independently. One may remain focused on interaction with individual children or small groups, while the other circulates throughout the classroom, monitoring and responding to children's needs. Here again, it is helpful to take a "wide-angle" view when observing in Montessori settings. The question, for instance, is not, "Did educator #1 monitor for or respond to children's needs?," but rather, "Were children's needs noticed by an educator and, when necessary, responded to?" This is because one educator may intentionally focus on lesson delivery, with the shared understanding that monitoring and responding will be handled by the partner educator.

## Look for "Embedded" Interactions

Montessori environments are designed to promote maximum child independence and autonomy. Remember the triangle of Montessori interactions:




Montessori educators may work in support of children both by interacting directly with them and/or by preparing and adjusting the physical environment to better meet children's needs and to support children in independently meeting their ***own*** needs. Montessori educators may spend significant time and effort preparing the classroom environment in such a way that many CLASS elements (i.e., routines, opportunities for learning, or creativity) are "embedded" within the design of the classroom and its materials. In other words, there are times when children may be supported in CLASS-aligned ways *without* observing familiar behavioral markers of the educator. When this is the case, it is important to remember to observe children's activity, affect, and response with indicator and dimension *intent* in mind.

> **Scenario:** A child enters the room, greets their educator, and independently initiates work by selecting a material from the shelf. In time, they return their material, and after observing other classroom activities for some time, they select another. You observe similar behavior from many or most children throughout the observation period.

Note that in the above scenario, the child interacted with an educator only briefly (in the form of a morning greeting). And yet, several CLASS-aligned interactions may have taken place. This was made possible by the educator's careful preparation of the environment, ensuring that routines and learning opportunities were built into or embedded within it. Depending on specifics (duration of activity, child affect, physical organization and preparation of the classroom, frequency of such behavior during the observation period, etc.), this child-directed activity may provide evidence of one or more of the following indicators:

- ☑ **Respect:** Cooperation and sharing appear embedded in classroom processes. Is there a shared understanding that one child can work with a material and then return it to the correct place for use by another child?
- ☑ **Enjoyment:** Children are content, smiling, and expressing enthusiasm.
- ☑ **Child comfort:** Children freely participate in their work and, they appear comfortable taking risks.
- ☑ **Child-centered:** Children freely choose materials, demonstrating that activities incorporate children's interests and follow children's leads.
- ☑ **Support for autonomy and leadership:** The classroom functions as if it is designed to provide meaningful choice, opportunities to lead activities, and chances to exercise responsibility.
- ☑ **Allows movement:** Children freely move about the classroom during the observation period.
- ☑ **Opportunities for learning:** A wide variety of activities are available for children to engage with, thereby minimizing the time children spend waiting.
- ☑ **Routines:** It appears clear that children know what to do with their time, and children know the consistent routine of the day without explicit communication from the educator. While children pause between activities, is this a productive "brain break" to prepare for the next autonomous choice, rather than an instance of wandering?
- ☑ **Preparation:** There is clear evidence of materials being "ready and accessible." Are most children able to engage independently and productively with activities without educator assistance or intervention?
- ☑ **Variation in approach:** Children engage with hands-on and participatory opportunities, and the materials represent a wide range of modalities.
- ☑ **Child interest:** The children actively participated in activities with the materials and demonstrate focused attention.

In some learning settings, many of the CLASS indicators above are most effectively met through direct educator-child interactions. In Montessori classrooms, however, supportive, CLASS-aligned interactions are just as likely to occur through child-child and child-environment interactions. As a result, observers must remain aware of how careful educator preparation may have incorporated *supportive* elements into the structural and process elements of the classroom.

## Observe for Dimension/Indicator Intent

We've recognized that in Montessori settings, CLASS-aligned supports may be provided to children with or without direct educator-child interactions or in the absence of familiar CLASS behavioral markers. When observing, taking notes, sorting by dimension, and coding, observers should remain attuned to the definition and intent of CLASS dimensions and indicators, rather than focusing primarily on direct interactions between educators and children.

> **Scenario:** A child puts away their materials and walks to an area where "serve yourself" snacks are available. They place a nametag at the table (to reserve one of the three available spaces), wash their hands, and take a plate for food. As they walk down the counter, they use tongs to serve themselves a few different items. Each serving plate is accompanied by a sign like the following, designating how many pieces they are welcome to take:


Again, this scenario may not immediately demonstrate any familiar behavioral markers. And yet, depending on the specifics of what you observe surrounding this child's behavior, the *intent* of several indicators or dimensions may have been met. These could include

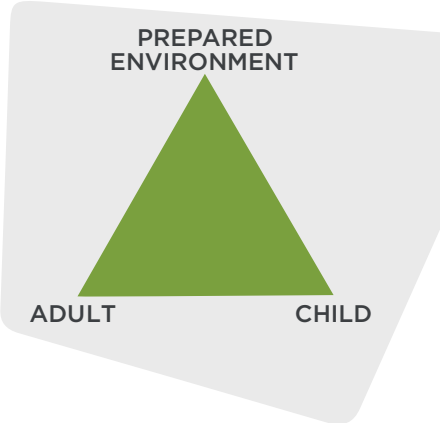
- ☑ **Connections to everyday lives:** If the intended outcome is met, the child is able to relate the concept of numbers and counting to the everyday task of serving a snack.
- ☑ **Support for autonomy and leadership:** The environment supports the child to make a meaningful choice of when to break from work to meet bodily needs.
- ☑ **Cooperation with expectations:** The child cooperates with expectations, with or without direct educator communication. For example, do they wait for a snack to be available, reserve a space with their name tag, and make clear attempts to serve the correct number of items on their plate?
- ☑ **Routines:** The child appears to know what is expected around snacks (wait until snack food and space are available, put away learning materials, serve yourself appropriately, sit at the table during eating, put away dishes, and clean up after yourself) and how to do it.
- ☑ **Preparation:** The snack is prepared and available in a timely and efficient manner, or the snack is prepared and served with the involvement of children.
- ☑ **Clarity of learning objectives:** The child engages with the numeracy task of counting out their snack items and relating the written numeral to the number of dots. The child engages in complex, multi-step processes or acts as a responsible and respectful community member.
- ☑ **Integration:** The snack signs link the previous concept of number to the more advanced concept of numeral, then to the experience of serving oneself food.
- ☑ **Scaffolding:** The environment is prepared in ways that provides effective scaffolding for children to complete the activity according to their individual levels. Such scaffolding could include a snack nametag (or other signifier), the number-to-numeral signs, a variety of serving tools with different levels of challenge, placemats with shapes drawn on them to support place setting, clearly organized snack supplies (plates, napkins, glasses, silverware, etc.), and washing tubs and cleaning materials in a logical line to support clean-up.

# Recognizing & Coding Specific Variations in Montessori Settings

Here you'll find specific examples of how interactions can vary in Montessori settings, along with tips on how to take notes, code, and score in response to these variations.

## Triangular Interactions

Again, the primary way interactions vary in Montessori settings is that they are understood not as dyadic educator-child interactions, but as triadic interactions that take place within a triangular relationship between child, adult, and environment. Peers are considered an element of the environment surrounding a child.




This means that a higher proportion of effective interactions may occur "off-teacher" in Montessori classrooms than is typical in other environments. In addition to educator-child interactions, you may also observe CLASS-aligned interactions between the child and the environment or the child and peers.

## Educator Sensitivity

In their preparation to become teachers, Montessori educators are taught to prioritize child independence and self-sufficiency as key educational outcomes. As a result, you may observe that Montessori educators display a high degree of comfort when a child is persisting through a challenge with a task. At times, they may "respond" to a child's needs by making an adjustment to the environment rather than directly intervening with the child (see the Montessori triangle above).

> **Scenario:** In a preschool classroom, you observe a very young child showing interest in a pouring activity on the practical life shelf, but they are struggling to determine when to stop pouring to avoid an overflow. The educator might add food coloring to the water so that the water level is more evident than if it were transparent.
>
> or
>
> A child enjoys sorting shells by shape, and you observe them repeating the activity several times during your observation. The educator might replace the shell sorting activity with a version that requires a higher level of skill, for example, shells that have the same shape but different textures.

Some observers may bring a different threshold to an environment for when an educator should assist and may feel uncomfortable witnessing a child struggle or approach frustration. When this happens, it is important to revisit our strategies to "Recognize and Reduce the Impact of Bias" (see above). Observe the child's affect and context: Are they capable of persisting? Are they opting to persist, or are they disengaging from the activity? Are there signs of actual distress (as opposed to frustration)? Do any peers intervene and provide support? Do you observe the educator adjusting the physical environment to meet a child's needs? Examples might include switching out available materials, moving furniture, or repositioning clothes to make it clearer how to put them on independently.

Despite possible variations in Montessori educators' tolerance for child struggle, it remains crucial in *any* environment that educators maintain a keen **Awareness** of children experiencing instructional or social-emotional challenges and respond (whether via work with the child or the environment) in ways that support children's developing senses of self-efficacy, connectedness, and competence.

## Language Modeling

The mixed-age classrooms and larger class sizes of Montessori classrooms are specifically designed to foster child collaboration and peer teaching. In Montessori classrooms, older children often support younger children in their work, modeling possibilities for more advanced work and more sophisticated interpersonal interactions. While it is certainly the case that Montessori educators engage in Language Modeling by providing Open-Ended Promts, Communication Exensions, and Narration when delivering many lessons, some procedural lessons (washing a table, for instance) may be delivered in silence. Furthermore, it is just as likely that you may observe children modeling Advanced language for one another.

> **Scenario:** In a preschool classroom, you observe two children (one is 3, the other is 5) working side by side with a set of language cards that match photographs of various invertebrates with labels featuring their names. The younger child points to a photograph and says, "crab." The older child, who is beginning to read, points to the only remaining label and corrects, saying, "Actually, this is a lobster! Its body is long and thin, with pincers in front and a tail fan in the back!" and then allows their young friend to place the label.

It is essential to note the specific language of the CLASS® 2nd Edition indicators that comprise Language Modeling and to code accordingly. The first indicator in the dimension, Frequent Conversation, specifically identifies conversation and exchanges between children as a behavioral marker. However, the other three indicators—Open Ended Prompts, Communication Extensions, and Narration—are written in a way that focuses specifically on educator behaviors. Notice how the high-range indicator summaries from the CLASS® 2nd Edition Pre-K–3rd Observation Field Guide describe and highlight educators' actions:

> **Open-ended prompts:** "Educators effectively use prompts…"
>
> **Communication Extensions:** "Educators often repeat, expand, or extend children's language…"
>
> **Narration:** "Educators use in-depth narration…"

Therefore, Language Modeling may be one dimension of the CLASS® 2nd Edition tool that remains challenging for some observers and may not fully capture the extent to which children's language development is supported in Montessori classrooms. While the Language Modeling dimension is primarily focused on the strategies used by educators to foster language development, a recent large-scale study demonstrated that despite this philosophical misalignment, Montessori classrooms score only slightly lower than other programs on the Language Modeling dimension. Meanwhile, they scored slightly higher on the Instructional Support domain (to which Language Modeling contributes) overall (Lillard et al., 2024).

When conducting and scoring CLASS observations in any learning setting, follow the CLASS Coding Process (NICE) and:

- Take steps to ensure your notes are detailed and objective,
- Refer back to the dimension face pages, indicator summaries, and descriptive pages in the CLASS® Observation Field Guide to first forecast and then confirm the range for each indicator, and,
- Evaluate and reflect on each child's experience before assigning a score for the dimension.

## Coding Activity Settings

### Format: Independent/small group work vs. centers

In a typical, fully implemented Montessori classroom, the predominant instructional format will be **"independent work/1:1," with some "small group work"** taking place as well. During independent or small-group work, children would be free to make choices regarding what to work on, where, with whom, and for how long, while engaging predominantly with Montessori learning materials. Observers should code accordingly.

However, we must remember that not all schools with Montessori in the name are practicing the approach comprehensively. Therefore, watch for the following adjustments to coding "format" in some classrooms:

- If you recognize that children are interacting with "toys" (examples may be play kitchens, train tracks, dress-up costumes, dolls, etc.) rather than the Montessori materials featured on pages. 17-29, the format should be coded as **"free play."**
- If you recognize that there are a limited number of activity choices through which children rotate at educator-determined times, the format should be coded as **"centers."**

### Identifying content areas of Montessori Materials

The learning materials in a Montessori classroom are unique and specific to the Montessori curriculum. They tend to be specially designed, hands-on materials, often made of natural materials like wood, glass, and metal, that require specialized training for educators to use in their instruction. We recognize that it may be difficult for observers to identify the content areas children are engaging with when receiving a lesson or working independently with Montessori materials. Montessori classrooms should be very logically organized, with a designated shelf for each of the core curriculum areas. Therefore, once you learn to recognize that a particular material belongs, say, to the "math" or "language" area of the curriculum, it will be easier for you to accurately code the content area in the Activity Settings section of your CLASS scoresheet.

To facilitate this, we have prepared the following "Quick Guide to Montessori Materials." In this guide, you will find the following:

- Two sections, one illustrating materials at the Primary (ages 3-6) level and one illustrating Lower Elementary (ages 6-9) materials
- Within each section, a single-page visual guide for each curriculum content area of the Montessori curriculum
  - At the top of each page, you will find an image of shelves dedicated to that curriculum area
  - Below that, you will find close-up images of some core materials (but not all of the possible materials) that should typically be found on that shelf.

# A Quick Guide to Montessori Materials

## Primary (Ages 3-6 Classroom) Materials

**Primary Practical Life Shelf**

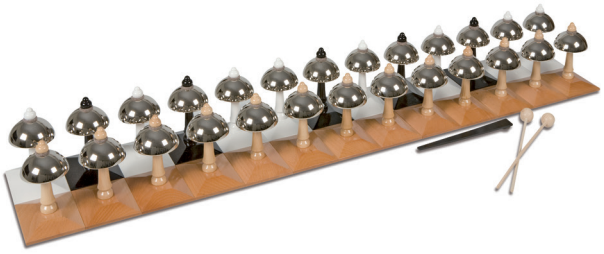
**(Code as Social-Emotional)**

### Core Practical Life Materials

**Primary Sensorial Shelf**

(Code as Literacy and/or Math)

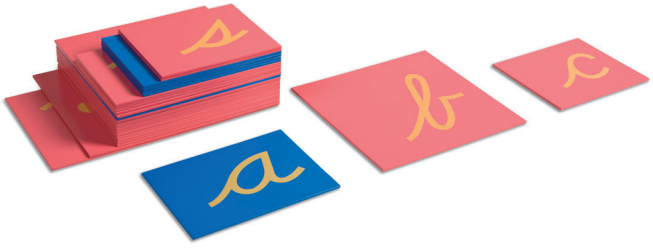
## Core Sensorial Materials

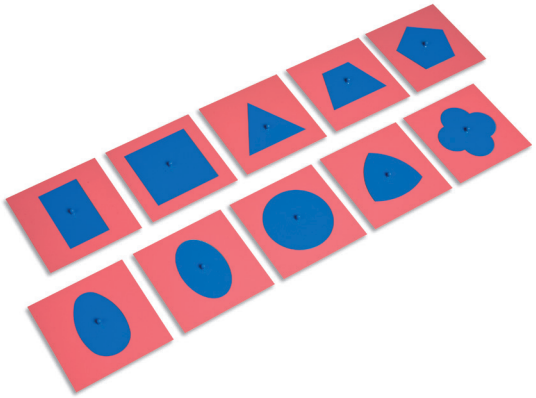


**Primary Language Shelf**

(Code as Literacy)

## Core Language Materials

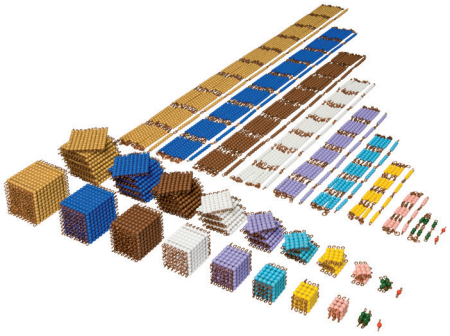


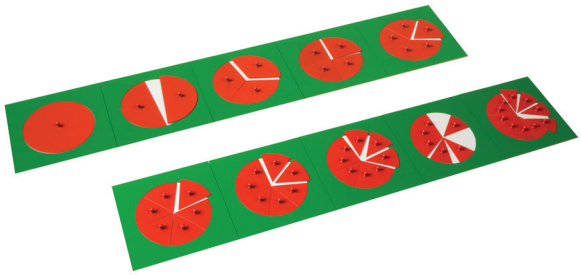


**Primary Math Shelf**

(Code as Math)

## Core Math Materials

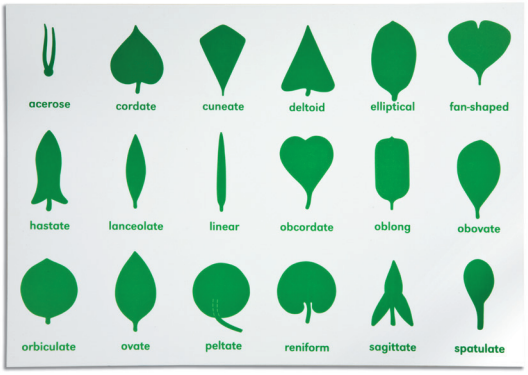





**Primary Cultural Shelf**

(Code as Science and/or Social Studies)


## Core Cultural Materials




**Primary Art Shelf**
(Code as Art)

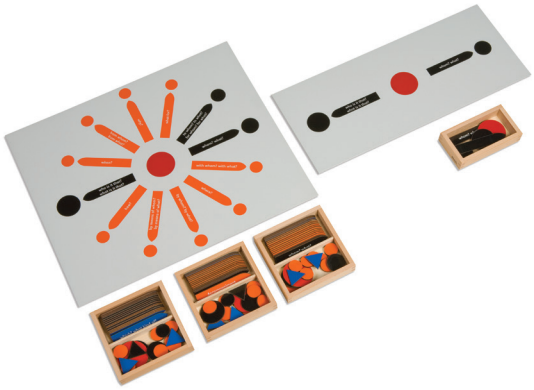
## Core Art Materials

# Lower Elementary (1st-3rd grade) Materials

**Lower Elementary Language Area**

(Code as Literacy)

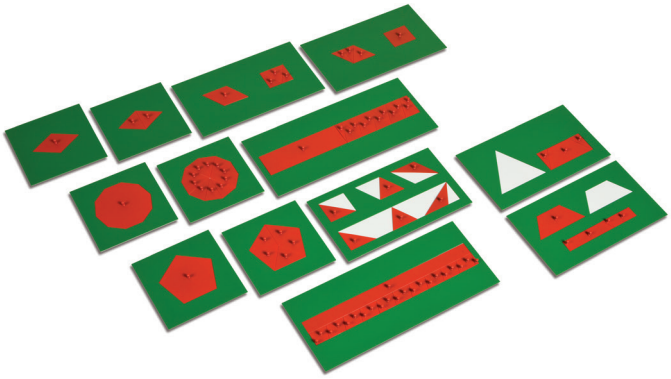
## Core Language Materials

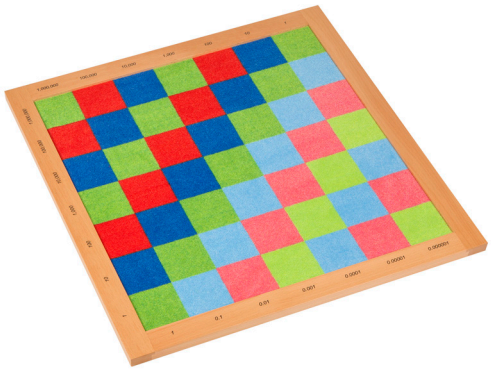


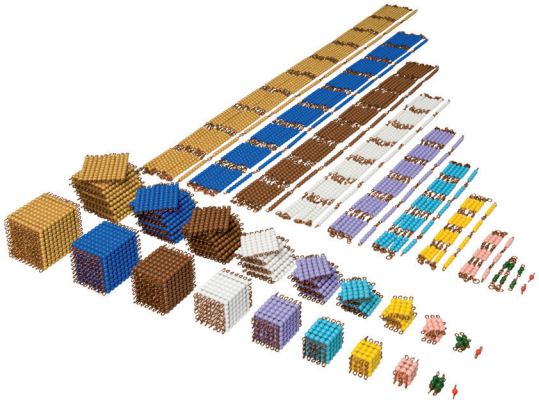
**Lower Elementary Math Area**

(Code as Math)

## Core Math Materials







**Lower Elementary Geometry Area**

(Code as Math)

## Core Geometry Materials

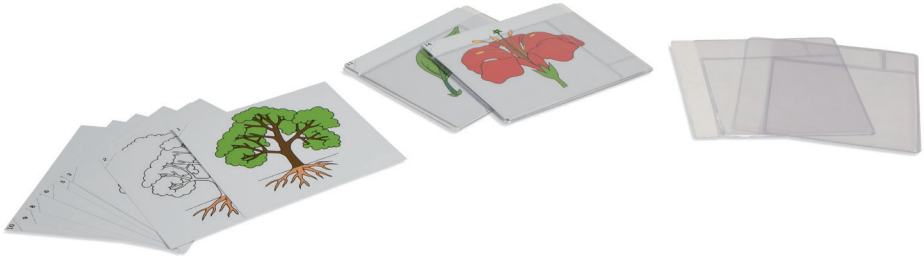
**Lower Elementary Art Area**

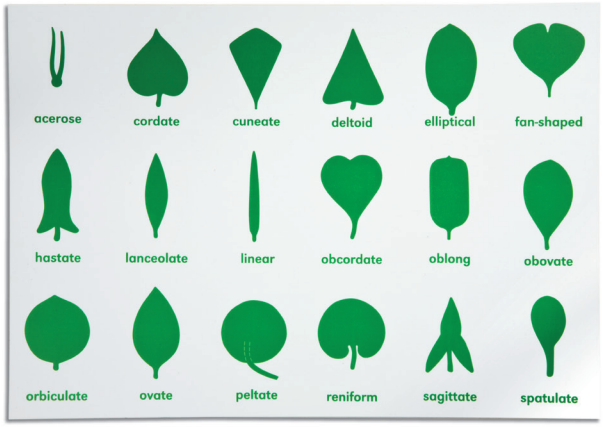
(Code as Art)

**Lower Elementary Biology Area**

(Code as Science)

## Core Biology Materials



**Lower Elementary Geography Area**

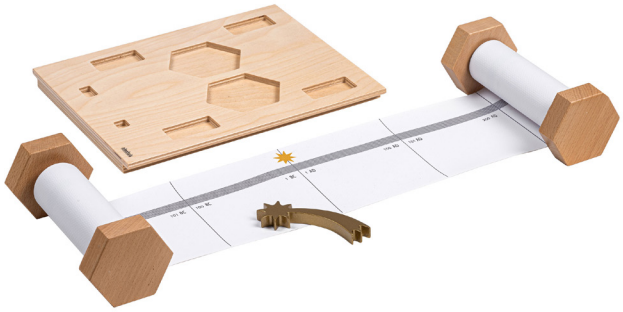
(Code as Social Studies)

## Core Geography Materials


**Lower Elementary History Area**

(Code as Social Studies)

## Core History Materials



TEACHSTONE®

CLASS®

# Thank You!

For more information on CLASS® frameworks and tools, please visit us at teachstone.com