Enacting Attention:

Concentration and Shared Focus in Montessori Classrooms

By Paul Epstein, PhD
Concentration is a *sine qua non*, a hallmark, of a Montessori Casa program. Yet, it happens that some children do not concentrate. They do not engage with the materials in the classic pattern of normalization. They are not challenged by ADD, ADHD, or a variant of sensory integration spectrum disorder. Instead of working alone, they prefer the company of others; they prefer to learn with others. We may wonder if their natural intelligence is interpersonal. Based on studies of brain development and findings from recent ethnographic research, this article describes a type of attention called shared focus (Epstein, 2011). Ethnographic research was conducted in Casa classrooms, located in four Montessori schools, during a 3-year period, beginning in 2008. The research involved observing classrooms and interviewing school staff, teachers, and children.

“Children who do not concentrate” was a common concern raised by the teachers in those classrooms. By regarding concentration as cultural behavior, research questions included the following: When do children concentrate? Does concentration occur throughout a typical day or only when children use the materials during the work period? If children do not concentrate, should we also conclude they are not paying attention? In other words, is concentration a type of attention? If so, what are some other types of attention?

A review of brain development research suggests concentration is a type of attention (Bateson, 1995; Goleman, 2006; Hoffman, et al, 2006). Children may use a type of attention called shared focus when, for example, they laugh and run together on the playground, and when they leave their parents during morning arrival. Some children may also more naturally use this type of attention instead of concentration during the work period (Epstein, 2011).

The Discovery of Concentration
At the start of the 20th century, educators assumed young children were incapable of sustaining their attention for long periods of time. Montessori (1918/1995, p. 53) admitted that she too believed “in the characteristic instability of attention in young children” until she witnessed a 3-year-old working with a cylinder block in San Lorenzo in 1907. Montessori had encountered a new truth—the transformative phenomenon of concentration in young children.

[I] happened to notice a little girl of about three years old deeply absorbed in a set of solid insets, removing the wooden cylinders from their respective holes and replacing them. The expression on the child’s face was one of such concentrated attention that it seemed to me an extraordinary manifestation; up to this time none of the children had ever shown such fixity of interest in an object; and my belief in the characteristic instability of attention in young children, who flit incessantly from one thing to another, made me peculiarly alive to the phenomenon. (1918/1995, p. 53)

Montessori experienced her discovery of concentration as a personal transformation. By linking concentration with psychical development, she established a spiritual pedagogy as the basis for a reform of education (Epstein, 2011). Guiding children to concentration became a Casa teacher’s primary purpose. “The first essential, for the child’s development,” wrote Montessori (1949/1994, p. 202), “is concentration. It lays the whole basis for his character and social behavior.” Montessori (1946/1974) described further how teachers should accomplish this purpose:

The work of the teacher is to guide the children to normalization, to concentration. She is like the shepherd who goes after the sheep when they stray, who conducts all the sheep inside. The teacher has two tasks: to lead the children to concentration and to help them in their development afterwards. The fundamental help in development, especially with little children of three years of age, is not to interfere. (p. 16)

With the onset of concentration, children repeatedly use the materials and further develop their coordination. The teacher does not interrupt but instead observes a child’s work and mastery of an activity or skill. Based on observation, the teacher continuously re-prepares the classroom with new works. These works must, wrote Montessori (1918/1995, p. 56), engage the child and “exercise the intelligence and develop qualities we consider lofty . . . such as patience and perseverance in work, and in the moral order, obedience, gentleness, affection, politeness, serenity.” Concentration with the materials enables normalization. When children do not concentrate, Montessori (1946/1974) instructed teachers to apply a certain kind of imagination and anticipate the child’s ability to concentrate. It was an imagination freed of prejudice.

An ordinary teacher cannot be transformed into a Montessori teacher, but must be created anew, having rid herself of pedagogical prejudices. The first step is self-preparation of the imagination, for the Montessori teacher has to visualize a child who is not yet there . . . and have faith in the child who will reveal himself through work. The different types of deviated children do not shake the faith of this teacher, who sees a different type
of child in the spiritual field and looks confidently for this self to show when attracted by work that interests. She waits for the children to show signs of concentration. (1946/1974, pp. 86–87)

Behavior Is Situation-Specific
Concentration in today’s frenetic world has become priceless. The challenges include the sheer volume of novel situations we now face, both real and virtual. Ethnographic research offers further understanding about cultural situations and the phenomenon of concentration. A culture occurs when a group repeatedly comes together for the same purposes. From an ethnographic perspective, a “typical” day in a Montessori Casa classroom involves several behaved periods or situations. Each situation occurs routinely and offers a context within which participants can mutually focus on and understand themselves and their behaviors as meaningful and purposeful. Meaningful behavior is, in other words, situation-specific. During each situation, participants expect certain activities to take place. The participants also expect to enact social roles that are specific to the situation taking place (Epstein, 1992).

During any cultural situation, people bring together their personalities, interests, types of intelligences, learning styles, personal experiences, preferences, and styles of attending. In order for a group to attend properly to the situation, they will focus together and coordinate memories, decision making, and recognition about what is going on. Accordingly, children, teachers, parents, and administrative staff routinely coordinate their behaviors; together, they meaningfully enact what is supposed to happen, who is supposed to do it, when it will occur, and how long it will continue.

Attention is, then, shared (Goleman, 2006; Hoffman, et. al., 2006). This enables a situation to be experienced as “typical”: as normal and routine. In the absence of a shared focus, people become perplexed as to what is going on and what should be done about it. Tellingly, young children often do not know how to act when they see their teacher at a restaurant, shopping mall, or movie. These are not classroom-related situations, and the children lack social experience with their teacher who is, in these places, not “a teacher.”

Table 1 summarizes a sequence of typical situations, activities, and roles enacted in Montessori Casa classrooms. Typical Casa situations include the morning arrival time, followed by a work period, a gathering or circle time, outdoor play, and then morning dismissal. If this is a full-day program, there is lunch, a rest period, the afternoon work period, afternoon circle time, afternoon outdoor play, and then an afternoon dismissal. These situations and their names will vary from school to school, depending on factors such as half-day and full-day enrollment and kindergarten extended-day programs. Elementary and secondary programs may have different sets of situations.

In keeping with Montessori tradition, a Casa classroom is a prepared environment with settings such as Practical Life, Sensorial, math, language, the cultural area, the snack table, the art corner, and the bathroom. A variety of typical Montessori activities occur meaningfully in these settings during the work period. There is work, giving presentations, eating snack, preparing

<table>
<thead>
<tr>
<th>Situations</th>
<th>Settings</th>
<th>Activities</th>
<th>Social Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning arrival</td>
<td>Classroom door Coat hooks</td>
<td>(1) Greetings (2) Invitations to choose work or attend presentations</td>
<td>Teacher, assistant Parents, sons, daughters 1st, 2nd, 3rd years</td>
</tr>
<tr>
<td>Work period</td>
<td>Various classroom areas Snack table</td>
<td>(1) Work (2) Presentations (3) Conflict resolution (4) Snack</td>
<td>Teacher, assistant Individual child 1st, 2nd, 3rd years Friends, boys, girls</td>
</tr>
<tr>
<td>Line time</td>
<td>Line area</td>
<td>(1) Sing songs (2) Share stories (3) Class presentations</td>
<td>Teacher, assistant Individual child 1st, 2nd, 3rd years Friends, boys, girls</td>
</tr>
<tr>
<td>Outdoor play</td>
<td>Sandbox area The entire playground By the trees</td>
<td>(1) Running in packs (2) Stampeding (3) Superhero play (4) Mothers &amp; babies (5) Dogs &amp; cats (6) Bonfires and making leaf stews &amp; s’mores</td>
<td>Horses, riders, chasers Superheroes Friends Mothers, babies Dogs, cats</td>
</tr>
</tbody>
</table>
snack, choosing work, putting work away, the bathroom, and being silly. There is also individual work and group work. There is table work and floor work. These activities co-occur and overlap. During a work period, children walk through the room and silently carry one cube at a time. They learn it is acceptable to load up a bank tray and carry many cubes, unless there are “too many.” Teachers remind children to use soft voices during the work period.

From a teacher’s perspective, some of the enacted social roles during the work period include teacher, first years, the boys, the risers, friends, and challenging children. At the same time, adults enact roles such as teachers, assistants, friends, colleagues, employees, parents, and spouses. Consider the following commonplace occurrence. Brenda, a lead teacher, engaged in three different activities during a brief 5-minute period. The school administrator came to the classroom door and asked Brenda to come to the office at the end of the day to discuss a purchase order. During this brief exchange, Brenda interacted as an employee. Next, a teacher from another classroom came by and asked a question about tomorrow’s field trip. Brenda was now a colleague discussing and finalizing plans. Turning back into the room, Brenda noticed a child mixing the red and blue Addition Strip Board colored strips. Changing hats, she walked over to this child, and re-presented the lesson as his teacher.

Appropriate behavior involves coordinating what to attend to and then enacting those social roles and social activities that will occur in a given situation. The cultural expectations for meaningful behaviors during the work period differ from those occurring during other situations, such as morning arrival. “Work,” in the sense of enacted presentations, choices, and repetition with materials, does not occur during the situation known as morning arrival time. During morning arrival, for example, parents and their children separate. The adults usually enact roles such as “teachers” and “parents,” and their activities include exchanging greetings and information about the child’s previous evening and future school events. As “teachers” greet the children, the “daughters” and “sons” (roles the children enact meaningfully when they are with their parents) shift their focus and become “first years,” “second years,” or “third years.” These are social roles the children enact meaningfully with their teachers. The work period begins, and the teacher may ask all of the first years to join her at the circle.

A different set of activities takes place outdoors; the same group of children adopt different social roles. The enacted meanings of “work” as they are known during a work period do not occur during outdoor play, when teachers now encourage children to run and use loud, calling voices. Now it is okay to carry many different things all at once. Outdoors, when the activity is horses, the children recognize themselves as horses, buffalo, riders, and chasers. When the activity is house, the children engage as mothers, babies, fathers, and the family dog. Concurrently, Brenda, as Sally’s friend, talks about anticipated weekend activities. Back in the classroom, roles regroup during the morning dismissal situation, and Sally becomes Brenda’s assistant.

Cultures Are Taught and Learned
Cultural, patterned behaviors are taught. That is, members of the culture teach one another to enact similarly and interpret the meaning of their behaviors in terms of situations, activities, and social roles. Children learn that appropriate and correct behaviors are situation-specific. Behaviors that are accepted as appropriate for one sit-
uation may be rejected as inappropriate for another situation.

When we instruct a child to walk, not run, through the classroom, we may offer the child explanations that define the purpose of a situation. We may explain, "It is not safe to run through the prepared environment." We may state, "Running takes place when we go outside." Similarly, when we are outdoors, we may urge a child, "Go ahead and run! We're outside now."

When children and their parents first enroll in a class, they are shown the everyday routines. To those who have been there a while, these are "ordinary." For a new child, however, the ordinary may be "overwhelming." There is much to attend to and to learn as children are shown where to put their belongings, how to choose work, when to use a rug, and how to return materials to the shelf. The term "work" holds multiple meanings. Work may refer to a material, or a specific period of time called the "work period." During the work period situation, children also hear, "Choose your work." "Where is your work?" "Whose work is this?" "Did you put away your work?" "How many can do this work together?" The new child learns which "work" belongs on a table and which on the floor. Older children will remind the new child or complain to a teacher when things do not go as culturally expected. An older child may give a younger child a classroom tour. She or he points to the materials on the shelves, and, with august majesty, declares each one to be either "hard" or "easy." Depending upon the judgment, the new child may choose or avoid the material.

Types of Attention:
Concentration and Shared Focus

Today, children participate in any number of cultures, real and now virtual, occurring in their homes, schools,
dance classes, Tae Kwon Do, musical lessons, sports teams, and more. In each culture, children contend with numerous changing situations. In each situation, children are not passive observers; they, like adults, are participants, and participants focus together and socially construct what is going on. They may need different styles of attending and different ways of organizing. Effective attention involves choice, making decisions, memory, and understanding a given situation. Because of the myriad of situations we each encounter daily, Bateson (1995) recommends developing a repertoire of attention styles.

**Attention involves mobilizing mental capacities to function adaptively in a given situation. Just as situations vary, so do styles of attention. The ability to concentrate exclusively on one thing is essential in the modern world for both men and women, but so is the skill of attending to more than one thing at a time. Ideally, each individual would cultivate a repertoire of styles of attention, appropriate to different situations, and would learn how to embed activities and types of attention one within another.** (p. 97)

For most children, concentration occurs routinely during some of the activities that make up the work period situation. But shared focus occurs too. A child and teacher may similarly focus during a work period as they attend to a presentation. While involved in a math presentation, two children are 4-year-olds. After their presentation, they are super friends engaged in an activity their teacher calls being silly. Other children may use shared focus during other work period activities, such as snack, and during other situations, such as morning arrival, line time, and outdoor play. Again, without the ability to similarly focus, social situations would not occur.

The following running record describes a conversation that highlights how shared focus occurred between two 3-year-old children. It is the morning work period, and Tina and Brianna have placed fruit cards facedown on their rug.

**Running record: 10/8**

Tina: “Is this girl work?”

Brianna: “We’re ready to start the party. We both have to close our eyes.”

Brianna makes a pile of the cards with her eyes closed, and she holds the cards out toward Tina. Tina closes her eyes, and she stretches her arms toward Brianna. They both open their eyes, and Brianna gives the cards to Tina.

Brianna: “That was hard, right?”

Tina: “Now can we play my game?”

Brianna: “Okay.”

Tina: “I spy with my little eye . . .”

The girls play “I spy” for several minutes. They pile the cards together and return them to their place on the shelf.

In this brief engagement, Tina uses questions to inform Brianna about her understanding and intentions for what they are doing: “Is this girl work?” “Now can we play my game?” Brianna also informs Tina, but she uses verbal announcements: “We’re ready to start the party. We both have to close our eyes.” Young children will make announcements to identify both the activity and social roles everyone should adopt. This too requires a shared focus; the children must identify, and agree to, what they will attend to and what their behaviors will mean.

In the following example, Caitlyn plays in the outdoor sandbox with Olivia, Devon, and Luke. They announce that they are “friends,” and they describe their activity as “making roads.” Their teachers say, with a note of curiosity, that Caitlyn and Olivia always play together outside, but they never work together in the classroom. Devon and Luke, however, are inseparable, indoors or outside. Work with materials involves presentations, repetitions, and control of error. “Making roads,” by comparison, requires shared focus. Children collaborate and develop the content and context of their play while it unfolds. The children use announcements to identify their activities, social roles, and its duration. “Pretend we’re the . . .” “No, put it that way like I’ve told you a million times.” Their “control of error” occurs through their social negotiations.

**Brain Research**

Growing evidence from brain research recommends further consideration of shared focus. Studies of shared focus suggest this type of attention emerges as early as 3 months of age and facilitates the learning of language and socialization skills (Hoffman,
et. al., 2006). Other studies describe how shared focus engages the amygdala, mirror neurons, spindle neurons, the orbitofrontal cortex, the anterior cingulate cortex, and the right temporoparietal junction. We are, simply put, designed to be social (Goleman, 2006):

- The brain is more active during social relations than solitary acts.
- Our brains influence the brains of others and, in turn, are influenced by their brains.
- Social experiences sculpt the shape, size, and number of neurons and their synaptic connections.
- Social interactions reset key aspects of brain functions and orchestrate our emotions.
- Distressing relationships increase levels of stress hormones, damaging specific genes that regulate the immune systems.

To interact successfully with others, children (and adults) generate and maintain a shared focus. A shared focus functions like a “perceptual glue” and generates shared feelings and emotions. In order to successfully interact, children attend to what they are talking about as well as to conversational turn-taking and non-verbal communications. Children focus together and synchronize their behaviors. As they converse and interact, eye movements, hand gestures, facial expressions, gaze shifts, body orientation, position, posture, facial expressions, word pacing, and breathing patterns synchronize beneath their awareness. Synchrony is a requirement for interaction; in its absence, we may feel uneasy during a conversation. We may also be unable to have the conversation. Synchrony occurs before birth; a neonate’s movements synchronize with rhythms of human speech (and with no other sounds). One-year-olds...
can match the timing and duration of their talk to the beat of their mother’s speaking. For infants, as well as for children and adults, conversations end when synchrony ends and breakdowns occur. Children will miscue, misunderstand, misinterpret, or prefer to play something else, or with someone else.

Today, we routinely prepare indoor classroom environments that invite concentration during the work period. The work period situation has had some 112 years of Montessori development. The placement of furniture, the sequencing of materials, the mannerisms of the teachers and their presentations and recordkeeping are all in service of children concentrating. Montessori defined a formula for constructing the qualities and quantities of the didactic materials. Classroom ground rules make clear how to respect one another with the expectation that each will refrain from interrupting concentration. “This is my work!” is a child’s meaningful declaration.

Other situations have long escaped our notice. During outdoor play, children play in an environment that is loosely prepared; swings, slides, climbers, and sandboxes are there by tradition and maintained with low budgets. Teachers routinely repair skinned knees and other wounds and help children resolve upsets. Although a number of schools are now installing natural playscapes, we have not applied Montessori’s principles of scientific/spiritual pedagogy to look more closely at what happens during outdoor play. The phenomenon of shared focus opens new guiding questions for further study. We might ask several additional connecting questions:

- How do children develop shared focus during their early childhood years?
- Does this development occur similarly or differently for boys and girls?
- More broadly, how do experiences of shared focus affect developing concentration?
- How might we modify our work period environment for children whose attention preference is shared focus instead of concentration?

In general, how should we prepare our other environments and materials for children who are developing their abilities for shared focus? Are there other kinds of attention that children develop and use? There is much to do, and, as Montessori (1994) taught, we are the ones to do it:

It is not we who teach [the child]. This child can run, walk, talk, and notice tiny little things. He has done it all by himself. It is not we adults who have done it for him. This is therefore a special period, a period during which the child carries out the most difficult studies of his whole life. Only he must take for himself by his own special method. He cannot receive from us. We cannot be teachers but we can help children, and our work must be to render this tremendous work of exploration which he carries out, easier.

References


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