

## **Balance, Posture, and Movement**

### **Optimizing Children's Learning Capacities Through Integration of the Sensory Motor System**

**By Ingun Schneider**

If you were to spend time observing children in a typical school (including, alas, a Waldorf school) you would probably see some or all of the following:

Second graders copying a page of text from the blackboard are in constant restless motion, twisting to the left as they write with their right hand or repeatedly bending over their paper and then straightening up. · A number of fifth graders constantly tip their chairs back and forth or from side to side. One even balances the chair on one leg and then rotates the other three legs around it. If asked to sit quietly with all four chair legs on the floor, this child would slide off! · In the sixth grade a student (one among several) sits with his elbows resting on the desk and his head in his hands. He looks as if he is experiencing his head to be as heavy as a bowling ball. Another student sits on one of his legs for much of the lesson time. Another holds her head so close to her work on the desk that one wonders how she can see anything. Meanwhile, the muscles at the back of her neck are tight with the effort of keeping her head from landing on the desk.

Each of these examples of poor integration of the sensory-motor system-as expressed in the child's poor posture and inattentiveness-bespeaks a discomfort with the structural physical body-skeleton, muscles, and nerves. The physical, emotional, and intellectual together comprise a unit of interrelated parts, and for these to function optimally the child must feel at home in his physical body. If a child experiences his body as an ill-fitting glove, settling down and paying attention to the task at hand are very difficult. Thus, helping children integrate the sensory-motor system by developing good posture, body awareness, and orientation in space is an important concern for parents and teachers.

The postural system is based on the senses of self-movement and balance. These senses develop body awareness and orientation to space through clear developmental stages. This begins in infancy with the newborn's spontaneous, reflexive movements related to survival-for example, the rooting, sucking, and grasping reflexes. During waking hours the infant is in almost constant movement. When given the opportunity, she will gradually develop more intentional, controlled movements. For the infant the best "opportunity" is being placed on her back and being allowed to explore and discover the multitude of movement possibilities on her own-rolling over onto the stomach; pushing up onto the hands to look around from this new vantage point; rolling around again and watching the hands "play with the light beams"; pulling the feet up toward the mouth or letting the hands play with the feet; getting into the sitting position; crawling; and so on.

Thus a parent can provide the basis for good posture and body awareness by giving an infant a period of time each day on a flat, comfortable, broad surface-such as a clean floor-where she is free to move around safely. The toddler likewise is in constant motion and also needs a protected large space in which to move freely-thus developing orientation to space while exploring different types of movement, such as running, jumping, and skipping. Antithetical to this end is allowing a young child to sit motionless and glassy-eyed for long periods in front of a television or video player.

As the child uses her "surveying instruments"-the senses of balance, self-movement, and touch-she will build up a map of the space around her (spatial orientation) and of her own body in space (body awareness). This healthy integration of the senses of self-movement and balance also manifests in the development of proper muscle tone. A child with good muscle tone can maintain a comfortable posture, using the least amount of energy needed for the activity, whether it involves movement-walking, running, knitting, cutting with scissors or a knife-or stability-sitting and standing. Proper muscle tone is the foundation for good posture, as well as for learning fine and gross motor skills. Reliable trunk stability allows the child to freely use her hands for skilled movements.

Unfortunately, more and more children fail to pass through this sensory-motor developmental process in a healthy manner. Already in first grade many children have acquired stiff, stooping, or floppy postural habits. They slouch when sitting, hold pencils or paint brushes in tense, awkward ways, and have trouble standing upright and still while speaking a verse.

Fortunately, the human nervous system is amazingly flexible and adaptable. Thus there is much that parents and teachers can do to help children develop the body awareness and spatial orientation that is the foundation for easeful posture and efficient fine and gross motor movements.

A teacher can incorporate games and activities that involve recapitulation of primary movements such as crawling, running, jumping, rolling over, and so on. These promote the maturation of the senses of balance and self-movement. Sometimes children who cannot handle activities during circle time will misbehave to deal with their frustration. It is tempting to have them sit out, but then they would miss the very activity that they need. The challenge for the teacher is to creatively support and involve each child as much as possible.

"Feely bags" are cloth bags filled with various textures of fabric, buttons, shells, or beads. They help children with a compromised sense of touch, and can be very calming. Teachers can also help children who struggle by incorporating short movement breaks into every lesson. Children need regular opportunities to move, and breaks will increase their ability to focus and to maintain good posture during the rest of the class.

Teachers can identify those children in the class who have postural and body awareness problems by careful observation of each child as she goes through the activities of the school day-as she stands, sits, walks, works with a pencil or crayon, and so on. Sometimes children who seem to have a good sense of balance and can ride a bike, do skateboarding, or skate on rollerblades in fact have trouble with static balance. For example, they have difficulty walking slowly heel-to-toe in a straight line. They walk fast, use long steps, or fail to keep to a straight line. To assess static balance the teacher can ask the child to stand on one foot, shoes off, while holding his arms straight in front and counting out loud. Then the child can try the same thing with eyes closed. If the child is unable to maintain his balance for about ten seconds, exercises to strengthen the sense of balance are recommended.

For each child the teacher can devise appropriate pedagogical exercises. An important principle is to start where the child is. If the child tends to do a movement fast, challenge him to do it as fast as lightning, then to do the same movement slow as molasses, ending with the medium speed indicated for him with rhythmic counting, a verse, or a song.

Children with special problems can also receive individual lessons from an Extra Lesson educational support teacher, therapeutic eurythmist, and/or movement therapist. Through individual and group activities in class and through extra personal movement instruction much progress can be made. Trunk stability improves; the pencil grip relaxes; the child can stand more freely; form drawing and writing take place with less stress and more joy. There are concomitant changes in mood and behavior. The child is more balanced, relaxed, and content. Able to do things with more ease and with less intervention from teachers and parents, she feels more self-esteem.

Within a typical Waldorf classroom there are many factors that contribute to the physical, emotional, and intellectual well-being of the child, and thus to postural health and uprightness. These include the warm and supportive ambiance of the classroom, the loving attention and clear guidelines of the teacher, the artistic and musical activities, eurythmy, singing, and so on.

Parents can and should be part of the support process. In working with parents on this and other issues the Waldorf teacher can help them avoid feelings of guilt about how they have raised their children. Rather, parents should be congratulated and affirmed for all the good they have done for their child so far. Then they can be given suggestions for steps to further the child's potential.

How parents organize the home life can make a great difference in the general well-being of the child. A daily schedule with a predictable rhythm, with set mealtimes and times for getting up in the morning and for going to bed is extremely important. Times set aside for the children to relax, plenty of sleep, and wholesome balanced meals also are crucial. Regular chores and tasks that challenge the child's movement system-something in addition to taking the trash out-can also make a big difference. Activities such as sweeping,

raking, digging, carrying buckets, and moving rocks are all excellent.

One activity I suggest to parents, and which children and parents seem to truly enjoy, is the "cocoon wrap." At bedtime, the parent spreads out a large sheet, bedspread, or blanket on the floor. The child lies on the blanket at one of the shorter sides. The parent tucks this end of the blanket around the child, who then rolls over slowly until the blanket is fully wrapped around him. The child can then be helped into bed, where he can lie down, sit, or nestle in the parent's lap. The parent can tell or read a bedtime story to the wrapped-up child. Many grateful parents have told me how much more easily the child goes to sleep after being wrapped in this way.

A parent can also massage the wrapped child on his back, legs, and arms, adjusting touch according to the child's suggestion. Some children like a very firm massage. Hand and foot massage is often helpful for a child who is struggling with fine motor skills or who uses more tension than necessary in fine motor activities—for example, grasping a pencil too tight when writing. Massage can also help children get up in the morning.

The main purpose for the wrap and the massage is to enliven the sense of touch. This is essential to feeling at home in one's body. Children (and adults) who do not feel at home in their bodies often have trouble falling asleep. An integrated sense of touch also is critical for developing the ability to recognize the existence of the I in another human being—what Rudolf Steiner calls the sense of the ego of the other. Also, the wrap helps the child experience his physical boundaries. When a child knows where he ends and where the world begins, he has an easier time accepting boundaries such as classroom regulations, parental limits, and unspoken social rules. Parents can lead and accompany children in floor movements to help fill in possible gaps in early movement development. These include slowly rolling like a seal, crawling like a lizard—both fast and slow—stalking like a cat, and soaring like an eagle. Activities good for the sense of balance, besides walking on balance beams, logs, and boulders, include all activities that cause the child's head to be upside-down or parallel to the ground.

Parents can lead the child in the same body geography exercise that many teachers do in class—for example: "Touch your right little finger to your left big toe." It is important that the child, in performing this motion, leans over so that the head hangs freely upside down, and thus experiences the "upside-down world."

Regular trips to the playground are valuable so that children can play on swings, go down slides while lying down, hang upside down on the turning bar, and spin on the merry-go-round. Tumbling and acrobatics are also great for children, as is doing stunts with parents. The greater the variety of postures, positions, and movements the child experiences, the better.

Finally, both teachers and parents need to be aware of the importance of furniture. The

uncomfortable and restless schoolchildren described at the beginning of this article are in part the victims of desks and chairs that do not fit them. A classroom chair should be sized so that when the child sits fully back in the chair with feet on the floor directly below the knees and with back straight, there are ninety-degree angles at both the knee and the hip joints. The front chair edge should be gently curved. The backrest also can be gently curved from side to side as well as top to bottom, with a slight curvature to support the lower back.

The height of the desk or worktable needs to relate to the seated child. To determine the proper size for the desk, we look at the level of the seated child's elbows when he is seated with back straight and shoulders relaxed. Ideally the upper arms angle out just slightly from the trunk as the forearms rest comfortably on the desk surface without the shoulders pulling up. Sometimes this height of the top surface of the desk does not allow for much of a storage space under the desk surface, because the child's thighs then bump into the bottom of this storage space. Other solutions for storage of school supplies can be found, e.g., a holder at the side of the desk.

Many of the people who knew Rudolf Steiner, the founder of Waldorf Education, were struck by his posture and bearing. According to their reports, Steiner had a perfectly upright but relaxed posture, and when he walked his head seemed "to be suspended effortlessly between Heaven and Earth." Perhaps this is an image which we as parents and teachers can keep in mind as we work with our children's postural and movement systems and with our own.

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