Modification of Environments and Routines
To Support Optimal Learning©*
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Sensation throughout the day
Incoming sensory information affects our level of attention and sense of comfort throughout the day. When we sit for too long, we get "fidgety" and can have trouble focusing. Some children need more sensation than others to stay organized. The notations below are meant as a short overview of the ways different sensations can affect learning and behavior.

Movement
Motion is one of the strongest influences on state of alertness. We all know that sitting still for a long time can make us feel sleepy and lethargic. We naturally want to get up and work around when we start to feel sluggish. Children often "tell us" that they need to move by tilting or rocking in their chairs. "Active sitting" that occurs when a seat is less stable can help to keep a person more awake and attentive. Rocking, turning side to side, and gently bouncing up and down can help children to stay more awake and alert. The sensory system which responds to gravity and movement (the vestibular sense) needs to be stimulated in order to help keep us awake and sitting upright against gravity. Chairs that provide back and forth or side to side motion help a child to stay alert and engaged in learning

Touch
Our sense of touch guides all of our skilled actions. We rely on touch to guide a pencil, hold a fork and manipulate objects such as buttons, coins and containers. Using tactile materials and activities can help little hands be ready to write and to work. Some children are easily bothered by light touch. Avoiding inadvertent touch at circle time, in line and around desks may help some children from becoming irritated.

Pressure and Position
Firm pressure on our skin, muscles and joints is naturally calming and organizing. This is why a massage or doing yoga makes us feel calm. Hugs and rubbing the skin after an injury also shows how pressure makes us feel better. Leaning back on a chair, carrying something heavy, bouncing up down against some resistance are all activities that can have an organizing effect on our nervous systems. Having children stretch, press down on the top of their heads and having the chance to sit in chairs that allow pressing their backs or feet against resistance can help them feel ready to learn. Moving desks and chairs may turn out to be a good movement and "heavy work" breaks during the day. When in classrooms with multiple points of instruction (e.g. a white board at the front of the class with other types of instruction at the sides or back of the room), students will benefit from sitting in chairs that turn for ease in alignment to the teacher. Since new technology involves more hand held devices, students can be comfortable holding a device with their elbows supported on chairs that have arms.

Sights
Desks, bulletin boards, blackboards and cupboards with many visual elements can feel distracting to some children. Reducing visual elements and/or organizing visual aspects may be helpful. Florescent lights have a "flickering" element that can be very bothersome to certain people. Using as much natural light as possible is optimal.

Sounds
Many people are sensitive to certain sounds. When possible, carpeting will greatly reduce irritating sounds from chairs moving on the floor. Keeping track of the noise level in the room and ensuring that all children can hear instructions will reduce irritation and frustration.

Smell
The sense of smell is very basic and "primitive." Natural smells can bolster a sense of well-being and alertness. We might think about fun ways to include natural smells such as citrus, cinnamon, basil, rosemary, vanilla, etc., into some classroom activities. Artificial smells are not optimal (such as candles and room sprays).

Classroom layout
The overall organization and layout of space can have a strong effect of the psyche. The right layout can contribute to the feeling that the classroom is inviting and inspiring, and also that it is a place to learn. Experiment with natural "groupings" of furniture and ways to organize quiet spaces.

Classroom routines
Considering ways to alternate between sitting, standing, lifting, moving and stretching throughout the day can help to meet everyone's sensory and motor needs so that behavior challenges may be reduced. Providing "heavy muscle work" options during the school day will have the effect of both giving students a chance to get organized and centered in their bodies and also to reinforce the actions that may help them to learn concepts.

Learning through doing
It is by watching, listening and perhaps most importantly by DOING that the first steps to socialization occur. Long before children learn the words and understand the concepts for things such as big and little, up and down or rough and smooth, they have experienced these things through their own senses and their own movements through the world around them. The important processes of problem-solving, sequencing, prioritizing and decision making that form the foundation of many key elements of the academic curriculum. Students can continue to benefit from experiential learning throughout their school years so it is useful to consider ways in which we can provide options for learning through doing in all schools and classrooms.

Giving students the opportunity to interact with materials in 3 dimension and real life experiences will offer additional ways for concepts to be understood and applied. Math concepts from multiplication to geometry can be reinforced by engaging students in moving objects and even furniture in the classroom. Multi-step projects such as book reports and history projects can be made more memorable and meaningful when tangible elements are added to the assignments.