Children rely on sensory input to make meaning from their constantly changing worlds. For their caregivers, understanding the sensory system can be an important step in creating nurturing and joyful environments. The process by which an individual’s sensory system organizes stimuli is called sensory integration (Siegel & Bryson, 2011). Sensory integration allows you to ignore the discomfort of a wrinkled sock, to tune out the ticking sound of a clock, or to have a conversation while performing a routine task. Dysfunction in sensory integration can lead to many challenges, such as a lack in coordination, difficulty during conversations and play, and adverse reactions to sounds, textures, and smells (Arky, n.d.). Ayres (1979) called this Sensory Integrative Dysfunction, which is now known as Sensory Processing Disorder (SPD).
Sensory integration is rooted in vestibular (movement and balance), proprioceptive (joints, muscles, and tendons), and tactile (touch) sensations which are described by Angie Voss as the "power sensations" (n.d.). When children are exposed to a variety of sensory experiences at a young age, more opportunities exist for receptors in the brain to make the neuronal connections needed to take in, process, and interpret sensory input (Hanscom, 2016). Therefore, embedding power sensations into everyday routines allows teachers and families to create opportunities for children to form the neuronal connections needed to develop a solid foundation for learning, especially for those with SPD (Hanscom, 2016; Voss, 2011). These connections not only help children translate their current world, but will also improve their regulation for sensory input in the future.

Get Ready to to discover the power of building a strong sensory foundation for early childhood development and learning by understanding the impact of sensory integration. By exposing young children to sensory stimuli in their daily routines, teachers and families can set up the opportunities for sensory integration in everyday contexts (Hanscom, 2016).

- Sensory Processing Issues Explained Beth Arky article
- The REAL Reason Children Fidget TED talk with Angela Hanscom
- The In-Sync Child website
- A Sensory Life website

Get Set to create learning environments that focus on embedding the power sensations into everyday classroom and home routines. Early childhood settings (i.e., family life, classroom, daycare center) have many opportunities to embed sensory learning (Dunst et al., 2002). Routines provide the perfect time for children to learn, due to their repetitive and predictable nature. In addition, routines often involve an interested and committed adult facilitator. Since routines happen every day, you can simply evaluate your current environment for opportunities to embed sensory experiences and document children’s responses to determine how to differentiate learning for every child. As children will have different sensory preferences, it is common to notice adverse reactions to sensory stimuli. Therefore, it is important to be mindful and to adjust for individual sensory preferences. For example, some children may prefer a “fluffy, soft” hand towel instead of a “rough, scratchy” paper towel.

- Family Guided Routines Based Intervention: Everyday Routines, Activities and Places resource Evidence-Based Reasons Why Routines are Important
- Sensory Success in the Classroom Autism Digest article
- Alerting Sensory Activities for the Classroom handout
- Early Childhood Technical Assistance Center: Instruction Checklists Embedded Instructional Practices
- Sensory Balanced Daily Schedules a guided scheduling tool from the STAR Institute
Go support families and caregivers in developing everyday routines with a sensory development focus by sharing your knowledge. In early childhood, consistency across settings is important for learning and development. When families are encouraged to integrate sensory experiences, the connections are made for building a strong sensory foundation (vestibular, proprioceptive, and tactile). As you support families, keep in mind that the power sensations working in tandem will help to harmoniously organize sensory input (Siegel & Bryson, 2011; Voss, n.d.).

- Evidence-Based International Early Intervention Office: Intervention Planning Protocol for the RBI
- Family Guided Routines Based Intervention: Everyday Routines, Activities and Places resource Building Routines with Children and Caregivers Tip Sheet
- Raising a Sensory Smart Child: The Definitive Handbook for Helping Your Child with Sensory Processing Issues by Lindsey Biel and Nancy Peske
- Creating a Sensory Environment in the Home from Angie Voss' website, A Sensory Life
- Learning through Routines series from the VCU Autism Center for Excellence

References


Dunst, C. J., Hamby, D., Trivette, C. M., Raab, M., & Bruder, M. B. (2002). Young children’s participation in everyday family and community activity. *Psychological Reports, 91*, 875-897. [https://doi.org/10.2466/pr0.2002.91.3.875](https://doi.org/10.2466/pr0.2002.91.3.875)


