

Using Sensory Stories & Sensory Strategy Cards in Everyday Practice



Therapro
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Sensory Stories

The Suite of Sensory Story Products



Participants will learn to . . .

1. Implement Sensory Stories to improve participation.
2. Create an individual Sensory Story.
3. Integrate Sensory Strategy cards for daily activities.



Why Sensory Stories???



- ▶ Our role to equip students with knowledge, skills, and attitudes for lifelong success.
- ▶ Children with sensory modulation difficulties have barriers to participation in various tasks.
- ▶ Sensory Stories: a tool to increase children's participation in typical events.

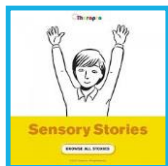
Who is the targeted audience for a Sensory Story?

- ▶ Children with over-responsive sensory modulation issues that impact their ability to engage in occupations.



Some key points

- ▶ An evidence-based practice
- ▶ An occupation-based practice
- ▶ A self-regulation intervention
- ▶ A sensory processing intervention



A Sensory Story to View

Brushing Teeth

A Story for



Almost everybody has teeth.
Teeth get dirty when people eat and sleep.



Teeth need to be cleaned. The best way to
clean teeth is with a toothbrush and
toothpaste.



Sometimes people don't like having their teeth brushed.
I can do special things before my teeth are brushed.
I can get my body ready by giving myself a big hug
and doing a power push. These activities help me to relax.



I can squeeze my lips together, grit my teeth,
and then push hard with my tongue
against the roof of my mouth.



I can press my hand hard against my mouth.
This gets my mouth ready for the tooth brush.



Then the toothpaste goes on the toothbrush.
The toothbrush goes up and down in my
mouth to brush each tooth.



I spit out the foam, get a drink of water,
and wipe my mouth hard with a towel.



I give myself a big hug because
my teeth are clean.

Who would use a story like this?



- ▶ The child who:
 - ▶ is over-responsive to sensory information
 - ▶ has an unsuccessful routine with tooth brushing
 - ▶ has negative behaviors when it comes time to brush the teeth

Directions for Use:

- ▶ Adults can read the story
- ▶ The child can read the story
- ▶ Read **daily** each time prior to ____
- ▶ Read **several** times prior to ____
- ▶ Regular practice of sensory strategies
- ▶ Encourage ownership of the strategies

'What do you need to do now?'

'I'm brushing my teeth. What do I do next?'

The Importance of Routines/Habits



- ▶ Definition
- ▶ Their power
- ▶ Their role in people's lives
- ▶ When routine is lacking or ineffective
- ▶ Lack of routine with over-responsive sensory modulation
- ▶ Relationship to Sensory Stories

Common Interventions to Help Establish Routines



- ▶ Establishing Daily Schedules
- ▶ Visual Schedules
- ▶ Social Stories (Gray, 2000)
- ▶ Scripting (McClannahan, 2005)
- ▶ Activity Routines (Gull, 1995)
- ▶ Discrete Trial Training (ABA, AVBA)
- ▶ Self Care with a Flair (Raghavan, B., & McDonald, G., 2012)
- ▶ Sensory Stories (Marr & Nackley, 2006)

The Aim of Sensory Stories

- ▶ To identify contextual factors for participation.
- ▶ To teach self-imposed sensory strategies.
- ▶ To establish habits for daily activities.

➔ Improved occupational performance



V. L. Nackley, August 5-6, 2010

The Basics

Social Stories
+
Sensory Processing
+
Learning Theory
=
Sensory Stories



Similar to Social Stories in that:

- ▶ Sensory Stories: story style
- ▶ Sensory Stories: specific sentence format
- ▶ Sensory Stories: read frequently, promote learning, prepare for challenging occupations



I can tell my brother, "Don't do that. That makes me mad!"

Sensory Stories are different from Social Stories in that...

- ▶ All illustrated
- ▶ Use more suggestive sentences
- ▶ Teach children self-employed strategies (before, during and after the event)
- ▶ Teach the intended results of the strategies (calm, focused, etc.)



SENSORY PROCESSING DISORDER (SPD)



SOR = Sensory Over-Responsivity
 SUR = Sensory Under-Responsivity
 SS = Sensory Seeking/Craving

Figure 1. A New Taxonomy for the Identification of Sensory Processing Disorders

Miller, L. J., Cermak, S., Lane, S., Anzalone, M. B. & Koomar, J. (2004, Summer). Position statement on sensory integration dysfunction. *SF Focus*, 6-8.

Sensory Modulation: brain's regulation of sensation

- ▶ Sensory Over-responsivity: perception that typical sensations are overwhelming, unpleasant, noxious, uncomfortable, painful, etc.
- ▶ Overly exaggerated responses to daily sensory input.
- ▶ Examples in daily life:
 - ▶ Clothing, smells, foods, movement, car rides, perfumes, lights, art materials,
 - ▶ Avoidance, isolation, negative behaviors, fear, aggression, repetitive behaviors, inattention, heightened activity level, anxiety, etc.
 - ▶ Life can be unpleasant. Self-preservation.
 - ▶ Our goal: preparing, coping, self-regulation, participation.

Sensory strategies for the child with over-responsivity

▶ Calming sensory stimuli:

1. Deep touch input
2. Linear vestibular input
3. Active resistance to movement (proprioceptive input)



Calming touch input



- ▶ Self-imposed input
- ▶ Deep touch – as deep as the muscle and bone
- ▶ Examples of activities:
Sitting & standing

Calming Balance Input



- ▶ Slow linear input
- ▶ Self-directed
- ▶ Examples of activities: Sitting & standing

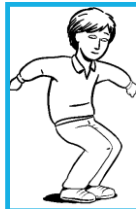
Calming Proprioceptive input

- ▶ Heavy input to muscles & joints
- ▶ Active resistance to movement
- ▶ Self-imposed
- ▶ Examples of activities: Sitting & standing



Specific Sensory Strategies

- ▶ Deep touch input
 - ▶ I can push down hard on my head with my hands.
- ▶ Linear vestibular input
 - ▶ I can bend my knees up and down.
- ▶ Heavy proprioceptive input (active resistance)
 - ▶ I can push against a wall as hard as I can.



Intended results . . .

Contexts of limited participation:

- ▶ Home
- ▶ School
- ▶ Community



Ten Sensory Stories in each contextual area:

Home

- ▶ Bathing
- ▶ Combing Hair
- ▶ Ear Cleaning
- ▶ Eating
- ▶ Getting Dressed in the Morning
- ▶ Nail Care
- ▶ Showering
- ▶ Sleeping
- ▶ Tooth Brushing
- ▶ Washing Hair

Ten Sensory Stories in each contextual area

School:

- ▶ Assemblies
- ▶ Being in Lines
- ▶ Cafeteria
- ▶ Circle Time / Floor Time
- ▶ Desk Time
- ▶ Eating Time
- ▶ Moving in the School
- ▶ Outdoor Recess
- ▶ Physical Education Class
- ▶ School Bus Ride

Ten Sensory Stories in each contextual area

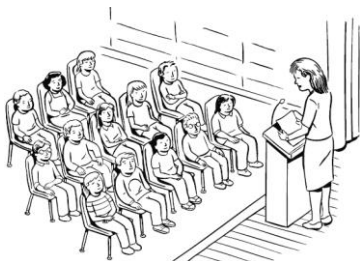
Community:

- ▶ Getting a Haircut
- ▶ Going to a Restaurant
- ▶ Going to a Store
- ▶ Going to Parties
- ▶ Going to Places of Worship
- ▶ Going to the Dentist
- ▶ Going to the Doctor
- ▶ Riding in an Elevator
- ▶ Riding in the Car
- ▶ Riding on an Escalator

Another sample Sensory Story

Assemblies

A story for



An assembly is a special time in the school day when children go to a big room. There they listen and learn from special people.



Sometimes it is noisy and crowded. Some children don't like being in crowded places. They don't like the noise. They also don't like being bumped.



I can do special things to make it easier to go to assemblies. Before I go to the assembly I can put on my heavy fanny pack. That helps me to be calm.



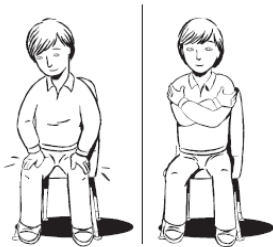
Then I might put on my headphones. That makes it less noisy.



When I get to my seat at the assembly, I can do an elbow check to make sure no one is sitting too close.



During the assembly, I can make my muscles tight like a statue. Then I take a deep breath and relax.



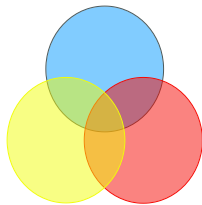
When I'm sitting and listening, I can push my hands down really hard on my legs and then give myself a big hug. These activities make it easier to listen.



When the assembly is over, I can stretch my arms up high and take another deep breath. Assemblies at school can be fun!

Changing *Occupational* Performance:

Note: Sensory Stories are aimed at all 3 circles
Change the Person

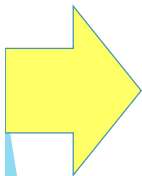


Change the Activity

Change the Environment

Based on M. Law: Person, Environment, Occupation Model, 1996

Key Features of Sensory Stories



1. Sensory Strategies
2. Self-choice
3. Self-implementation
4. Socially acceptable strategies
5. Line drawings
6. Innate desire of children
7. Improving awareness

Format for a Sensory Story

1. Introduction to the targeted experience
2. Identification of the potential negative sensory input during that experience
3. Acknowledgement that the experience can be unpleasant/uncomfortable

4. Strategies that can prepare the child for the experience.
5. Outlining the steps of the experience and the strategies to be used during the experience.
6. Strategies at the conclusion of the experience.
7. Ending the story on a positive note.

Analysis of the Sensory Story on Assemblies

1. Introduction to the targeted experience
 - ▶ *An assembly is a special time in the school day when children go to a big room. There they listen and learn from special people.*



2 & 3 Identification of the potential negative sensory input during that experience

Acknowledgement that the experience can be unpleasant/uncomfortable

- ▶ *Sometimes it is noisy and crowded. Some children don't like being in crowded places. They don't like the noise. They also don't like being bumped*



4. Strategies that can prepare the child for the experience.

- ▶ *I can do special things to make it easier to go to assemblies. Before I go to the assembly I can put on my heavy fanny pack. That helps me to be calm.*
- ▶ *Then I might put on my headphones. That makes it less noisy.*
- ▶ *When I get to my seat at the assembly, I can do an elbow check to make sure no one is sitting too close.*



5. Outlining the steps of the experience and the strategies to be used during the experience.

- ▶ *During the assembly, I can make my muscles tight like a statue. Then I take a deep breath and relax.*
- ▶ *When I'm sitting and listening, I can push my hands down really hard on my legs and then give myself a big hug. These activities make it easier to listen.*



6. Strategies at the conclusion of the experience.

- ▶ *When the assembly is over, I can stretch my arms up high and take another deep breath.*



7. Ending the story on a positive note.

- ▶ *Assemblies at school can be fun!*

THIS Sensory Story would be used for:

- ▶ The student with over-responsive sensory modulation.
- ▶ Recommended to be read several times prior to the assembly.
- ▶ Read the day of the event.
- ▶ Read during the event.
- ▶ Goal: full participation in the assembly through implementation of self-imposed sensory strategies.

Writing a Sensory Story

Suggestions of possibilities?

Writing a Sensory Story

Helpful Hints:

- ▶ Select a task or activity requiring a routine
- ▶ Find a novel activity (no pre-existing Sensory Story)
- ▶ Keep the language at a simple level; be brief
- ▶ Avoid using directive sentences (NO must / have to / need to)
- ▶ Instead use suggestive sentences: I can . . . I like to . . . It helps me to . . .
- ▶ Analyze the sensory properties of the event and choose strategies that match those challenges
- ▶ 2+ inhibitory strategies to prepare for the event . . . And 2+ during the event
- ▶ Identify the intended results of the strategy for the child (i.e. that helps me to be calm, that helps me to focus)
- ▶ Steps 1-3 are to be written in the third person and 4-7 in the first person

Refer to last 2 pages of handout.

Name the Story:

1. Introduction to the targeted experience
2. Identification of the potential negative sensory input during that experience
3. Acknowledgement that the experience can be unpleasant/uncomfortable
4. Strategies that can prepare the child for the experience
5. Outlining the steps of the experience and the strategies to be used during the experience
6. Strategies at the conclusion of the experience
7. Ending the story on a positive note

Implementing a Sensory Story

- ▶ Review the Sensory Story checklist on the handout
- ▶ Practice runs
- ▶ Tweak
- ▶ Illustrate or pictures or graphics
- ▶ Read regularly
- ▶ Practice the strategies
- ▶ Plan for ownership (child as teacher)
- ▶ Reinforce self-regulation

Where does this all fit in ? ! ? !

- ▶ One possibility to address the participation for children with whom you work.
- ▶ Opens the dialog regarding sensory processing
- ▶ Provides concrete suggestions
- ▶ Child should assimilate strategies to other areas
- ▶ Applications not only for school . . . Also for home and the community (A link!!!)
- ▶ Should not take the place of therapeutic intervention
- ▶ Should be used in conjunction with a sensory diet

The good news . . .

- ▶ 15 research studies to date to support the use of Sensory Stories



<http://focus.com/blog/5-questions-to-ask-before-planning-a-celebration/>

Sensory Strategy Cards

2 Decks per Box
45 Cards per Deck

- ▶ Self-regulation
- ▶ Preparation
- ▶ Empowerment





Use of a plastic storage sleeve.
Which should we do first?
Matching the intended result.



Attaching the cards for ready access.

Matching Game / Memory Game / Pick a Strategy



Desk Top or Notebook Reminders

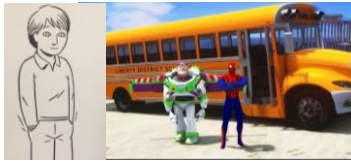


Scenario Problem Solving

1. Getting ready for art class . . . A. This helps me to be calm.
2. Getting ready for music class . . . B. This gets my ears ready.
3. Getting ready for computer class . . . C. This gets my body ready.
4. Getting ready for a fire drill . . . D. This helps me to listen better.
5. Getting ready for nap time . . . E. This me to pay attention.



Power Card



Buzz Lightyear makes his muscles tight like a statue before going on the school bus. I can do that too. That keeps us both calm & relaxed.

<https://www.pinterest.com/pin/43417583884988476/>

Sensory Strategy Card Testimonial

► Dr. Meredith N. Santana, OTD, MS, OTR/L

The Suite of Sensory Story Products



Thanks for Attending!!!!

Questions and Suggestions ??

www.sensorystories.com

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References

- ▶ Allen, S., Halstead, L., Lateer, C., Lehman, H., Melgoza, H., & Pastorella, M. (2011). *What are the effects of Sensory Stories in going to a place of worship?* Unpublished manuscript, Utica College, Utica, NY.
- ▶ Bacon, K., Donohue, A., Reeder, K., & Spano, A. (2007). *Can a customized sensory story help a child tolerate more foods?* Unpublished manuscript, Utica College, Utica, NY.
- ▶ Bailey, J., Clymo, S., Murphy, J., & Petyshyn, M. (2009). *The effect of Sensory Stories on participation during nail care.* Unpublished manuscript, Utica College, Utica, NY.
- ▶ Gray, C. (2000). *The new social story book.* Arlington, TX: Future Horizons.
- ▶ Capron, J. L., Comesky, C. M., Mondrick, A. M., Watson, C. M., Wolken, M. E., Zangilli, R., (2011). *The effects of Sensory Stories on adults with intellectual disabilities.* Unpublished manuscript, Utica College, Utica, NY.
- ▶ Croucher, E., Fitzpatrick, R., Holmquist, R., Pozos, M., & Reyner, K. (2010). *The effect of Sensory Stories in off-task behavior during homework for children with over-responsive sensory modulation.* Unpublished manuscript, Utica College, Utica, NY.
- ▶ Deonarain, S. S. (2010). *The effect of a circle time Sensory Story on attention-to-task behavior in two integrated preschool classrooms.* Master's thesis. Retrieved from ProQuest. (1484748)
- ▶ Klimont, A., Pelan, D., & Huchro, L. (2007). *Can Sensory Stories elicit a change in behavior?* Unpublished manuscript, Utica College, Utica, NY.
- ▶ Marr, D., Apsley, A., Reynolds, A., Stoltz, A., Said, A., & Keller, J., (2010). *The effect of Sensory Stories on a community-based activity in children with Autism Spectrum Disorder.* Unpublished manuscript. Shenandoah University, Winchester, VA.

More References

- ▶ Marr, D., Brenner, K., Burosh, A., Steel, A., & Nackley, V. (2009, April). *The effect of Sensory Stories vs. Social Stories on a targeted self care activity in children with autism spectrum disorders*. Paper presented at the AOTA Annual Conference and Expo, Houston, TX.
- ▶ Marr, D., Gal, E., & Nackley, V. (2006). Sensory Stories: Improving participation for children with sensory modulation dysfunction. *Israel Journal of Occupational Therapy*, 15(2) E41-E55.
- ▶ Marr, D., Mika, H., Miraglia, J., Roerig, M., & Sinnott, R. (2007). The effect of Sensory Stories on targeted behaviors in preschool children with autism. *Physical and Occupational Therapy in Pediatrics*, 27(1), 63-79.
- ▶ Marr, D., & Nackley, V. L. (2005, Summer). *Sensory Stories: A new tool to improve participation for children with over-responsive sensory modulation*. *S. I. Focus*, 8-11.
- ▶ Marr, D. & Nackley, V. (2006). *Sensory stories*. Framingham, MA: Theraproducts.
- ▶ Marr, D., & Nackley, V. (2007, June 25). Writing your own Sensory Stories. *OT Practice*, 15-19.
- ▶ Marr, D., & Nackley, V. (2010, June 7). Using Social Stories & Sensory Stories in autism intervention. *OT Practice*, 17-20.
- ▶ McClannahan, L. (2005). *Teaching conversation to children with autism: Scripts and script-fading*. Bethesda, MA: Woodbine House.
- ▶ Murray-Slutsky, C. & Paris, B. A. (2014). *Autism interventions: Exploring the spectrum of autism (2nd ed.)*. Austin, TX: Hanmill.
- ▶ Quill, K. (1995). *Teaching children with autism: Strategies to enhance communication and socialization*. Albany, NY: Delmar.
- ▶ Shepard, C., Knop, M., & Talarlo, J. (2008). *The effect of Sensory Stories on participation while getting a haircut for children with sensory processing disorders*. Unpublished manuscript, Utica College, Utica, NY.
- ▶ Sherick, J. R. (2004). *The effects of sensory stories on behaviors in children with autism*. Unpublished master's thesis, The Ohio State University, Columbus, Ohio.
