Handwriting Activities

Introduction

Handwriting started to evolve in the 15th Century. By the early 20th Century the Manuscript that is used today was developed.

Handwriting allows us to express & share thoughts, feeling, & emotions. In school, Handwriting is the means through which our children demonstrate their knowledge. Unfortunately many children have difficulty with handwriting & therefore cannot demonstrate their knowledge as easily as children who do not have handwriting difficulties.

Handwriting is a skill that requires a strong foundation of skills including fine motor coordination, visual motor skills, & hand dexterity. Occupational Therapists frequently work with children who experience handwriting difficulties.

Handwriting is a valuable, and often difficult tool to teach. Many children have handwriting difficulties due to difficulties in other areas, such as right/left discrimination and fine motor coordination difficulties. In addition, proper pencil grasp is crucial for developing good handwriting.

The following activities can help your child develop their handwriting skills

Preschool

- 1. Boardwork tasks are good for increasing the strength in the "writing" arm and hand. It is also simple to see the students pencil grip on the chalkboard as they write.
- 2. Coloring is a precursor to handwriting. By encouraging the proper crayon grasp and paper slant during coloring, students will acquire some skills necessary for handwriting.
- 3. Letter & number formation can be reinforced by creating them out of clay, tin foil or toothpicks.

Kindergarten through Grade 2

- 1. Boardwork tasks are good for increasing strength in the "writing" arm and hand. It is also simple to see the students' grip on the chalk as they write.
- 2. Mystery Writing: Ask one student to come to the front of the room where all other students can see. Ask the student to draw a letter/number in the air. The class must guess the letter/number the student drew.
- 3. Touch Writing: Have students draw numbers or letters on the back or palm of another student. The second student must guess which number was drawn on him or her.
- 4. Messy papers: Many students hand in papers that are messy due to frequent erasures. To remedy this problem, teachers can ask students not to erase mistakes, but rather draw a single line through the error. With this method, teachers can also see where the students' errors lie, and assist students in overcoming these mistakes.
- 5. Practice writing letters & numbers in or on different textures such as salt, rice, paint and sandpaper to reinforce correct letter & number formation.
- 6. Place foil over the top of a stencil of letters, numbers, shapes and gently rub index finger over foil to reveal the stencil.

Grade 3 through 5

- 1. Boardwork tasks are good for increasing strength in the "writing" arm and hand. It is also simple to see the students' grip on the chalk as they write.
- 2. Letter Chain: Once students have learned a series or all of the alphabet in cursive ask them to write the letters as if they were one word on the chalkboard. This will also enable the teacher to see if the student uses a static (immature solely wrist movement during writing) or a dynamic (mature -mainly finger movement controlling the writing utensil) type of grasp. The teacher can encourage a dynamic grasp by asking students to hold their dominant wrist with the opposite hand while writing on the chalkboard. The students will have to occasionally release the wrist to move down the chalkboard.

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Sensory Integration

What is Sensory Integration????

Sensory Integration, also referred to as Sensory Processing, is our ability to use our senses (touch, movement, smell, taste, vision, and hearing) to <u>take in</u> information, <u>organize</u> and <u>interpret</u> that information, and make a <u>meaningful response</u>. For most people, this process is automatic. When we hear someone talking to us or see an ambulance coming, our brains interpret that as speech or emergency, and we respond to that information appropriately.

People who have deficits in sensory processing may misinterpret everyday sensory information, such as touch, sound, and movement. They may feel bombarded by information, and may have a difficult time organizing their emotions, attention, motor, and other responses. This can result in decreased participation and independence in every day activities (often referred to as Activities of Daily Living (ADLs)).

What are the "senses" I keep hearing about???

Most people are familiar with the five senses: sight, smell, touch, feel, and hearing. Sensory integration, however, focuses on three senses, which are TACTILE, VESTIBULAR, and PROPRIOCEPTIVE. Auditory and gustatory (taste) can also be component of sensory integration.

#1 Proprioceptive System: The proprioceptive system refers to components of muscles, joints, and tendons that provide a person with a subconscious awareness of body position. When proprioception is functioning efficiently, an individual's body position is automatically adjusted in different situations; for example, the proprioceptive system is responsible for providing the body with the necessary signals to allow us to sit properly in a chair and to step off a curb smoothly. It also allows us to manipulate objects using fine motor movements, such as writing with a pencil, using a spoon to drink soup, and buttoning one's shirt. Some children can have a difficult time registering proprioceptive information and they may excessively seek it out.

Possible Signs of Proprioceptive processing deficits:

- Clumsiness
- A tendency to fall
- Minimal crawling when young or difficulty crawling
- Difficulty manipulating small objects (buttons, snaps),
- Eating in a sloppy manner
- Resistance to new motor movement activities
- Constantly jumping, crashing, and stomping
- Loves to be squished and get "bear hugs"
- Prefers tight clothing, loves rough-housing,
- May be aggressive with other children
- Bumps into things often
- Moves in a stiff and/or uncoordinated way
- Doesn't know how hard to push on an object
- Misjudges the weight of an object
- Breaks objects often

- **#2 Vestibular System:** The vestibular system refers to structures within the inner ear (the semi-circular canals) that detect movement and changes in the position of the head. For example, the vestibular system tells you when your head is upright or tilted (even with your eyes closed). Dysfunction within this system may show itself in two different ways:
- 1.) Some children may be **hypersensitive** (overly sensitive) to vestibular stimulation and have fearful reactions to ordinary movement activities (e.g., swings, slides, ramps, inclines). They may also have trouble learning to climb or descend stairs or hills; and they may be apprehensive walking or crawling on uneven or unstable surfaces. As a result, they seem fearful in space. In general, these children appear clumsy.
- **2.)** On the other extreme, the child may actively seek very intense sensory experiences such as excessive body whirling, jumping, and/or spinning. This type of child demonstrates signs of a **hyposensitivity** (**decreased sensitivity**) to vestibular input; that is, they are trying continuously to stimulate their vestibular systems.

Possible Signs of Vestibular processing deficits:

- Constantly moving
- Difficulty with typical motor actions (riding a bike, climbing stairs)
- Never getting dizzy OR getting dizzy very easily
- Fearful of playground equipment
- Fear of having head upside down or backward
- Thrill seeker
- Full of excess energy

#3 Tactile System: The tactile system includes nerves under the skin's surface that send information to the brain. This information includes light touch, pain, temperature, and pressure. These play an important role in perceiving the environment as well as protective reactions. Both over sensitivity and decreased awareness of tactile input is possible. Tactile defensiveness is a condition in which an individual is extremely sensitive to light touch. Theoretically, when the tactile system is immature and working improperly, abnormal neural signals are sent to the brain which can interfere with other brain processes. This, in turn, causes the brain to be overly stimulated and may lead to excessive brain activity, which can neither be turned off nor organized. This type of over-stimulation in the brain can make it difficult for an individual to organize one's behavior and concentrate and may lead to a negative emotional response to touch sensations.

Possible Signs of Tactile processing deficits:

- Withdrawing when being touched,
- Dislikes kisses,
- Dislikes rough clothes, tags, and/or seams in socks
- Refusing to eat certain 'textured' foods and/or to wear certain types of clothing
- Complaining about having one's hair or face washed,
- Avoiding getting one's hands dirty (i.e., glue, sand, mud, finger-paint), and
- Using one's finger tips rather than whole hands to manipulate objects.
- Misperception of touch and/or pain (hyper- or hyposensitive) and may lead to

- Self-imposed isolation, general irritability, distractibility
- Doesn't realize hands or face are dirty,
- Touches everything and anything constantly,
- May be self-abusive, plays rough with peers,
- Doesn't seem to feel pain (may even enjoy it!)
- Persistently walks on toes to avoid sensory input from the bottom of the feet.

<u>Sensory Modulation</u> Another area of sensory processing is the referred to as sensory modulation. Dr. Jean Ayres, often considered the "founder" of sensory integration theory, defined modulation as the "brain's regulation of its own activity". It involves facilitating some neural messages to produce an enhanced response and inhibiting other messages to reduce activity. She highlighted the role of the vestibular system in modulating the activity of the other systems. Modulation has also be referred to as the process that keeps brain activity in harmony with all the other functions of the nervous system.

Possible Signs of Modulation deficits:

- Getting aggressive--pinching or spitting, usually in a taunting way
- being extremely silly
- Being unresponsive
- Laughing uncontrollably
- Losing control of his body--getting extremely limp and/or clumsy
- Resists new situations
- Can be very impulsive or distractible.
- Becoming either hyper- or hypo-sensitive to pain and other physical stimuli
- Humming and clicking while wandering around aimlessly

<u>Implications:</u> In general, dysfunction within these systems manifests itself in many ways. A child may be over- or under-responsive to sensory input; activity level may be either unusually high or unusually low; a child may be in constant motion or fatigue easily. In addition, some children may fluctuate between these extremes. Gross and/or fine motor coordination problems are also common when these systems are dysfunctional and may result in speech/language delays and in academic under-achievement. Behaviorally, the child may become impulsive, easily distractible, and show a general lack of planning. Some children may also have difficulty adjusting to new situations and may react with frustration, aggression, or withdrawal.

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Fine Motor Activities for Pre-School Aged Children

- 1. Scissor Ships: Draw broad, straight lines on a sheet of paper. Tell students that the scissors are like big ships breaking through ice, and they have to be opened wide before moving on.
- 2. Pizza making: Give each student a piece of clay approximately the size of their palm. Have students roll the clay into a ball with both hands. Do not let students roll the clay on the table. Once the clay is in the shape of a ball, have students flatten the clay with their hand. Ask students to pinch off small pieces of clay and roll them into little balls with the thumb and first finger of one hand to represent the pepperoni or sausage for the pizza. Students must place the "toppings" on the pizza.
- 3. Secret Key: Place a padlock on a box filled with a goodie of some kind (fruit, stickers, etc.). Place several keys in front of the box-with only 1 key being the right key. Students must manipulate the keys in order to get a prize.
- <u>4. Rubber-band Wrap</u>: Give students various sizes of rubber bands and several different sized jars and cans. Students must stretch the rubber bands over the cans and jars.
- <u>5. Scissor Cutting Activities:</u> Students cut old magazines, greeting cards, and newspapers to find a specific letter or picture, and paste it into a collage.
- <u>6. Jewelry Making:</u> Students design jewelry from macaroni, buttons, and beads.
- 7. Building Block Activities: Students use plain blocks, legos, or tinker toys to build and or copy designs.
- 8. Coloring: Students use crayons, colored pencils, or markers to color pre-drawn pictures.
- <u>9. Push Pegs:</u> Draw circles or any shapes on a piece of styrofoam. Give students golf tees or small wooden dowels. Students must push the pegs through the circles on the styrofoam. This reinforces tip-to-tip grasp with the thumb and index finger.
- 10. Sand Writing: Place a layer of sand (or flour) in a baking pan. Ask students to write or draw in the sand with their fingers.
- 11. Chalk Scraps: Give students small pieces of colored chalk. Instruct students to hold the chalk piece between their thumb and first two fingers (the last two fingers can remain next to the second finger, but not touching the chalk). Allow students to draw on the chalkboard using this grasp. This grasp reinforces proper grasp for future pencil writing tasks.
- 12. Pick Up Objects: Have students pick up small objects such as pennies, marbles, or beans and place them in a bottle with a small opening or small opening in a box.
- 13. Q-Tip Art: Have students paint pictures with a Q-Tip.
- 14. Card Bowl: Cut a small rectangular shape in the lid of a bowl (Cool Whip sized). Have students put playing cards through the hole one at a time.
- <u>15. Spoons:</u> Have students pickup beans with a spoon and transfer them from one container to another. Students should be reminded to maintain proper grasp (which is the same as their pencil grasp).

Activities for Fine Motor Skill Development Grade K - 2

Lacing and Threading Activities

- Commercial lacing, sewing, beading kits
- Use bobbins, napkin rings, cheap bangles and rings, washers, macaroni beads, etc.
- Punch holes in cardboard to make lacing boards. You can also punch the holes to make shapes & picture.
- Lace across the opening or around edge of a cardboard box, plastic strawberry boxes, colanders, or rug canvas.
- Sewing cards

Stacking and Building Activities

- Stack rings on a post. There are many types available commercially.
- Stack household items like washers, nuts, bobbins, plastic containers, etc.
- Stack building blocks according to shape and color.
- Play with commercial construction toys such as lego, kinnex, etc.

Winding, Twisting, & Screwing Activities

- Wind-up toys & nut and bolt toys
- Screw/unscrew containers such as jars & nesting cups
- Construction toys with nuts and bolts like a work bench

Tweezers Type Tasks Activities

- Put clothes pins on and off the sides of containers.
- Place doll's clothes on a play clothes line.
- Transferring items with tweezers & tongs from one container to another. Items include cotton balls, pom-poms, beads, & paper clips.

Commercial Games

- Jacks
- Barrel of Monkeys, Jumpin Monkeys, Don't Break the Ice
- Mazes
- Bed Bugs Game
- Perfection, Operation
- Card Games
- Connect Four

Puzzles

- Framed puzzles
- Make your own puzzles by gluing a picture onto cardstock or cardboard & them cutting it into pieces. Have your child perform the gluing & cutting if they are old enough.

Drawing Activities

- Chalk and chalk boards
- Crayons and paper
- Stencils & templates
- Felts
- Finger Paints
- Paints

Cutting, Tearing, Folding Activities

- Scissors (right and left, single and double, loop type)
- Variety of paper & materials to cut.
- Controlled tearing
- Folding
- Wrapping/unwrapping activities

Nesting Activities

- Nesting toys like barrels & dolls
- Nest plastic containers, canisters, boxes, etc.

Construction Activities

• Variety of commercial construction toys like Lego, Kinnex, & Tinker Toys.

In-hand Manipulation Activities

- Turning pages of a book
- Picking up coins, beads, & Bingo chips. Try to pick-up more than one and hold them in the same hand
- Remove a pen or marker lid with one hand while holding pen in the other hand.

Toys to Balance & Standing Up

- Animals
- Soldiers
- People
- Trees
- Blocks

Games Involving Timing

- Play with an egg timer & time:
- 1. sorting objects,
- 2. turning cards over,
- 3. matching objects, and
- 4. putting pegs into a pegboard.

Other Fine motor Activities

- 1. Rolling play dough into tiny balls (peas) using only the finger tips.
- 2. Using pegs or toothpicks to make designs in play dough.
- 3. Tearing newspaper into strips and then crumpling them into balls. Use to stuff scarecrow or other art creation.
- 4. Using a plant sprayer to spray plants, (indoors, outdoors) to spray snow (mix food coloring with water so that the snow can be painted), or melt "monsters". (Draw monster pictures with markers and the colors will run when sprayed.)
- 5. Using eye droppers to "pick up" colored water for color mixing or to make artistic designs on paper.
- 6. Rolling small balls out of tissue paper, then gluing the balls onto construction paper to form pictures or designs.

Department of Health and Human Services: Centers for Disease Control and Prevention

Sudden Infant Death Syndrome (SIDS) and Sudden Unexpected Infant Death (SUID): Reducing the Risk

The <u>National Institute of Child Health and Human Development's</u> "Back to Sleep" campaign has developed information for parents about ways to reduce the risk of SIDS.

Always place babies on their backs to sleep—Babies who sleep on their backs are less likely to die of SIDS than babies who sleep on their stomachs or sides. Placing your baby on his or her back to sleep is the number one way to reduce the risk of SIDS.

Use the back sleep position every time—Babies who usually sleep on their backs but who are then placed on their stomachs, like for a nap, are at very high risk for SIDS. So it is important for babies to sleep on their backs every time, for naps and at night.

Place your baby on a firm sleep surface, such as a safety-approved* crib mattress covered with a fitted sheet—Never place a baby to sleep on a pillow, quilt, sheepskin, or other soft surface.

Keep soft objects, toys, and loose bedding out of your baby's sleep area—Don't use pillows, blankets, quilts, sheepskins, or pillow-like bumpers in your baby's sleep area. Keep all items away from the baby's face.

Avoid letting your baby overheat during sleep—Dress your baby in light sleep clothing and keep the room at a temperature that is comfortable for an adult.

The NICHD's publication Reduce the Risk of SIDS: Safe Sleep for Your Baby PDF 194 KB gives a complete list of ways to reduce the risk of SIDS.

What does a safe sleep environment look like?

To learn more about safe sleep environment and reducing the risk of SIDS, check out the NICHD publication Reduce the Risk of SIDS: What does a safe sleep environment look like?

PDF 194 KB

What groups are most at risk for SIDS?

Babies who are placed to sleep on their stomachs or sides are at higher risk for SIDS than babies who are placed on their backs to sleep. African-American babies are more than two times as likely to die of SIDS as caucasian babies. American-Indian/Alaska Native babies are nearly three times as likely to die of SIDS as caucasian babies.

Will my baby develop flat spots on his or her head from back sleeping?

For the most part, flat spots on a baby's head go away a few months after the baby learns to sit up. There are other ways to reduce the chance that flat spots will develop on your baby's head, such as providing "tummy time" when your baby is awake and someone is watching. "Tummy time" not only

helps prevent flat spots, but it also helps a baby's head, neck, and shoulder muscles get stronger.