

Department of Special Education and Related Services

Occupational Therapy Programs

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Introduction

The purpose of this manual is to provide a brief description of what Occupational Therapy (OT) is and intervention strategies that may be used by a classroom teacher or parents. The intervention suggestions are provided in this manual may be used by classroom teachers for students who may have fine motor concerns which interfere with the student’s ability to perform basic school tasks. The manual covers several skills, all of which are needed to perform the occupation of being a student. This guide also consists of a basic review of the motor milestones of a typically developing child.

Multiple strategies and interventions should be utilized to assist the student with developing age appropriate skills. **The following interventions should be attempted for approximately two (2) weeks prior to referring a student for a formal occupational therapy evaluation.** During this intervention time, consult with your school’s Occupational Therapist to discuss progress or possibly adjust interventions.

However, an intervention period should not unnecessarily delay a full OT evaluation if the student does not respond to the intervention. When in doubt, please consult with the OT assigned to your school.

How Can School Based Occupational Therapy Help?

School-based Occupational Therapists (OT) help students access common activities that make up daily life at school. For example, occupational therapists can help students properly hold and use items such as books, pencils, buttons, and scissors. OTs can also help a student pay attention in class and focus on the task at hand.

Not all students who demonstrate difficultly performing the common school activities need to be pulled out of class to receive therapy. Occupational Therapists may consult with teachers to design classroom based interventions and/or accommodations that can be performed with limited interruption to a student’s routine.

Occupational Therapists and their assistants work closely with classroom teachers in an effort to integrate fine motor therapy into a student’s daily life. Based on the child’s needs, the school team could recommend a variety of different options with regard to occupational therapy services such as: direct services, consultation, accommodations, adaptations and group services.

Please review this guide and consult with your school’s occupational therapist to further discuss how occupational therapy supports can help your student participate in school-based tasks.

## Considerations Prior to Making A Referral And/or Indications For Discharge Of Occupational Therapy

#### **Eligibility**

Not all students who have a motor-dysfunction-based disabling condition are eligible to receive occupational therapy in the school system. The student may receive occupational therapy through the school system only if the student has been identified as a student with a disability under the IDEA requirements and if the condition adversely affects his/her educational performance and requires specially designed service.

Conditions that may not require occupational therapy include but are not limited to:

* The  student’s  disability  does  not  interfere  with  the  student’s  ability  to  function

adequately within an educational setting.

* Current level of achievement is consistent with other areas of development.
* The student has learned appropriate strategies to compensate for deficits.
* Demands for written communication are within the capabilities of the student in his/her environment.
* Functional living skills are not goals that are documented in the student’s individualized education program (IEP).
* The student has adequate motor development to control and coordinate movements.
* Modifications to the school, work environment have been made and are effective.
* Assistive technology is available, in working order, and is effective. School based staff have been instructed in its use and care.
* Modifications to testing procedures or written communication formats have been made and are effective. Needed strategies can be implemented effectively by current educational team.
* School-based staff is aware of and understands implication of the student’s   medical and/or physical condition and is managing the student’s environment appropriately.
* The student is demonstrating progress toward IEP goals and objectives/benchmarks without support of related services.

#### Stages of Development

Children require various developmental skills in order to participate in academic and school tasks as independently as possible. Although all developmental skills are important, occupational therapists are particularly concerned with a student’s performance pertaining to fine motor skills, pre-writing skills, visual-motor integration, and self-help skills. The following pre-requisite skills can help to provide a basic expectation of how children should be performing based on their age. It is important to remember that each child develops skills at a different rate and will not necessarily meet each stage within a specified time frame.

**Expected Skills of Students Ages 3-4:**

* Pre-writing/writing: Imitate and copy a vertical, horizontal and circle stroke. Trace simple shapes and begin to trace first name.
* Scissors: Begin with snipping and progress to being able to cut a full piece of paper in half, progressing to begin to cut along straight lines.
* Puzzles: Complete a variety of single inset puzzles.
* Stacking: Build a tower of 7+ with ½-1” blocks.
* 2- handed tasks: String 7+ beads of various sizes. Take off/put on glue stick/marker lids.

**Expected Skills of Students Ages 4-5:**

* Grasp: Can demonstrate a tripod grasp with writing utensils.
* Pre-writing/writing: Imitate and copy |, \_\_, O, +, /, square, \ and X. Trace first name. Begin to produce/copy letters of first name.
* Scissors: Cut along straight, curved and zig-zag lines. Begin to cut out simple shapes.
* Puzzles: Complete a variety of simple multi-piece puzzles.
* Stacking: Imitate different designs i.e. 6 cube pyramid.
* 2-handed tasks: Fasten/unfasten large buttons and snaps, ties shoes, zip most zippers and manages belt buckles or shoes.
* By age 5 demonstrates preference for right or left hand during a fine motor task.

**Expected Skills of Students Age 6+:**

* Fine and visual motor skills needed to perform the occupation of being a student should be proficient enough to foster comfortable and efficient handwriting, use of classroom utensils and tools, as well as other academic and self-help skills.

Interventions Guidelines

The follow pages contain specific interventions that can be addressed by occupational therapy. If a student in your class is demonstrating difficulty in one or more of the listed skills please consider the following:

* Implement these interventions and record progress monitoring data on the attached forms.
* Data collection period should be a minimum of two weeks prior to referring a student for a formal occupational therapy evaluation
* Consult with your school’s Occupational Therapist to discuss progress or possibly adjust interventions.
* Use multiple strategies and interventions to assist the student with developing age appropriate skills.

Sensory Input and Modification

# A child’s sensory environment and sensory-filled activities during the day can have a significant positive impact on his or her ability to attend to an activity and learn. Modifying a student’s environment and schedule to allow calming/alerting activities may enable students to become more effective learners.

Because sensory activities are important for students to be able to stay engaged, these activities should **NOT** be withheld and used as a reward. Reversely, when a student displays undesired behaviors, sensory breaks prior to undesired behaviors may result in an improvement in behavior. It is helpful to track when a child exhibits undesired behaviors and allow sensory breaks prior to these times. *Planning sensory breaks and activities into the student’s daily schedule can be an effective behavior management tool.*

Following is a brief overview of accommodations that can be helpful for most children. Each child responds differently to specific sensory intervention therefore it is not appropriate to provide a detailed sensory routine that will work for all students.

If teachers suspect that a student has specific sensory needs, please consult with the OT assigned to your school to discuss particular strategies.

### Schedule Modifications:

Most children, especially those with sensory integration difficulties, benefit from a predictable schedule.

* Each morning, review the schedule for the day. If there are changes from the typical routine, discuss these with the class. It may be helpful to use a picture schedule on the board or on a child’s desk.
* If possible, discuss unexpected events before they happen (e.g. fire drills, assemblies) to allow the child time to prepare. It may be helpful to come up with a story that describes how the child should act in each situation.
* To assist students transition from one activity to another, use a “clean-up” song or “new activity” song to help the child prepare to end one activity and begin another activity.

### Organizing Sensory Activities:

* During independent work times, play classical music in the background.
* Have a quiet corner in the classroom where individual students can read or listen to music if they are feeling overwhelmed.
* Instruct the child to take deep breaths prior to transitioning.
* Have children perform “heavy work” activities such as pushing the wall over, chair pushups,  carry  books  to  the  library  or  carry  “cold  lunch  bin”  to  the  cafeteria.
* Allow the class frequent movement breaks. These breaks can be short and include stretching,  deep  breathing,  oral  motor  “snack”,  heavy  work,  walks, brain breaks or a change of pace.

### Environmental Modifications:

* Limit the amount of visual material on the walls or hanging from the ceiling.
* Store fine motor/math manipulative and other colorful activities in plastic boxes or cubbies out of the child’s sight.
* Organize the classroom and create a specific place for books, activities, and other items to be stored out of sight. It may be helpful to take pictures of items and tape the picture where the item belongs.
* Limit the amount of auditory input by closing doors and windows in the classroom. If a child is distractible or has a sensitivity toward auditory input, locate the desk away from doors, windows, fans, or the loud speaker.
* When possible, prepare a child who is sensitive to auditory input for fire drills, morning announcements, or recess bells.

Classroom Activities:

**Sensory Break Activities:**

|  |  |
| --- | --- |
| * steamroller | * massage |
| * wall pushups | * crawl under beanbags |
| * theraband exercises | * jump on trampoline |
| * weighted items: | * push teacher in rolling chair |
| * + - * + vests | * scooter board |
| * + - * + ankle weights | * pull someone in wagon |
| * + - * + hat | * fidgets: |
| * + - * + lap pad | * + - * squeeze ball |
| * + - * + crate | * + - * tridget fidget |
| * + - * + -backpack | * + - * -theraputty |
| * sit in beanbag | * + - * -stress relief ball |
| * pressure vest/bearhug | * hippity hop ball |
| * body sock | * yoga |
| * dots and squeezies | * sensory table (rice especially) |
| * burrito | * heavy work bands |
| * roll therapy ball over student | * bubble wrap |
| * tryke |  |

**Sensory Classroom Modifications:**

|  |  |
| --- | --- |
| * Move and sit/disco sit | * Resistive tools/toys: |
| * Sit on ball | * spray bottle |
| * Elevated writing surface | * clothespins |
| * Writing activities: | * Stapler |
| * + - Chalk on chalkboard | * hole punch |
| * + - Crayons on sandpaper/cross stitch board | * bingo dotters o |
| * + - Pencil in playdoh | * Unifex cubes |
| * + - Rice | * legos |
| * + - Stamps | * theraband on chair |
| * + - Grease pencil on plexiglass | * use bottle/glitter glue |
| * + - Slanted/vertical surface | * use move and sit as foot rest |
| * put materials under seat | * carry chair from desk to work area |
| * move and sit/disco sit | * spray bottle |
| * clothespins |  |

**Sensory Jobs:**

|  |  |
| --- | --- |
| * collect library books | * washing windows |
| * collect milk | * staple papers |
| * take down chairs | * hole punch papers |
| * vacuuming | * transfer wet laundry to dryer |
| * carry laundry basket | * wash table |

**Sensory Recess Activities:**

|  |  |
| --- | --- |
| **Outdoor** | **Indoor** |
| * Sidewalk Chalk | * Play doh |
| * Blow bubbles | * Twister |
| * Rock climb on playground | * Sensory table |
| * Monkey bars |  |

**Sensory PE Activities:**

|  |  |
| --- | --- |
| * Crab walk | * Weighted ball toss |
| * Scooter board relays | * Army crawl |
| * Wheelbarrow walk | * Parachute |
| * Push ups |  |

**Sensory Snacks**

|  |  |
| --- | --- |
| Chewy | Resistive Sucking |
| * Dried fruit | * Drink with crazy straw |
| * Gummi bears/worms | * Sports bottle with long straw |
| * Licorice | * Lollipops |
| * Beef jerky | * Popsicles |
| * Bagels | * Drink milkshake with straw |
| * Cheese | * Hard candies |
| * Granola bars | * Peanut butter |
| * Gum | * Kool-Aid bottles |
| * Raisins | * Suck apple sauces/yogurt through straw |
| * Taffy | * Gogurt |
| * Soft pretzels | * Freeze pop |
| * popcorn |  |

Sensory Classroom Activities adapted from: http://missallisonsclass.blogspot.com

(For More Info. See Appendix: “Does Your Student Have Sensory Processing Challenges” & “Sensory Activity Tracking Form”)

Attention

* Reduce distractions:
  + Visual: remove items not required off the desk, items hanging down from the ceiling or extra writing on the board. If the child is getting distracted by other elements on the page try using ruler to guide what line they are reading from or block out other information with a frame made out of cardstock.
  + Noise: Is the radio on or the doors/windows open with noise coming in?
  + Location in classroom: investigate where the child is sitting; is she next to a wall with lots of posters, or next to a window or door with people walking past? Could he be at the front of the class so he is facing forward and not looking at what other children are doing?
* Provide the student with feedback as to whether he has been displaying concentration skills and provide an opportunity to monitor skills on a chart.
* Increase independence in attending to tasks e.g.:
  + Get the child to work on simpler tasks on their own.
  + Set time limits.
  + Gradually increase the complexity of tasks, for example start with ones that can be completed in a short time or break up larger tasks.
  + Increase the length of time the child works on tasks (e.g. by having shorter breaks or changing tasks less frequently or using an egg timer).
* Ensure the child is attending to you and give short and clear instructions. Have the child to repeat back instructions.
* Allow the child to take a “heavy work” break e.g. handing out textbooks or collecting work.
* Provide the child with a separate work station with limited distractions (e.g. desk against a wall with nothing on it).
* Tape two file folders together to create a “cubicle” for the student during independent work time.

Ability to Cross Midline



The ability to cross midline involves incorporating the use of both right and left hemispheres of the brain. The two hemispheres work together when a person reaches across the body to complete a task. The ability to cross midline is needed for writing, reading and other self-care tasks.

Classroom Activities:

|  |  |
| --- | --- |
| * Place supplies and writing tools in such a way that the child has to reach across the body to obtain items. * Create a crawling obstacle course that requires students to climb over, under, and through while on their hands and knees. * Scooter board activities. Encourage the child to use both arms in an alternating pattern. * Toe touches, reaching across to touch the opposite foot. * Practice tying shoes and working with other clothing fasteners. * Draw figure 8’s on the white board. | * Play flash light tag. Have children lay down on the floor and dim lights. Have children follow your flashlight beam with theirs. * Play partner clapping games (i.e. Miss Mary Mac, See See My Playmate). * Play Simon Says to support crossing midline (i.e. put your right hand on your left hip). * Draw a large path on the white board and have student trace the path with a toy car or finger. Then have them erase the board using big movements. * Dot-to-dot worksheets. |

Bilateral Coordination



Bilateral coordination is the ability to use both sides of the body simultaneously to complete a functional task. Bilateral coordination can mean using both sides of the body for the same action. It can also occur when each side of the body does a different action. This skill is seen when a child holds a writing utensil in one hand and stabilizes the paper with the other hand. Scissor use and tying one’s shoes are also important tasks that require bilateral coordination. Children should be able to perform complementary two-hand use around the age of 3 years old. The following activities promote the use of bilateral coordination in the classroom.

Classroom Activities:

|  |  |
| --- | --- |
| * Finger painting at desks or on an easel. * Throwing and catching a big bouncy ball or beach ball. This requires the use of both hands for each action. * Ripping paper (newspaper, construction paper, etc.) * String beads or macaroni/pasta. * Practicing buttons, zippers, snaps, lacing cards, and tying. * Have one child blow bubbles and have peers pop bubbles using two hands. | * Staple or punch holes in paper. * Wring out a sponge and wipe off a table. * Sharpen pencils or staple papers. * Open and close jar lids. * Seal and unseal Ziploc bags. * Push together or pull apart pop beads. * Cutting with scissors. * Gluing objects onto paper for craft activities. * Drawing with both hands at the same time. Can also use a magna doodle. |

Body Stability



In order for a child to develop a stable body, he or she must develop postural control. Postural control requires the development of core muscle strength and stability. Once this is mastered, fine motor skills can become more precise and controlled. Activities that incorporate both the upper and lower body are often used achieve good body stability.

Classroom Activities:

|  |  |
| --- | --- |
| * Completing activities while on hands and knees (puzzles, blocks). * Animal walking (crab, bear, etc.) * Encourage children to try different positions during play, work, or group time (lying on stomach while resting on elbows or side lying). * Complete pre-writing shapes while on their tummy. * Have child sit on a therapy ball rather than a chair. * Chair and/or wall push-ups. * Hang up artwork on wall with clothespins | * Completing activities on a vertical surface (writing on the dry erase board, painting on an easel). * Scooter board activities while lying on stomach. * Play games such as Twister. * Yoga positions. * Cleaning the white board, chalkboard or windows. * Have children hit a balloon or beach ball back and forth without letting it drop to the ground. * Pushing or moving classroom furniture or equipment. |

Arm and Hand Strength

The small muscles of the hand, as well as the larger muscles in the forearm, are used together when performing fine motor tasks. The muscles of the forearm provide strength and stability, while the smaller intrinsic muscles of our hands allow for more skilled and isolated movement. Prior to writing, children must have well-developed arches in the palms of their hands. They must also be able to perform slight sustained wrist extension for writing on horizontal surface. With mature writing and coloring tasks, the thumb, index finger, and middle finger should act as the “skill” fingers by providing movement. The ring and pinky fingers should act as stabilizers. *One possible indicator of hand weakness is if a child is unable to maintain an open index finger-thumb web space (an “O”) during fine motor tasks, particularly when using a writing utensil*.



Classroom Activities:

|  |  |
| --- | --- |
| * Use large tweezers to pick up small marshmellows or pom poms. * Squeeze a stress ball, play dough or putty. * Use eye droppers to pick up colored water and make designs on coffee filters. * Use a spray bottle to water plants or to “melt monsters” drawn on the white board or chalk board. Fill the spray bottles with food coloring and make designs in the snow. * Play on the playground (monkey bars and climbing walls). | * Crumple newspaper in one hand and shoot baskets into the garbage. * Use pop-beads or pull tubes for warm up activities. * Squeeze different sized clothespins and place on edge of a container. * Use a single hole punch to make confetti. * Play games that incorporate tug-of-war, wheelbarrow walking, or animal walking games to strengthen the arches of the hand. |

Visual Perception and Integration



Visual perception is a complex sensory and cognitive process that involves receiving and interpreting visual information. Visual perception allows a child to recognize, recall, discriminate and make meaning of what they see. Visual motor integration is the ability of the eyes and hands to work together to produce smooth movement. Visual motor integration is loosely referred to as eye-hand coordination. Visual motor integration is especially important in pre-writing and writing. *Several studies have found that visual-motor-integration is the best predictor of handwriting ability and performance.* Pre-school and kindergarten age children with visual motor deficits may appear clumsy, awkward or unable to perform certain fine motor tasks, thus affecting their quality of work in the school setting.

Effects on Classroom skills and activities for remediation

|  |  |  |
| --- | --- | --- |
| **Visual Perceptual Skill** | **How Visual Perceptual Skill Difficulties Can Affect Classroom Skills…** | **Activities/Supports/Accommodations** |
| **Figure Ground Perception**  -ability to locate and identify shapes and objects embedded in a busy visual environment.  Image result for wheres waldo | * Difficulty copying from the board * Difficulty attending to a word on a printed page due to inability to block out other words around it. * Difficulty locating a friend on the playground or finding a specific item in a cluttered desk. * Difficulty sorting and organizing personal belongings | * Use highlighters to emphasize important parts or cover up parts to only show material that needs to be completed. * Allow a copy of notes to be copied at desk level * Keep desk clear of distractions * Place only one activity on a page * Use colored placemat under the materials they are working on * Use a different colored marker to outline boundaries for coloring, mazes or cutting tasks. |
| **Form Constancy**  -ability to see a form and find it among other forms, although it may be sized different or rotated. | * Makes reading difficult as the student might not recognize familiar letters when presented in different styles of print (ie fonts, size, color). * Can result in being slower to master the alphabet * Can cause confusion between “p, q, and g”, “a and o”, “b and d” * Difficulty recognizing things that should be familiar when environmental conditions change. | * Practice building block designs according to a model * Try to limit the amount of different fonts student is exposed to. * Allow for a kinesthetic approach to learning by having student be able to touch, move, and manipulate objects when teaching new material. |
| **Sequential Memory**  -ability to recall a series or sequence of forms. | * Can affect reading comprehension * Difficulties in spelling, near and far point copying, remembering the alphabet in sequence, and with the ability to sequence letters or numbers in words or math problems. | * Make patterns and have student copy them. * Word search puzzles * Provide auditory input with the visual input (ie spelling outloud and then writing it) * Visual cues (ie visual schedule or sequence of events) * Allow student to have a copy of peer or teacher notes |
| **Visual Closure**  -ability to know what an object is even when the object is only partially visible. | * Difficulties with copying if complete presentation cannot be seen. * Difficulty using worksheets or test forms that are poorly photocopied. * Tend to leave out parts of words or entire words, and leaves out parts of worksheets. | * Seat student close to white or smart board * Present cleanly photocopied worksheets and test forms. * Provide student with an example of completed project for a novel project. * Complete dot to dot or jigsaw puzzles. |
| **Visual Discrimination**  -ability to recognize similarities and differences between shapes, size, colors, objects, and patterns. | * Difficulty correcting errors in school work * Difficulty distinguishing similarities and differences in the formation of letters or objects, ie letter reversals. * Difficulty discriminating between size of letters and objects | * Have student “grade” papers with letter formation, sizing, and spacing errors and circle errors with different colored pen. * Sort coins and other objects * Matching and memory games |
| **Visual Memory**  -ability to immediately recall what the eye has seen. | * May have problems reproducing figures from memory causing the student to mix upper and lower case letters. * Deficits also influence near and far point copying and tends to copy only one letter or number at a time from the board. * Difficulty remembering sight words and what was read. * Difficulties in reading comprehension. | * Play memory games * Use manipulatives to form letters and shapes (ie Wiki sticks, pipe cleaners, etc) * Make verbal descriptions of letter formations to pair with visual * Visual cues help to facilitate recall * Read directions aloud * Keep visual information clear, uncluttered and concise. * Allow student to have a copy of peer or teacher notes |
| **Visual Spatial Relations**  -ability to determine that one form or part of a form is turned in a different direction that the others.  Image result for visual spatial relations | * Difficulty differentiating between “b, d, p, q”. * Difficulty with spatial concepts * Results in inconsistent symbol reversals and transposing numbers or letters * Forgets where to start reading or loses place on page when reading. | * Practice copying pictures from paper. * Movement activities or chores/jobs * Use visual cues to indicate place when reading or writing. * Use Directional arrows to help with directions or placement. * Use of graph paper to help with spacing of letters or math problems. |

Sources: [www.YourTherapySource.com](http://www.YourTherapySource.com) & therapyfunzone.net

(For More Info See Appendix: “Symptoms of Poor Visual Perception”)

Fine Motor Coordination

Fine motor control is needed throughout our every day as students dress, write, prepare food, and participate in various classroom activities. Difficulty with using hands and fingers in a coordinated manner may cause frustration and low self-image if students compare themselves to their peers. The following are ways to improve hand strength and therefore fine motor coordination.



Classroom Activities:

* String beads
* Pop beads
* Pulling caps off markers and pens and replacing them
* Stretching rubber bands
* Using squeeze and spray bottles
* Ripping paper
* Use various size tweezers to pick up small items
* Buttoning
* Twisting twist ties or pipe cleaner
* Playing with small blocks or Lego’s
* Placing coins through a slot
* Open close zip lock bags
* Play with play dough, (find hidden toys inside)
* The game: Operation

In-Hand Manipulation

In-hand manipulation is the ability to move small objects efficiently within one hand. It is one of the most complex skills in the arena of fine motor. Moving coins from palm to finger tips, picking up coins out of a wallet and storing them in palm, unscrewing a lid, adjusting grip on a writing utensil and turning over pencil to erase are all examples of in-hand manipulation. Without sufficient in-hand manipulation a child may be slow, clumsy, or unable to complete certain fine motor activities. They may also use two hands for the manipulation of materials, when using one hand is much more efficient.



Classroom Activities:

* Cut play dough with scissors or plastic knife, then role play dough into tiny balls.
* Flatten play dough/putty and cut with a pizza cutter.
* Practice manipulating buttons or snaps on shirt.
* Open and close Ziploc bags.
* Lacing activities or lacing shoes.
* Have children open/close various size jars and lids, particularly lids that can be twisted off.
* Moving coins from palm to finger tips and place them in a slot container.
* Dice games.
* Lay out coins or buttons on the table and have a contest to see who can flip the coins over the fastest (without moving coins to the edge of the table).
* Use large tweezers to pick up fruit snacks or small marshmallows.
* Play “Bed Bugs” game or “Operation.”
* String beads, noodles, buttons, and cheerios.
* Remove key from key ring with both hands and place it into a lock with one hand.
* Play Connect Four – have child pick up three pieces at a time and hold them in his or her hand.

Handwriting Introduction

Handwriting is an important form of communication and expression for people of all ages both academically and outside the academic world. Because of the fine motor skill and precision required for handwriting it can be a difficult and frustrating skill for children to develop. Several skills are required for handwriting which can be difficult for children to manage all at once. Some students may only be able to focus on one handwriting rule at a time. The following are aspects that may present as difficulties while writing:

* Line adherence
* Spacing between letters and words
* Letter formation
* Letter reversals
* Organization of page
* Appropriate letter capitalization
* Sizing of letters
* Pencil grasp
* Stabilization of writing hand
* Stabilization of paper with supporting hand
* Ability to copy from near or far distance

# Pre-Writing Skills

Handwriting is an essential skill needed for the classroom. Elementary school age children spend 31-60% of their school day engaging in fine motor activities. Of those fine motor tasks, 85% involved the use of both paper and pencil. *For this reason, it is important that children develop the pre-requisite skills needed for writing, so they can best participate in classroom tasks and school assignments.* Pre-requisite skills needed for handwriting and activities can be incorporated in the classroom to help children develop these important skills.

### Shapes. Children need to be able to draw pre-writing shapes prior to forming letters correctly. We first learn to move up and down, then side-to-side, then draw circles, and then diagonals. If a child is unable to form these basic shapes, it is likely he or she will struggle to form letters and numbers.

| - O  +   □   / \ X

* Begin by having the child **imitate your movement** so the movement is learned.
* Have the child **make large shapes** e.g. in the air, on the white boards, floor or large piece of paper. Once they learn to form the shapes correctly, it will be easier for them to make the shapes smaller.
* Pre-writing shapes are often best learned through a **multisensory approach**. Sensory media can be used in a variety of pre-writing activities in many different combinations.

### Visual:

* Write or scribble on different kinds of paper e.g. - regular, sugar, greaseproof, foil, and brown.
* Use different tools such as a paintbrush, chalk, crayon, marker or changeable markers or a light-up pen.
* Use special coloring books in which the color appears when children paint with water.

### Tactile:

* Finger painting.
* Place a piece of paper on sand paper, carpet or other textured surfaces and have the child practice shapes**.**
* Write in sand, salt, foam, mud, flour, etc.
* Trace finger around shapes made of yarn, wiki sticks, sand paper, pipe cleaner, etc.

### Auditory:

* + - Attach bells to paintbrush.
    - Use a musical toothbrush to paint.

### Proprioception: Proprioceptive mediums are those that stimulate joint muscle feedback. They include activities in which there is increased weight or resistance to two-handed involvement with the pre-writing tool.

* + - Weighted pen or paint with weighted toothbrush.
    - Vibrating pen.
    - Write on  a  child’s  back  or  hand  and  ask him to  guess  what  letter  you
    - have drawn.
    - Use rolled up paper as a wand to write in the air with both hands.
    - Use a scarf as a streamer to make lines or circles in the air.

### Vestibular: Activities in which the child has to move and change positions also affect the vestibular or balancing system:

* + - Walk, run, skip, jump, knee walk - shapes on the floor, over string or rope, with or without shoes.
    - Follow the leader to form letters, shapes.
    - Imitate shapes with the body or blindfolded.

# Grasp

An efficient pencil grasp is an important skill needed for pre-writing. Children typically begin holding a writing utensil with a primitive type grasp. Over time, a more mature grasp should develop. Typically a static tripod grasp emerges around 3 ½ to 4 years old. A dynamic tripod grasp develops around 4-6 years old.

A mature grasp contributes to a child’s legibility and overall success with school related writing assignments. Causes of poor grasp can include: muscle weakness, joint laxity, poor sensory feedback, or lack of experience with writing tools. The following are examples of immature and mature grasps.

|  |  |
| --- | --- |
| *Immature Grasp:* | |
|  |  |
| *Fisted Palmar* | *Digital Pronate* |

|  |  |  |  |
| --- | --- | --- | --- |
| *Mature/Functional Grasps:* | | | |
|  |  |  |  |
| *Dynamic Tripod* | *Dynamic Quadrapod* | *Lateral Tripod* | *Adapted Tripod* |

* In general, the most appropriate grasp should exhibit the following characteristics:
* Writing utensil is held in a stable position between the thumb, index, and middle finger.
* Ring and little fingers are bent and supported on table.
* An open web space between index finger and thumb.
* Wrist is bent upward with forearm resting on table.
* Writing utensil is held about 1-2 cm from the tip.
* Movement is produced from the fingers versus the wrist or upper extremity.

Classroom Activities

* Place clothespins along the top of a container, have the child pinch the clothes pin with thumb and pointer finger to remove.
* Pick up small objects with a clothespin: cotton balls, pompoms, crumbled paper, beads, pegs, etc.
* Use tongs, tweezers, connected chop sticks, strawberry hullers to pick up small objects for sorting, such as beads, marbles, beans, pompoms and cotton balls.
* Pin poke pictures: use corn cob holders, toothpicks or large push pins (thumb tacks) to punch holes along the lines of a picture. Hold it up to let the light shine through.
* Place coins or bingo chips in narrow slots; a piggy bank is perfect, Connect Four.
* Use eye droppers to make colorful art by placing drops of colored water on a paper towel or coffee filter.
* Play with spinning tops, pick-up sticks, wind up toys, pegboard activities, Lite Brite, Ker-Plunk.
* Play tong games: Operation, Crocodile Dentist, Bedbugs.
* Pull apart and put together small pop beads.
* String small beads.
* Crumple small pieces of paper using fingertips, dip in glue and paste onto a paper plate or paper to make a flower bouquet.
* Tear small pieces of paper with finger tips and paste them onto a sheet of paper to make a picture.
* Pop bubble wrap with thumb and index finger.
* Push a toothpick point into a styrofoam tray or plate, or in aluminum foil placed over craft foam or cork board to make a picture.
* Break off small pieces of clay or putty, have the child try rolling the putty or clay between the pads of the thumb and index finger to make small balls. Flatten small balls by pinching them between the pads of the thumb and index finger.
* Have the child play with small Lego’s.
* Have the child play with small squirt toys; encourage pinching with 1 or 2 fingers opposite the thumb.
* Pick small objects such as pegs, buttons, or beads out of play dough or putty.
* Have the child squeeze a small foam ball: alternate each finger pinching toward the thumb using the ball as resistance.
* Hungry Guy: Cut a slit in a tennis ball, when you squeeze the ball the mouth will open. Hide pennies, pegs, beads and other small things inside.
* Have  the  child  color  or  write  with  short  (1”)  crayons  or  chalk.    This  will

encourage the child to hole a pencil correctly.

* Put a rubber band near the tip of the pencil and tell the child to place fingers on the rubber band.

Hand Dominance



Hand dominance occurs when there is an established preference for a child to use one hand over the other for grasping or manipulating tools. Hand dominance is essential as it supports more efficient fine motor skills that affect the child’s classroom participation. With time and repetition, the child’s dominant hand should become stronger, more skilled and accurate than the non-dominant hand. The non-dominant hand should then assist with activity, but more for support or stability.

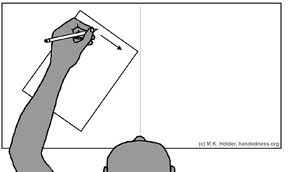
Hand dominance appears as early as three or four years old in typically developing children, however it can also develop as late as 8 or 9 years old. It is important that children develop hand dominance before they begin to write. Teachers should give students opportunities to develop a hand preference with these strategies and activities:

* Present a writing tool or object at midline and see what hand a child reaches with.
* Observe which hand the child uses spontaneously. For example, which hand does the child use to rub nose, scratch head, and feed self.
* Encourage the child to start and end the activity with same hand.
* Evaluate the child’s skill in using each hand. Pick the more skilled hand and try to encourage the use of that hand.
* Ask the child which hand feels easier to use.
* Label the appropriate hand with “helper” hand and “working” hand to serve as a reminder for the child.
* Use tongs to pick up small objects, scoop dry beans into containers or hang up pictures with clothespins.
* Have children color on small pieces of paper. This requires that the non-dominant hand stabilize the paper.
* Punch holes on cardstock and have child lace through the holes using yarn.

It is important to observe when the switching of hands occurs. If switching occurs midway through an activity it may be due to fatigue. In this case, hand strengthening would be recommended. Poor vision, lack of trunk rotation, or poor posture could also play a role in hand dominance. Always remember to consult the school’s occupational therapist if this is the case.

(For More Info. See Appendix: “Activities to Determine Hand Dominance”)

Left Handed Children



Left-handed children should be encouraged to use their preferred hand. More importantly, they should be taught how to correctly form pre-writing and writing strokes. Without proper training and practice, left-handed children may develop poor and/or inefficient writing skills. The most important factors in left-handed writing are: the position of the writing paper, the position of the arm and wrist, and the grip on the writing instrument. The following are tips for working with left-handed children in the school setting:

* Encourage children to work left-to-right of the paper as they may prefer to do the opposite.
* “Hooked” style of writing should be discouraged and corrected with proper paper positioning.
* Encourage the child to grip the pencil 1-1.5 inches away from the point. Place a mark on the pencil to remind child where to place the finger.
* Tilt paper so right arm is at a right angle to bottom edge of paper and top right corner is towards the writer.
* Wrist should be straight when writing and hand should be placed below the writing line.
* Provide left-handed scissors for cutting.
* For computer use, place the mouse to the left of the keyboard.

Sitting Posture

* While seated at a desk the child should have both feet firmly planted on the floor.
* Table surface should be 2 inches above child’s bent elbows when seated on a chair. Forearms should be able to rest comfortably on the table.
* The table or chair height may need to be adjusted to better fit the child. Foot rests or seat cushions may be used. Consult with your school’s occupational therapist for more information.



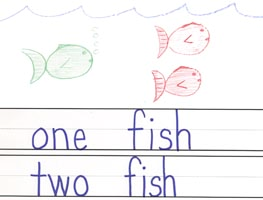
Paper Position

* Paper should be slanted on the desktop so it is turned in the same direction as the writing arm. The opposite hand should assist in steadying the paper.
* Right-handed students should slant the top of their paper approximately 25 to 30 degrees to the left with the paper just right of the child’s midline.

Letter Size

* Have the child use paper size appropriate to their writing.
* Have the child use paper with a dotted midline.
* Have the child copy work with correct letter size.
* See highlighter strategies in the “writing on the line” section to help the child with sizing.
* Have the child fit letters into squares of graph paper.
* Draw appropriate sized boxes on lined paper for letters to fit into (e.g. a box for the letter /l/ would be tall and skinny, the box for a letter /o/ would be short and wide).
* Provide student with number line or letter strip for reference of where letters fit within the line.

# Line Usage



Classroom Activities:

* Draw an individual box for each letter corresponding to the height and width of the letter.
* Have students evaluate their own work, circle where they go outside the lines or poor spacing.
* Use bumpy paper
* Highlight lines on the paper or use stripped paper(blue/white) for a visual prompt to stay within
* “Use pictorial schemes on writing guidelines” (sun, grass, water)
* Call unevenly placed letters are “popcorn letters”
* Isolate the line for the child to write on by having colored paper above and below the line or cut a line in a folder the size of the line and move it up to the next line as the child progresses through the paper
* Dots for beginning and end points for each letter
* Practice small versus tall letters
* Match lined paper with the student’s writing size on unlined paper and work towards age appropriate paper

Age appropriate paper: kindergarten: unlined 1” paper

Grade 1: 1-3/8” lined paper

Grade 2: 3/8-1/4” paper

Grade 3: ¼- standerd notebook paper

Grade 4 and up: standard- college ruled (Dangel& Landreman, p 25)

# Spacing

Many students have difficulty with spacing correctly whether it is writing letters on top of one another, words having no separation from one word to the next, or a variety of other difficulties. A student’s ability to space correctly is a visual perceptual skill that requires thought, planning, and doing. Planning is required before the end of a line is met to decide if adequate room is available to fit the next word. In other instances a student may be able to plan sufficiently but motor skill of actually *doing* may be missing. If a student is having difficulty with spacing make sure their vision has recently been checked.

Classroom Activities:

Letters

* Begin a “no touching rule” for all letters
* Place a dot between each letter
* Use graph paper and allow 1 letter per box (or notebook paper sideways)
* Box writing

Paper

* Have student skip a line in their writing
* Number lines on paper
* Use stripped paper (every other line blue)
* Color code margins
* Copy the spaces

Words

* Place a dash between words
* Use index finger on non-dominant hand or popsicle stick as a continual visual spacer
* Use pieces of adhesive paper that can be removed when the paper is completed.
* Make spaces with a rubber stamp
* Use skittles as spacers
* Teach students that every word has its own bubble

# Letter Formation and Reversals



Classroom Activities:

* Connect the dots in letter formation (decrease the number of dots depending on the students level)
* Provide arrows to show where to start and the direction of the line (to start from the top rather than the bottom.)
* Play games to teach left/right.
* Have students correct their own work, have them draw arrows to show the correct direction a letter should go.
* Use slant or vertical boards in writing
* Highlight in a magazine all b’s in one color and d’s in another (or m/w’s, p/q’s, etc)
* Form letters with clay
* Have students’ form letters with their own body
* Keep a small alphabet strip on the student’s desk and highlight letters that are struggles or provide arrows for formation of each letter
* Create catchy sayings with the child’s interest to talk about the direction, “d the magic c-way.”
* Make sure there is uniformity in the way formation is being taught at home, school and any other setting.
* Involve multiple senses while writing, verbal, visual, and movement. E.g. use the full arm to write a letter in the sky saying “d, the magic c-way” and provide a picture of a d.
* Trace letters in multiple textures, pudding, sand, on carpet etc.

# Reducing Pressure

* Flatten play dough on a desk or table and use a pencil to write in it. For those that press too hard, the letters and lines come out all torn up so they get immediate feedback to lighten their pressure.
* Have the child write on corrugated cardboard, encourage the child not to flatten the bumps on the cardboard.
* Have the child write on aluminum foil backed with cardboard – encourage the child not to rip the foil when they write.
* Have the child used a soft bristled brush to paint lines of various colors from left to right across paper. Encourage the child to use consistent pressure so that each line  is  the  same  width  across  the  page  (may  need  lines  to  ‘stay  between’  drawn  on   paper). Also encourage child to only use the tip of the brush.
* Crayon rubbings: use a template under paper (card stock die cuts work great), remove paper wrapper from crayon and lay crayon flat on paper. Rub the crayon over the paper, if pressure is too great, paper will often rip or design will not stand out well.
* Have the child write with a mechanical pencil.

# Increasing Pressure

* Use crayon rubbings (as explained in decreasing pressure). If too little pressure is used, the image does not come through clearly onto paper. After achieving the ‘perfect’ pressure when watching, ask the child to maintain the same pressure with eyes closed.
* Have the child to rub wax over a square of paper and then turn it over onto another piece of paper. Get the child to press hard onto the paper and draw shapes so the wax leaves marks on the other piece of paper.
* Have the child use tracing paper or carbon paper
* Have the child make pin poke pictures: use corn cob holders, toothpicks or large push pins (thumb tacks) to punch holes along the lines of a picture. Hold it up to let the light shine through.

# Near Point Copying

* Prior to writing, have the child count the words/ letters/spaces in the material to be copied. After the material has been copied have the child count their work to ensure they number is the same.
* Encourage the child to slow down and remind them that their work should look just like the model.
* Reduce the amount of writing distractions on the page.
* Have the child start copying short words. Progress to longer words and then to sentences.
* Have the child spell/read the word/sentence before starting to copy.
* Highlight or underline the information the child needs to copy.
* Ensure the material to be copied has a sharp contrast with the background to maximize visibility (e.g. black on white).
* Have the child proofread all written work prior to turning it in.
* Ensure the child is working in an appropriate setting with minimal distractions.
* Remind the child that work not done accurately will need to be redone.
* Use a frame or window to cove all material except that which the child is to copy.

# Far Point Copying

* Refer to the Near Point Copying strategies for copying basics.
* Enlarge the print in which the child is to copy.
* Seat the child closer to the material being copied.
* Ensure there is no glare on the material to be copied.
* Place the child close to the material to be copied. As the child demonstrates success, gradually move the material away from him/her.
* Ensure distractions are reduced between the child and the material to be copied.
* Provide student with a copy of information to have at the desk to copy from a near point when possible.
* Have students directly face whiteboard
* Allow student to copy a peers notes from the board
* Reduce any glare
* Allow rests for attention, eyes, and hands

Scissor Skills



Scissor mastery is an important fine motor skill that typically develops in preschool. Scissor skills are needed for many functional activities of daily living and are required for school related tasks. When using regular scissors, the correct grasp is thumb in the top loop, with the middle finger in the bottom loop. The index finger is left out and used to provide stability when cutting. The ring and pinky finger are curled towards the palm. In addition, the child should hold the paper to be cut with his/her non-dominant hand with the thumbs of both hands up (pointing toward the ceiling). **Remember thumbs up!!!** Left- handed students should be provided with left-handed scissors whenever possible. *If the elbow of the dominant hand is seems to stick out when cutting, this typically means the non-dominant hand should be re-positioned.* It may help to have the child rest his/her elbow of the dominant hand on the table. In addition, teach your student to cut counter-clockwise and reposition the non-dominant hand as needed.

Classroom Activities:

|  |  |
| --- | --- |
| * Hand strengthening activities such as play dough, putty, and squeeze toys. * Bilateral activities such as sewing cards, tearing paper or stringing beads. * Roll play dough into a long tube and have child cut tube into small pieces. * Have child cut out paper snips and use paper snips to create an art project. * Place glue on the line to be cut and let dry. Then allow child to cut line. | * Graduate thickness of paper. Start with cardstock, progress to construction paper, then paper bags and then traditional paper. * Cut using various media once the child can stabilize the paper efficiently: aluminum foil, wax paper, straws, yarn, sandpaper or fabric. * Slowly decrease the width of the cutting lines as the child’s eye-hand coordination improves. |

# How to Make Spring Loaded Scissors

\*\*\*For these scissors you need to use Fiskars or another brand in which the two pieces of the scissor are held together by a screw.

* Remove the screw from the scissors.
* Cut ends off of a large safety pin and bend ends downward.
* Using  a  #6  (3/8”)  sheet  metal  screw,  place  looped  end  of  safety  pin  on  the  screw

and thread into the scissors leaving it loose.

* Heat the bent ends of the safety pin (one end at a time) and press down into the plastic part of the scissors. The pin should be hot enough to melt the plastic as it goes in. Be careful not to burn your fingers!
* Let cool and tighten the screw.
* Add hot glue to the tips of the safety pin to secure.



Dressing

# Backward Chaining

### Backward chaining allows the child to complete a small portion of the task while giving them a sense of achievement. The adult performs the majority of the task and the child completes the final step. As the child progresses and he or she is able to complete the last step, the adult introduces the second to last step then the third to last step and so on.

**Putting on/Taking of Jacket:**

* Loose fitting clothing is easier when practicing dressing.
* When putting on a jacket, help the child place the first hand in the hole. Hold the jacket up and encourage the child to place the second hand in independently. Progressively give the child less assistance until he is able to do all steps independently.
* When taking a jacket off, pull the jacket off of the first hand and encourage the child to finish by pulling the second hand out independently. Progressively give the child less assistance until he is able to do all steps independently.

# Buttons

* Use a shirt with big buttons and buttonholes about the size of a quarter.
* Have the child practice the skill while the shirt is place on a table in front of her.
* Give the child verbal cues to help talk through the steps:
  + **Buttoning** “find   the  button”,  “open  the  hole”,  “push  it  though”,  “grab  it”,  “lay it  flat”.
  + **Unbuttoning**- “stand  it  up”,”  push  it  out”.
* Backward chaining: (completing the entire process, but leaving the last part for the child to do).
  + Fasten the buttons for the child, leaving the very top one.
    - You may need to assist by breaking the task down further.
      * Put the button half way through the hole and have the child pinch the button and pull it through. Progressively decrease the amount you place the button through the hole until the child is able to complete the task independently.
      * After the child has demonstrated the skill of pulling the button through the hole, just help him/her bring the two sides of the shirt together and have her button independently.

# Zippers

* Start by using a large zipper which is easy to engage.
* Backward chaining: (completing the entire process, but leaving the last part for the child to do).
  + Start with the shank already inserted into the slide bottom, and then introduce the insertion procedure:
    - Have the child zip zipper when three-fourths zipper.
    - Have the child zip zipper when one-fourth zipped.
    - Have the child zip zipper from bottom, with shank and slide bottom already engaged (child may need guidance to grasp the pull tab).
  + The child holds slide bottom with one hand, and is guided to insert shank into slide bottom, and zips.
  + The child zips and unzips separating zipper independently.

Helpful Classroom Tools

(Individual schools to supply adaptive equipment unless otherwise specified)

Pencils

|  |  |  |
| --- | --- | --- |
| Triangular Pencils: Promotes correct grasping and stability when writing. | Ergo-sof Pen: Ergonomic design allows for less stress on hand when writing. It also helps to promote an efficient grasp. | Mini-golf pencil: A small pencil is easier for a child to grip and manipulate. |

Grips

|  |  |  |
| --- | --- | --- |
| Soft grips: Promote correct finger placement and grasp on writing utensils. | Triangle grips: Provides a comfortable grip that encourages proper finger posture. | Spiny grips: Provide a comfortable grip and gives extra tactile feedback when writing. |

Paper

|  |  |  |
| --- | --- | --- |
| Raised Line Paper: Paper is raised to provide tactile cues to child to stay within the lines. | Yellow Highlighter Paper: Helps to provide a visual reference to help student develop appropriate letter placement. | Redi-Space Paper: Great for children who have issues with spacing between words and sentences. Can also help support appropriate letter sizing. |

Cutting

|  |  |  |
| --- | --- | --- |
| Fiskars: Provides a larger finger loop to support an appropriate cutting grasp. Can be used by left-handed and right-handed students. | Four Loop Scissors: Help to provide more stability when cutting. | Self-Opening Loop Scissors: Easy to grip and reopen once pressure is released. |

Attention

Fidget toys come in many different shapes, textures, and sizes. These can help improve a child’s attention and concentration by keeping their hands busy. They can also provide tactile awareness of the fingers and hands.

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Other Tools

|  |  |  |
| --- | --- | --- |
| Slant Board: Helps create the optimal positioning for writing. | Writing Guide: Helps students to be able to see and write within the lines. | Page Up: Holds paper in correct position for reading and copying from near point reference. |

Appendix

1. Sensory checklist
2. Sensory data Form
3. Visual Perception Checklist
4. Hand Dominance Worksheet
5. OT DATA collection
6. OT Referral Form

**Does Your Student Have Sensory Processing Challenges?**

Research shows that sensory issues affect 5-16 percent of the general population and up to 90 percent of people with autism spectrum disorders. Please fill out this checklist for the student indicated in order to help assess the impact of any sensory processing challenges on this student’s classroom performance.

Student’s Name

**Tactile**

Avoids casual touch from classmates or teachers Yes No Unsure

Becomes “silly” or annoyed when touched Yes No Unsure

Craves excessive physical contact with others Yes No Unsure Distressed by messy hands or face–glue, clay, paints, sand, food, etc Yes No Unsure Dislikes or craves certain textures– materials, paper, toys, etc. Yes No Unsure Distracted by clothing or shoes Yes No Unsure Chews or sucks on clothing, hands, pencils, others objects Yes No Unsure Craves or avoids hot or cold items, water play, art supplies Yes No Unsure Disturbed by vibration– such as air conditioner or trucks Yes No Unsure Tactile stims–tapping, rubbing, squeezing, banging Yes No Unsure

# Vision

Squints, blinks, or rubs eyes frequently Yes No Unsure

Makes poor eye contact Yes No Unsure

Struggles with reading Yes No Unsure

Has difficulty with eye-hand coordination–beading, writing, drawing Yes No Unsure Difficulty copying from the board Yes No Unsure

Distracted by glare, bright light, fluorescent lighting Yes No Unsure

Distressed when lights are dimmed or by the dark Yes No Unsure

Struggles to follow moving objects or people Yes No Unsure

Poor ball skills–catching and/or throwing Yes No Unsure

Easily overloaded by crowded visual fields Yes No Unsure Visual stims–hand flaps, flick fingers in front of eyes, spins objects Yes No Unsure

# Vestibular/Balance

Avoids changes in head position Yes No Unsure

Seems clumsy, moves awkwardly Yes No Unsure

Excessively cautious on stairs Yes No Unsure Slumps in chair/sits in W-position on floor/needs support for floor sitting Yes No Unsure Touches furniture or walls when walking Yes No Unsure

Rocks in chair, wraps legs around chair legs Yes No Unsure May fall out of chair or onto another student during floor time Yes No Unsure Fidgets constantly Yes No Unsure

Seems restless or always “on the go” Yes No Unsure

Seems lethargic or hard to “wake up” Yes No Unsure

Gets dizzy easily Yes No Unsure

Avoids or craves moving playground equipment or riding on bus/in car Yes No Unsure Difficulty using playground equipment–slides, swings, ladders, sandbox Yes No Unsure Vestibular stims–spinning, rocking jumping Yes No Unsure

# Auditory

Distressed by loud noises (fire drill, PA announcements, gym whistle) Yes No Unsure Disturbed by sounds such as singing and musical instruments Yes No Unsure Complains that everything/everyone is too loud Yes No Unsure

Speaks with a very loud voice Yes No Unsure

Speaks with an unusually quiet voice Yes No Unsure

Doesn’t seem to hear you Yes No Unsure Has difficulty filtering out noise and focusing on teacher’s voice Yes No Unsure Frequent outbursts in gym and recess Yes No Unsure

Frequent outbursts in cafeteria or assemblies Yes No Unsure Seems to learn more easily in one-to-one situations than in a group Yes No Unsure Auditory stims–hums, repeats, makes odd noises Yes No Unsure

# Proprioception

Poor body awareness–doesn’t know where body parts are Yes No Unsure Bumps into classmates, furniture, walls Yes No Unsure Difficulty grading force– breaks crayons, pencil points, toys Yes No Unsure Poor handwriting– difficulty forming letters, presses too hard or too soft Yes No Unsure Accidentally spills when opening containers, pouring, or drinking Yes No Unsure Drops items on floor, slams doors although not angry Yes No Unsure

Crashes and falls on purpose Yes No Unsure

Lies down on floor at inappropriate times Yes No Unsure

# Smell and Taste

Complains about smells Yes No Unsure

Complains about tastes Yes No Unsure

Doesn’t seem to notice strong odors–glue, markers, food Yes No Unsure Picky eating or very self-limited diet Yes No Unsure

Acts out at snack time or in cafeteria Yes No Unsure

Mouths or licks objects and people Yes No Unsure

Smells objects and people Yes No Unsure

# Behavior, Learning & Social Issues

Craves predictability Yes No Unsure

Engages in repetitive play Yes No Unsure

Doesn’t understand concept of personal space Yes No Unsure

Has difficulty joining group activities Yes No Unsure

Has difficulty with transitions between activities Yes No Unsure

Difficulty initiating and completing tasks Yes No Unsure

Struggles with sequencing activities Yes No Unsure

Poor organization, loses things frequently Yes No Unsure

Easily overwhelmed or frustrated Yes No Unsure

Frequently tunes out or withdraws Yes No Unsure

Frequently acts out or tantrums Yes No Unsure

Please fill out for your student and return to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2010, Lindsey Biel, OTR/L** [**www.sensorysmarts.com**](http://www.sensorysmarts.com)

**Sensory Activity Tracking Form**

**Student Name Date** **Teacher .**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TIME**  **Start** | **TIME**  **Ended** | **Behavior student was engaged in prior to break (1-10)** | **Sensory or Movement Break Activity (A – F )** | **Student’s Behavior AFTER the break**  **Green, Yellow, Red** | **Observations/Notes/Other concerns** |
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| --- |
| **Green** |
| **Yellow** |
| **Red** |

**Behavior student was engaged in prior to break (1-10)** **Sensory/Movement Activity** **Student’s Behavior AFTER the break**

|  |  |
| --- | --- |
| 1 - | 6 - |
| 2 - | 7 - |
| 3 - | 8 - |
| 4 - | 9 - |
| 5 - | 10 - |

|  |
| --- |
| A – |
| B – |
| C – |
| D – |
| E – |
| F – |

EYES ON TRACK

CLUE SHEET

Symptoms of Poor Vision Perception

Observe Student in the Classroom and Check Appropriate Box

## Student's Name: Date of Observations: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

* + - Performance symptoms:
    - Letter reversals (b,d,q,p) d
    - Number reversals

# Repeatedly confuses right/left direction

# Word reversals (saw/was; on/no)

* + - Grips pencil too tightly/poor grip (thumb crossed over fingers)
    - Poor handwriting
    - Poor spacing when writing
    - Uses other hand as "spacer" to control spacing when writing
    - Writes uphill or downhill
    - Orients drawings/writing poorly on page
    - Poor shape recognition/ difficulty copying shapes
    - Confuses similar words
    - Failure to recognize san1e word in next sentence
    - Poor visualization/ spells words based on sounds only
    - Poor c01nprehension/unable to describe what has been read
    - Difficulty with sports/poor motor skills
    - Frustration with school work

# Worksheet to Determine Hand Dominance

# If an object is used, place it in the center of the child’s body. Please note if the child switches hands in the middle of the activity.

|  |  |
| --- | --- |
| Student:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Completed by:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Right Hand** | **Left Hand** | **Comments** |
| Holding pencil/crayon |  |  |  |
| Holding scissors |  |  |  |
| Unzipping backpack |  |  |  |
| Brushing teeth |  |  |  |
| Turning on/off faucet |  |  |  |
| Flushing toilet |  |  |  |
| Eating with a spoon |  |  |  |
| Opening the door |  |  |  |
| Holding a cup |  |  |  |
| Turning pages in a book |  |  |  |
| Waving goodbye |  |  |  |
| Pointing to an object |  |  |  |
| Brushing hair |  |  |  |

Occupational Therapy

Data Collection Intervention Form

|  |  |  |  |
| --- | --- | --- | --- |
| Student: |  | Grade: |  |
| Teacher: |  | School: |  |

Define the activities that your student has difficulty with. Make sure to include what the student CAN and Can’t do: (Attach additional paper as needed)

|  |
| --- |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

|  |  |
| --- | --- |
| 0 | Remained at baseline |
| 1 | Slightly increased Proficiency |
| 2 | Moderately Increased Proficiency |
| 3 | Significantly Increased Proficiency |

Please use the following table during the two week data collection period. Please try at least 2-3 interventions for each area of concern. :

(it may be necessary to attach progress monitoring data)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Identify the intervention  (Consult with the OT as needed) | Date  Start | Date  End | Scale  (Circle One) | Comments  (Attach additional paper if needed) |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |
|  |  |  | 0 1 2 3 |  |

**Davis School District**

**Occupational Therapy Referral Form**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **INSTRUCTIONS:** This form is to be used by teachers or other observers when they believe a student should be referred to the IEP Team for discussion of motor development needs. Previous to filing out this form the IEP Team is to consult with their Occupational Therapist to implement interventions and collect corresponding data for at least 2 weeks. After intervention data is analyzed and the IEP Team decides to refer the student for occupational therapy assessment, include this completed form along with intervention data packet. Check the boxes that describe the observed motor characteristics of the student. | | | | | | |
| Student Name: |  |  |  | | Student ID: |  |
|  | Last | First | MI | | Home Phone: | - - |
| Student Address: |  | | | | Work Phone: | - - |
| Parent/Guardian: |  | | | | Date of Birth: |  |
| School: |  | | | | Grade: |  |
| Teacher: |  | | | | Chronological Age: |  |
| Primary Language: |  | | | | Home Phone: |  |
| **Previous OT and/or PT evaluations?** □ Yes □ No If yes, Date: / / | | | | | | |
| **Student Currently on an IEP?** □ Yes □ No If yes, Date of initial qualification: / / | | | | | | |
| **FINE/VISUAL MOTOR**   1. Student has difficulty:  * Manipulating classroom tools (e.g. glue stick, math blocks, ruler, compass, notebook, etc.) * Using scissors * Managing personal belongings (in desk, locker, backpack) * Stabilizing materials with one hand while working with other (e.g. stencils, paper, ruler, etc.) * Managing clothing for arrival, dismissal, and bathroom (e.g. fasteners, coat, pants, faucets) * Reaching across their midline to grab objects * Hold pencil with appropriate Grip  1. Student tends to:  * Complain of hand fatigue/pain with writing tasks * Produce illegible handwriting * Have difficulty copying near point * Have difficulty copying far point (Grade 5 and up) * Position body as to not reach across midline | | | | **SENSORY MOTOR**   1. Student tends to exhibit unusual response to:  * Touch * Movement * Sight * Sound  1. Student has:  * Unusually high activity level * Unusually low activity level  1. Student seeks out intense movement experiences:  * Body whirling * Falling * Crashing * Rolling * Other | | |
| **TECHNOLOGY ACCESS** | | | | Other: | | |
| 1. Student demonstrates physical difficulty using: | | | |  | | |
| * Computer mouse | | | |  | | |
| * Touch/interactive screens | | | |  | | |
| * Software programs | | | |  | | |
|  | | | |  | | |

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_/\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_

Position:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Referral generated at request of: □ School Team □ Parent □ Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Helpful Web Resources

Handwriting

* [www.hwtears.com](http://www.hwtears.com)
* [www.callirobics.com](http://www.callirobics.com)
* [www.firststrokeshandwriting.com](http://www.firststrokeshandwriting.com)
* [www.handwritinghelpforkids.com](http://www.handwritinghelpforkids.com)
* [www.handwritinginterestgroup.org.uk](http://www.handwritinginterestgroup.org.uk)
* [www.ldonline.org](http://www.ldonline.org)
* [www.peterson-handwriting.com](http://www.peterson-handwriting.com)
* [www.dltk-teach.com](http://www.dltk-teach.com)
* [www.hanedness.org](http://www.hanedness.org)
* [http://therapystreetforkids.com/h](http://therapystreetforkids.com/)

Visual Perception/Motor Integration

* [www.ldonline.org](http://www.ldonline.org)
* [www.skillsforlearning.net](http://www.skillsforlearning.net)
* [www.canchild.ca](http://www.canchild.ca)
* [www.edhelper.com/visual\_skills.htm](http://www.edhelper.com/visual_skills.htm)
* [www.yourtherapysource.com](http://www.yourtherapysource.com)
* <http://www.make-the-grade-ot.com>
* [www.therapyfunzone.com](http://www.therapyfunzone.com)
* <http://www.otplan.com>
* [www.getreadyforschool.com](http://www.getreadyforschool.com)

Helpful Classroom Tools

* <http://www.enasco.com/product/9718132CQ>
* <http://www.uischoolsupply.com>
* <http://www.therapro.com>
* <http://www.discountschoolsupply.com>

References

Alpine School District: Occupational Therapy Fine Motor Development Guide for Teachers (Retrieved November 30, 2015)

<http://alpineschools.org/wp-content/uploads/sites/40/2011/09/OT-Fine-Motor-Development-Guide-for-Teachers1.pdf>

Beery, K.E., & Beery, N.A. (2004). The Beery-Buktenica Developmental Test of Visual Motor Integration. Minneapolis: NSC Pearson

Case-Smith, J. (Ed.) (2005). *Occupational therapy for children* (5th ed.) St. Louis, MI: Elsevier, Inc.

Case-Smith, J. & Pehoski, C. (Eds.) (1992). *Development of hand skills in the child*. Rockville, MD: American Occupational Therapy Association, Inc.

Cleveland, A., Caton, B. & Adler, L. (1997). *Activities Unlimited.* Elgin, Illinois: Building Blocks.

Dangel, A. & Landreman, D. *Response to Intervention: An Elementary and Secondary School Guide.* (n.d.) Waukegan CUSD 60 Occupational and Physical Therapy Department.

Getting a Grip on Writing. (n.d.). Retrieved March 19, 2011 from http://www.getreadyforschool.com/preschool/pencil\_grip.htm

Hand Dominance. (n.d). Retrieved March 19, 2011 from <http://www.capitalhealth.ca/especiallyfor/otonhand/handdominance.htm>

Henderson, A. & Pehoski, C. (Eds.) (2006). *Hand function in the child: Foundations for remediation.* St. Louis, MI: Mosby Elsevier

Hofman, Ashley Opp (Retrieved November 30, 2015) What Parents Need to know About School-Based Occupational

[www.aota.org/about-occupational-therapy/professionals/cy/articles/school-consumer.aspx](http://www.aota.org/about-occupational-therapy/professionals/cy/articles/school-consumer.aspx)

Holder, M.K. (2006). *Teaching left-handers to write*. Retrieved March 24, 2011 from <http://www.handedness.org/action/leftwrite.html>

Jordan School District Occupational Therapy Pre-Referral Intervention Packet. Retrieved July 2015

McCarney, S.B., Wunderlich, K.C., & Bauer, A. (1994). *The Teacher’s Resource Guide.* Columbia, MO: Hawthorne Educational Services, Inc

Modified from Amundson, S.J. (1998). TRICS for written communication: Techniques for rebuilding and improving children’s school skills. Homer, AK: O.T. KIDS. In Case-Smith, J. (2005). *Occupational Therapy for Children*, (Ed.). St. Louis, MI: Elsevier, Inc.

Occupational Therapy- Kids health information. (PDF document). Retrieved March 19, 2011 from http://www.childrenfirsttherapeutics.com/pencilgrip.pdf

Pencil Grasp (n.d.). Retrieved March 19, 2011 from http://www.capitalhealth.ca/especiallyfor/otonhand/finemotor/pencilgrasp.htm

Saunders D. (2009). Pre-writing skills for children under five. *Occupational therapy now*, 11(6), 27-28.

Sava, D.I. Pre*-referral intervention for classroom difficulties* (PDF document). Retrieved April 4, 2011 from http://www.sbac.edu/~werned/DATA/PARENT%20HANDOUTS/Pre-referral%20Interventions%20-%20Deanna%20Iris%20Sava.pdf

Sava, D.I. *Hand dominance* (PDF document). Retrieved March 19, 2011 from <http://www.supinationwatsu.com/articles/HandDominance.pdf>

Solomon, J.W. & O’Brien, J.C. (2006). *Pediatric Skills for Occupational Therapy Assistants*, (2nd ed.). St. Louis, MI: Mosby, Inc.