

## **I. THE DEVELOPMENTAL, INDIVIDUAL, DIFFERENCE, RELATIONSHIP BASED (DIR<sup>®</sup>/FLOORTIME) MODEL**

### **SIX DEVELOPMENTAL MILESTONES (Dr. Stanley Greenspan and Dr. Serena Wieder)**

1. **SHARED ATTENTION AND REGULATION:** the child's ability to take in sensory information and remain organized and attentive.
  - Use the child's individual sensory and motor profile to draw him into shared attention
  - Harness all the available senses, as well as motor capacities and affects (e.g. involve the child in interactions that involve vision, hearing, touch, and movement, coupled with highly enjoyable activities.
  - Use both constructive and playful obstructive strategies.
  - Stretch the child's capacity for shared attention by increasing interactive circles or communication rather than trying to get the child to focus on a particular object or toy.
2. **ENGAGEMENT:** ability of the child to sustain mutual engagement with another individual while experiencing a broad range of emotions.
  - Follow the child's lead in order to engage in interactions that bring pleasure and joy.
  - Build on these pleasurable interactions
  - Join in the child's rhythm in terms of affect, visual, auditory and motor movements.
  - Join with physical objects of the child's pleasure.
  - Attempt to deepen the warmth and pleasure by giving priority to his comfort and closeness.
  - Use playful obstruction to entice him to focus on you.
3. **AFFECTIVE RECIPROCITY AND GESTURAL COMMUNICATION:** the ability of the child to initiate and respond using circles of communication in a back and forth exchange that is driven by affect (intent).
  - Be very animated and attempt to exchange subtle facial expressions, sounds and other gestures.
  - Open and close circles of communication by building on natural interests.
  - Treat everything that the child does as purposeful and meaningful.
  - Encourage initiative by avoiding doing things for the child.
  - Support initiative by enticing the child to do things to you.
  - Over time build obstacles to increase the number of circles communicated in order for him/her to achieve his goal.
4. **COMPLEX PRE-SYMBOLIC SHARED SOCIAL COMMUNICATION AND PROBLEM SOLVING:** the ability of the child to extend circles of communication by creating a continuous flow of circles. Problem solving abilities emerge at this level.
  - Create problem-solving opportunities for the child.
  - Lengthen chains of interaction to beyond 10 circles of communication in a row.
  - Support the beginning of symbolic play in the form of simple schemes and representational ideas.
5. **SYMBOLIC AND CREATIVE USE OF IDEAS, INCLUDING PRETEND PLAY AND PRAGMATIC LANGUAGE**
  - Role play and puppet play
  - Use toys and dress up in pretend fashion; toy or costume is elevated to the level of an "idea"
  - Themes of aggression and power will emerge
  - Expand range of themes.

6. **LOGICAL AND ABSTRACT USE OF IDEAS AND THINKING, INCLUDING THE CAPACITY FOR EXPRESSING AND REFLECTING ON FEELINGS AND HAVING INSIDGHTS INTO SELF AND OTHERS.**

- Ask why questions
- Ask for opinions
- Compare and contrast different points of view
- Ask the child to predict or put themselves in someone else's position.
- Reflect on feelings and ideas.

## I. DIR<sup>®</sup> SCHOOL CURRICULUM

### 1. SPONTANEOUS, DEVELOPMENTALLY APPROPRIATE INTERACTIONS WITH ADULT FACILITATORS (Floor Time – mobilizing 6 developmental levels)

- Level 1 and 2 children – 4-6 sessions per day (20-30 minute sessions)
- Level 3 and 4 children – 3-4 sessions per day (20-30 minute sessions)
- Level 5 and 6 children – 2-3 sessions per day (20-30 minute sessions)

\*These interactions will be naturally integrated into each student's school day. They may occur during play, academic, lunch, recess and/or therapeutic environments. All Soaring Eagle Academy staff may serve as adult facilitators during these interactions. Session frequency and duration will be adjusted and modified daily, as appropriate, to each student's individual needs.

### 2. SPONTANEOUS, DEVELOPMENTALLY APPROPRIATE INTERACTIONS WITH PEERS GIVEN ADULT SUPPORT (Floor Time mobilizing 6 developmental levels)

- Level 3-6 children – 1-2 sessions per day (20-30 minute sessions. Can be incorporated into Floor Time sessions)

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### 3. SEMI-STRUCTURED PROBLEM SOLVING INTERACTIONS

- Activities that connect affect (intent) to motor planning and sequencing capacities that are engineered in the environment by the staff.
- Activities that connect affect (intent) to sensory processing channels (touch, vision, hearing) that are engineered in the environment by the staff.

### 4. SENSORY AND MOTOR MODULATION AND INTEGRATION ACTIVITIES

Sensory modulation is when the senses work together. Each sense works with the others to form a composite picture of who we are physically, where we are, and what is going on around us. Sensory modulation is a neurological function that is responsible for producing this composite picture. It is the organization of sensory information for on-going use.

- **Vestibular stimulating activities:** This refers to the information that is provided by the receptors within the inner ear. It is concerned with the perception of movement and gravity as well as the development of spatial awareness, balance, equilibrium, postural control, and muscle tone. It is also considered to be an important center for bilateral coordination and the development of lateralization.
  - Rolling games
  - Spinner games (swing, scooter boards)
  - Ball games (bouncing on ball)
  - Trampoline workout (bounce sitting, run in place, jump)
- **Proprioceptive stimulating activities**
  - Heavy load walks and hiking trips
    - Wearing heavy weighted vests
    - Crawl or creep with heavy weights

- Cocooning – wrap child in tight sheet or blanket and hold like a caterpillar in a cocoon.
- Climbing mattresses or blow up pillows
- Pulling a wagon filled with heavy books, pushing a wagon with heavy objects, carrying objects from one place to another
- Animal walks
- Body wheelbarrow walks
- **Motor planning:** Child's ability to organize, plan and then execute new and unpracticed fine motor or gross motor activity
  - Balance beams
  - Obstacle courses
  - Problem solving within motor tasks

## 5. PERCEPTUAL MOTOR CHALLENGES

- Throwing
- Catching
- Crossing midline
- Kicking and hitting balls
- Drawing (paper and pencil mazes)

## 6. PRAXIS ACTIVITIES

- Ideation
- Motor planning
- Execution

## 7. VISUAL-SPATIAL PROCESSING ACTIVITIES

- Convergent/divergent processing
  - Treasure hunts
  - Obstacle courses

## 8. TACTILE DISCRIMINATION

- Finding objects hidden in beans, rice, birdseed
- Hiding in a pillow case

## 9. STRUCTURED TEACHING STRATEGIES

When needed for children with significant motor challenges (to be used at the discretion of the staff and modified to include affect and meaning).

## 10. SPEECH AND LANGUAGE THERAPY

- **Nonverbal communication**
  - Use of gaze and shifts for referencing and regulating
  - Conventional gestures (pointing, showing, giving)
  - Contact or distal gestures
  - Unconventional gestures (made up by child but understood by parent)
- **Receptive language skills:** The child's ability to receive and respond to communicative signals from others.
  - Child will react to sound by turning head towards a human tone or voice.
  - Respond to their name.
  - Smiles at persons speaking to him/her.
  - Discriminates angry versus friendly voices.

- Localize sounds that are far away (across the room).
  - Begin to selectively listen to sounds and words.
  - Recognize some words.
  - Share joint attention by looking at the same object as caregiver/teacher.
  - Laughs at familiar interaction sequences
  - Inhibits action in response to “no.”
  - Responds to “hi” and “bye”.
  - Follows caregiver’s gaze to labeled objects
  - Follows some directions.
  - Follows simple motor games, especially if accompanied by visual cues.
  - Understands a few words in context
  - Acts on objects at hand; imitates ongoing actions.
  - Responds to single words in immediate context
  - Understands one word sentence when referents are present
  - Points to objects and body parts in response to Show me\_\_\_\_\_.
  - Will get an object if told when object is in view.
  - Will perform some actions with verbal instructions alone.
  - Knows names of familiar people.
  - Understands words when referent is not present.
  - Understands action words out of context
  - Does what is usually done with objects.
  - Understands yes/no
  - Responds to what, what doing, and where questions.
  - Responds to whose, who, why, how questions.
  - Follows 3 step directions
  - Understands pronouns he/she.
  - Understands syntactic cues in basic sentence forms.
  - Responds to two stage action commands.
  - Responds to how and when questions.
  - Comprehends location and temporal relationships such as behind, in back of, in front of, before, after.
- **Expressive language skills:** communication means (the way in which information is communicated), communicative functions (the purposes for which the child is communicating) and speech production (quality and variety of parameters of speech).
    - Gazes at caregiver/teacher
    - Vocalizes with mostly vowels
    - Babbles strings of sounds
    - Varies pitch
    - Imitates tones and sounds
    - Experiments with sounds
    - Smiles and vocalizes to another
    - Varies volume, pitch, rate
    - Vocalizes pleasure and displeasure.
    - Pays attention to faces.
    - Reduplicated babbling
    - Imitates gesture and tonal quality of adult speech
    - Pointing, showing without reference to adult for confirmation
    - Uses jargon
    - Uses one or more words
    - Uses conventional gestures – pointing, giving, showing
    - Expresses communicative intentions – request, comment, protest.
    - General nominals, specific nominals and action words are used.
    - Begins to combine 2 words
    - Talks about existence, nonexistence, recurrence, action, location, possession, state and attribution with 2 word combinations.

- Uses subject-verb structure
  - Uses relational words big/little, hard/soft, tall/short
  - Uses kinship words (mother, father, sister, brother)
  - Uses pronouns I, it, my, me, mine, you, your, she. He, yours, we, they, us, hers, his, them. Her.
  - Uses present progressive tense, on, in, plural s, past tense irregular, possessive s, copula (to be), articles, past regular, third person singular, third person singular irregular, auxiliary
  - Agent-action, action-object, agent-object used.
  - Uses form/content relations: existence, recurrence, nonexistence, location, possession, rejection, denial, attribution, quantity, state.
  - Uses subject-verb-complement structure
  - Uses contrastive pairs – more/less, before/after
  - Uses pronouns – its, our, him, myself, yourself, our, their, theirs, herself, himself, itself, ourselves, yourselves, themselves.
  - Uses complex forms of declarative, negative and interrogative sentence types.
  - Uses “because” to join clauses.
  - Acquires 14 grammatical morphemes.
- **Pragmatic language skills** - conversational development, expression of communication intentions, development of speaker-listener roles.
    - Verbal turn taking emerges
    - Increased rate of communication and greater persistence.
    - Expresses a range of communicative intentions
    - Talks about the “here and now.”
    - Aware of his/her listener
    - Begins to repair unintelligible utterances upon request.
    - Uses language to regulate, plan, report, project feelings, comment on imagined context, request information, and request confirmation.
    - Utterances are about the immediate past and immediate future.
    - Can determine information the listener needs
    - Can use sequences in narratives.
    - Maintains topic and conveys new information.
    - Adjusts speech and language to different listeners.
    - Abides by rules to be clear, concise, informative and polite.
    - Uses language to converse, explain, imagine, persuade, and tease.
    - Is able to embed plots, include multiple themes.
- **Oral motor and articulation skills**
    - Phonology
      - Monosyllabic CV or VC units
      - Labial (p,b,m) and alveolar (t,d) sounds
      - /a/, /i/, /u/ vowels established
      - Phonological processes are present (18 months-4 years)– final consonant deletion, cluster reduction.
      - Uses m,b,p,n,w,h
      - Uses the above + the following: t, d, k, g, ng, y, f, v, s, sh, ch, l, r
      - Syllable structure emerges.
      - Uses all of the above sounds + the following: j, z, th
      - Use of 2-3 syllables.
      - Able to use “thr” in all positions of words.
      - Uses multisyllabic words.
    - Voice quality
      - Hoarse
      - Strained
      - Vocal nodules

- Appropriate tone and vocal intensity
  - Fluency
    - Whole word repetition
    - Part word repetition
    - Sound repetition
    - Blocking
    - Facial grimaces
- **Feeding and sensory motor activities for the mouth and its integration**
  - Integration of mouth for feeding purposes – expand range of textures, strengthen oral motor mechanism for feeding
- **Auditory processing abilities:** Ability to comprehend sounds and components of language.
  - Auditory attention: The ability to maintain purposeful focus to sounds over extended periods of time.
  - Auditory figure-ground discrimination: The ability to focus on sound in the presence of background noise.
  - Auditory Discrimination: The ability to tell whether two sounds are the same or different.
  - Auditory Sequential memory: The ability to remember sounds and words in sequential order.
  - Phoneme and Syllable synthesis: The ability to blend sounds into syllables and syllables into words.
  - Auditory, Syllable and Phoneme Segmentation: The ability to detect and count the number of sounds and syllables in a word.
  - Auditory and Phoneme Identification: The ability to recognize a sound and store an adequate representation of the sound in long term memory.
  - Sound-Symbol Correspondence: The ability to associate a sound with an alphabetic letter.
  - Rhyming: The ability to recognize sound patterns in a word.
  - Recognition of sound and identification of sound position in words: The ability to detect a phoneme in a word and to identify the position of a phoneme in a word.

## 11. COGNITION

- Activities to improve abstract thinking skills within play and dialogue
- Activities that incorporate emotional themes into academic contexts
- Problem solving with peers during conflicts
- Understanding questions (why, how, when), concepts of time, comparing and contrasting of ideas, anticipating the feelings of others, predicting, ability to infer).

## 12. MOTOR PERFORMANCE

- **Neuromotor**
  - Coordination of motor and cognitive tasks
- **Fine motor**
  - Grasps a rattle (age 4 months)
  - Bring both hands together (age 4 months)
  - Feed herself a cracker (age 8 months)
  - Passes an object from one hand to another (age 8 months)
  - Can pick up a tiny object. (11 months)
  - Pulls toys with strings
  - Builds tower of 6 blocks
  - Pretends to push a train made out of three blocks after watching an adult do so.
  - Strings 1-4 large beads
  - One hand starts to be dominant
  - Holds crayon with the whole hand (fingers straight)

- Imitates an adult making circular strokes or dots (The child will make a circle or dots after watching an adult do so.)
- Copies horizontal and vertical lines
- Uses spoon well Jumps in place with both feet
- Builds tower of nine blocks
- Snips with scissors
- Completes 5-6 piece puzzle
- Holds crayon with three fingers(F)
- Copies circle (can make a circle when he sees another one on a paper.)
- Imitates cross (can make a cross after watching an adult draw one)
- Draws person with head
- Uses spoon and fork properly (without making a "big" mess
- Builds tower with 10 blocks
- Strings small beads
- Holds writing utensil with three fingers
- Copies square
- Draws person with head feet and body - 30 minute attention span (5-10 minutes per activity)
- Dress/Undress independently (except for closings, i.e. buttons, zippers)
- Crosses midline (anchor to this term in the article above
- Does not switch hands in the middle of an activity
- Clear dominance in right handed children
- Builds tower 12 blocks
- Can build three steps out of six blocks
- Draws angled lines and triangle
- Draws a person with head, body, legs and face
- Can color in lines
- Cuts on straight lines
- Holds knife in dominant hand
- Draws diamond
- Cuts with knife
- Holds writing utensil with three fingers with movement in the fingers.
- Ties shoelaces

- **Gross motor**

- Lifts head while lying on stomach
- Rolls over one way
- Keeps head level with body when pulled to a sitting position
- Rolls over both ways
- Sits without support
- Gets into a sitting position from stomach
- Stands holding on to someone or something
- Pulls up to standing position from sitting position.
- Can walk holding onto furniture
- Walks and runs on full feet
- Climbs on furniture to look out the window and get down.
- Climbs stairs holding on with two feet on each stair
- Assists in dressing
- Jumps in place with both feet
- Kicks stationary ball
- Rides tricycle
- Stands on one foot for two seconds
- Swings on swing when started in motion
- Hops on one foot 1-3 times
- Plays catch with large ball
- Good control of tricycle (curves and spins)

- Walks on straight line
- Can climb steps holding an object
- Hops on each foot three times
- Stands on one foot 8-10 seconds
- Rides two wheeler with training wheels
- Can swing by himself
- Bounces and catches tennis ball
- Stands on one foot with eyes closed for 3 seconds
- Walks on line in heel-toe fashion
- Skips
- Rides bicycle without training wheels
- Jumps rope
- Catches and bounces tennis ball