OCCUPATIONAL THERAPY EVALUATION FOR EDUCATION PURPOSES AND IN SCHOOL SETTINGS

Name: CASE 2

Referral: CASE 2 was referred for an occupational therapy evaluation by her parents to assess her development and to determine the need for occupational therapy services. Her parents report that CASE 2 is a happy child who is eager to learn. She reads well but her fine motor skills are very weak. She has difficulty with math and social studies. She has the diagnosis of autism.

Medical History: CASE 2 was born at approximately 36 weeks gestation via typical labor and delivery. She had complications with a nuchal cord wrapped around her neck and possible anoxia. She was born with a cleft palate that was repaired surgically. She had difficulty sucking from a bottle. She was diagnosed with autism by the school psychologist in 2005. She has allergies including dairy and is followed by Dr.. She had repeated ear infections, and required P.E. tube placement twice that were removed at age 3 years. She takes Namenda to help her memory and Oxytocin nasal spray that helps diminish social anxiety.

Educational History: CASE 2 attends school in a SDC class. She qualifies for special education with the eligibility of Autism and Intellectual Disability.

Intervention History: CASE 2 receives occupational therapy 45 minutes weekly. She has ABA services at home. She receives 80 minutes per week of speech and language therapy services, three times with group and once 1:1. She has two hours per week of speech and language therapy services at home and one at

Developmental History (Parent Report):

<u>State Regulation</u> – CASE 2's parents indicated that she was a quiet baby who liked being held. She sleeps well. She engages in some repetitive vocalizations. She is sometimes aggressive when upset and tantrums. She is frightened by loud sounds.

<u>Gross Motor</u> – CASE 2 had delayed motor milestones. She sat alone at 14 months and walked at 30 months. She did not crawl.

<u>Fine Motor</u> - Her fine motor skills emerged slowly. She finger fed at age 3 years and ate with a spoon at 5 years.

<u>Communication</u> - She had speech and language delays during her early development.

Vietnamese and English are spoken in the home. Her father reports that she understands Vietnamese and knows the words to some songs, but usually speaks in English. She said her first word at 5.5 years, combined words at 6.5 years, spoke in sentences at age 9 years. She followed one-step commands at 8 years and struggles to follow several step commands.

<u>Self-Care</u> – She was toilet trained by 5 years and independent in toileting at 8 years. She learned to dress herself including fasteners by 9 years of age. She eats well but is somewhat picky with her food. She enjoys all kinds of noodles.

<u>Affect, Attention, & Activity</u> - On a behavioral checklist her parents indicated that she is sometimes happy. She can be overly active, anxious, inattentive and impulsive at times.

<u>Self-Direction</u> – Daily routines such as leaving the house in the morning and bed times rarely go smoothly. Getting ready to go somewhere, leaving the house in the morning, mealtimes, and bedtime routines usually go well. Bathing and grooming activities are sometimes difficult. Meal preparation and cleanup never goes smoothly.

<u>Play and Leisure</u> – During her free time CASE 2 is primarily sedentary. She enjoys playing on the computer. She can use the mouse well and find what she needs. She enjoys playing with her siblings but is a little rough with her brother.

Performance Test Situation: CASE 2 was assessed during one two-hour performance evaluation with intermittent breaks as necessary to sustain her attention. Her father was present throughout the evaluation. She was active and talked to me as she sat down in the testing room. She was willing to interact with me but had difficulty sustaining her attention to the tasks. She was immediately distracted by my jewelry, but this subsided. She needed physical assistance and ongoing guidance to sit at the table and attempt the test items. She tended to sit with a rounded back, her head propped up with her hand. I administered all of the SIPT in a standardized fashion however they were quite difficult for her. She gave herself verbal praise after almost every item. She clearly wanted me to do this as well. I observed significant dyspraxia when I asked her to do novel activities through visual instruction, verbal instruction, or creative manipulation of novel objects/situations. She did not consistently visually regard the activities we were doing and needed frequent redirection to the task. She had a stuffy nose and a couple of times used her sleeve to wipe her face, immediately saying, "Yuck." Her father explained that she does not yet know how to blow her nose.

During space visualization, she was able to choose between the shapes presented. Each time she said, "Wonderful, great job, ta-da, and super." As the items became more difficult she guessed rather than taking her time to problem solve. Figure ground was difficult for her. We stood up to do the standing and walking balance test and she walked around the room, pacing. She had difficulty balancing one foot or with her feet in tandem for this task. Her father reports that she has difficulty walking down stairs alternating feel and has difficulty navigating curbs. When drawing during design copying I noted that she has low tone in her hands. She used a fingertip grasp and her hands were shaky. She imitated a vertical line and a diagonal line but did not imitate more complex shapes. Instead she started to trace the stimulus figures. When asked to write her name she wrote "CASE 2 binh" in large letters that went up the page, reversing the "b" and "d" in her last name. Praxis on verbal command in which she is asked to follow two-step unfamiliar instructions was also too difficult for her. When asked to imitate, she had difficulty figuring out how to put her body in the same positions as I demonstrated. I presented the constructional praxis test and she was unable to replicate either of the structures. She tended to stack the blocks or place them on the stimulus figure. She had no postrotary nystagmus test following rotation. At this point it was time for a break and she requested the bathroom.

When she returned, she did the motor accuracy test that requires tracing along a printed line. She was unable to visually track the black line and trace it with the pen. She was unable to replicate the motor sequences on the sequencing praxis test. She was able to complete the oral praxis test but with poor accuracy. She tended to lean forward and fix her trunk on the table while attempting these mouth, tongue and lip movements. She was unable to do the kinesthesia and tactile tests in which vision was occluded. She was able to do several items on manual form part I accurately. She said, "Whoo, hoo. Yahoo. Good work. Yeah for CASE 2." She was unable to do the other tactile tests. When I gave her the light touch required for the tests, she did not respond as if she did not know she was touched. She showed no aversion to these tests. Although the testing was quite difficult for her, it is my impression that CASE 2 performed to the best of her ability and her performance may be considered a reliable indicator of her abilities at this time.

School Observation: I observed CASE 2 for approximately 40 minutes at school in her SDC class, escorted by the school psychologist. She was sitting at the table with her teacher, and one other student. There were three centers in all. One aide worked with one child at a table and the other aide worked at another table with three children.

CASE 2 was writing using a pencil with a grip. She made eye contact with the teacher and responded to his instructions. An adult walked in carrying something to class and she watched her. She was distracted also by the other group, looking over where they were talking. The teacher used both pointing and verbal prompts to direct CASE 2 to the items. In order to regain CASE 2's attention, the teacher asked what she was working for. CASE 2 replied, but I couldn't hear her. CASE 2 said, "Cat says meow?" She read the words, "lock" and "log". She needed

extra help to draw a line to the picture. The teacher helped her sound out the words and she was given a break and directed to use the keyboard.

CASE 2 regarded us and said, "Hi CASE 2?" She walked over to the window and looked out. Her teacher reminded her that she is working for the keyboard but instead she sat on the floor. The timer went off and her teacher allowed her permission to have a few more minutes. She jumped on the trampoline for a few minutes. He asked her to check her schedule but she went again to look out of the window. She used a tissue and then put it into the trash. She went to the closet, shut the doors and went back to her desk. A boy in her class gave her the pencil she was using with the grip. She had placed it in the community pencil box.

She sat on an adult size chair perched on the edge at a desk that was quite high. In fact when she leaned over a little bit with her arms on the desk, her face nearly touched her work. She worked with the aide on addition who prompted her to do each item. She did several on the page and went onto another page. The aide helped her count to six. She asked her to write 6 and did it hand-over-hand. CASE 2 asked, "Eight dollars?" Her aide reminded her it was not money, they were just counting. She counted to 7 and wrote the #7. The aide acknowledged that CASE 2's chin was resting on the table and encouraged her to sit up a bit, which she did. She wrote more letters and asked for "Free choice?" The aide provided 5 options, such as keyboard, book, and skittles. She continued to write letters, leaning over the desk. They discussed doing jobs and CASE 2 asked, "Jobs now?" She retrieved wipes so that she could clean her desk. She then asked for the bus, but was directed to continue to clean the table. She asked for a child, but was told that he was not in this class. She used both hands with wipes to clean off her desk. Spontaneously she said her name, address and phone number. When she finished she put the wipes in the trash.

Tests Used: The assessment report is based on information from the following:

- 1. Parent report: Developmental and Family Impact Questionnaires
- 2. Developmental Profile 2 (DP-3)
- 3. Adaptive Behavior Assessment System II (ABAS-II) Parent Form and Teacher Form
- 4. Sensory Processing Measure (SPM-P) School Form and Home Form
- 5. Portions of the Sensory Integration and Praxis Tests (SIPT), a series of 17 tests designed to assess visual and tactile perception, motor planning, visual motor skills, 2 and 3-dimensional construction and nystagmus, a back and forth reflexive response of the eyes to rotation.
- 6. Clinical observations of postural control, muscle tone, ocular and oral motor control and sensory responsiveness
- 7. Behavioral Rating Inventory of Executive Functions (BRIEF) Parent and Teacher Report
- 8. Parent interview
- 9. Record Review

SELPA

Individualized Education Program (IEP) report dated 1/11 Occupational Therapy Evaluation Report dated 3/11 Comprehensive Neuropsychological/Academic Assessment

Results: The test results are reported in the categories below.

On the **ABAS-II**, according to parent and teacher report, CASE 2 showed difficulties across multiple areas of adaptive functions. CASE 2 has dyspraxia which may affect her ability to learn fine and gross motor skills and perform a variety of adaptive skills. Many children with dyspraxia have an ability to understand what they need to do adaptively but are unable to execute these skills during daily life routines. At this stage in her development it will be important to address the multiple sensory motor and praxis aspects of her development that contribute to these essential adaptive skills as well as her cognitive and academic skills.

ABAS-II	Parent Report	Teacher Report
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	Raw Score	Scaled Scores	Standard Scores	%	Raw Score	Scaled Scores	Standard Scores	%
Communication	40	1	55	<1%	32	1	55	<1%
Community Use	27	5	75	5%	18	1	55	<1%
Functional	30	3	65	1%	25	1	55	<1%
Academics								
Home (School)	32	1	55	<1%	40	3	65	1%
Living								
Health and Safety	40	3	65	1%	36	3	65	<1%
Leisure	33	2	60	<1%	25	2	60	<1%
Self-Care	48	2	60	<1%	42	1	55	1%
Self-Direction	26	1	55	<1%	37	2	60	1%
Social	36	1	55	<1%	27	1	55	1%

ABAS-II Summary

Faleni				
Composite	Sum of Scaled Scores	Composite Scores	Percentile Rank	95% Confidence Interval
GAC	19	50	< 0.1	46-54
Conceptual	5	53	0.1	47-59
Social	3	56	0.2	49-63
Practice	11	50	<0.1	43-57

Teacher				
Composite	Sum of	Composite	Percentile	95% Confidence
-	Scaled Scores	Score	Rank	Interval
GAC	20	52	0.1	49-55
Conceptual	7	57	0.2	53-61
Social	5	62	1.0	57-67
Practical	8	51	0.1	46-56

SPM: According to teacher and parent reports CASE 2 has definite dysfunction with social participation some problems with sensory responsiveness and planning and ideas. There is no significant statistical difference between the total score between teacher and parent reports.

SPM Home Form						
	Raw Score T-Score		Interpretive Range			
Social Participation	34	78	Definite Dysfunction			
Vision	14	57	Typical			
Hearing	13	63	Some Problems			
Touch	17	61	Some Problems			
Body Awareness	14	57	Typical			
Balance and Motion	17	61	Some Problems			
Planning and Ideas	22	66	Some Problems			
Total Sensory Score	80	60	Some Problems			

SPM Main Classroom Form						
	Raw Score	T-Score	Interpretive Range			
Social Participation	32	70	Definite Dysfunction			
Vision	11	59	Typical			
Hearing	12	63	Some Problems			

Touch	11	61	Some Problems
Body Awareness	7	42	Typical
Balance and Motion	22	70	Definite Dysfunction
Planning and Ideas	24	64	Some Problems
Total Sensory Score	77	65	Some Problems

The test scores from the **SIPT** are reported in standard deviations and listed on the accompanying profile. CASE 2's performance is compared against children ages 8 years 6 months to 8 years 11 months, the highest standardization data available. Scores that fall below -1.0 are considered significantly low. Given that her performance was compared to children younger than her age, deficient scores are highly significant. The scores in the high or high average range cannot be interpreted as indicating higher than average performance since she is not compared against children in her age group; however these scores are significant in showing her relative strengths.

CASE 2 was able to complete 16 of the 17 tests with maximum assistance. She was unable to do the kinesthesia test that required figuring out where she was moving without being able to see where her arm was moved and the localization of tactile stimuli test that required tolerating, locating and identifying a light touch with a pen. She scored significantly low on all tests indicating significant sensory integration and praxis deficits across all domains tested.

Visual Perception

Sensitivity: On the SPM CASE 2's parents and teacher reported typical visual responsiveness. I observed that she was visually distracted by things going on the classroom. Discrimination: CASE 2 scored significantly low on space visualization, although she did better on this test than the other tests on the SIPT. She was able to complete14 items correctly. She expected verbal praise after each item. She scored significantly low on the figure ground perception test which is an abstract test of finding embedded figures. She was also unable to do a stereognosis task that required occlusion of her vision while feeling and identifying shapes. Visual motor skills: She was not able to copy designs when presented design copying which is a dot-to-dot task. She replicated the horizontal and vertical lines, but she was unable to copy other designs. She made lines or scribbles without replicating the stimulus picture. When asked to write her name she did so lightly with large identifiable letters, poorly spaced on the page. She made a "b" for "d" and her last name was illegible.

Auditory-Language Processing

Receptive: CASE 2 was unable to follow the instructions for praxis on verbal command that requires following unfamiliar two-step verbal commands.

Sensitivity: According to her teacher and parents' responses on the SPM, CASE 2 has some problems with auditory responsiveness. She appears under responsive to sounds and often makes noises or speaks too loudly for the situation.

Tactile Perception

Sensitivity: On the SPM her parents and teacher reported some problems with tactile responsiveness. She does not show unusual sensitivities at school; rather she seems unaware of being touched and is often not aware if her face is messy. At home she is sensitive to grooming activities such as having her nails cut.

Discrimination: CASE 2 appeared not to know that she was touched when her vision was occluded. She scored significantly low on manual form perception, finger identification and graphesthesia and was unable to complete the localization of tactile stimuli test. She did not know where and how she was touched on that test and therefore made no indication of the location of the stimuli.

Vestibular Processing

Vestibular-ocular responses: CASE 2 had no nystagmus following rotation required for the postrotary nystagmus test.

Postural Control: CASE 2 has low tone and poor proximal joint stability. She has difficulty coactivating the muscles of her trunk for core stability. She was unable to sustain antigravity positions. She scored -3.0 on the standing and walking balance test.

Ocular Motor Control: CASE 2 demonstrated difficulty with ocular pursuits and poor ability to stabilize her eyes during head movements.

<u>Proprioceptive Awareness</u>: According to parent and teacher report on the SPM, CASE 2 has typical body awareness. She was unable to perform the kinesthesia test. She did not appear to know where and how she was moving when she couldn't see where she was moved.

<u>Gross motor skills:</u> CASE 2 has delayed gross motor skills. She scored significantly low on sequencing praxis and bilateral motor coordination tests. She was unable to replicate any of the repetitive motor sequences on these tasks.

<u>Praxis:</u> CASE 2 ad difficulty imitating unfamiliar movements during oral praxis or postural praxis tests. According to parent and teacher reports on the SPM, she has some problems with ideas and planning. She is unable to solve problems effectively, fails to complete tasks with multiple steps, has difficulty imitating demonstrated actions, and has difficulty coming up with new ideas about what to do. This is a significant area of need.

<u>Executive Functions</u>: On the BRIEF teacher form, CASE 2 received significantly low scores on metacognition and behavioral regulation. Her parents were unable to complete some of the questions in various sections of the questionnaire; therefore no scores could be generated. Children with difficulty with executive functions often have difficulty with creativity (i.e., generating new ideas, coming up with options for life problems). They often require greater supervision than those with good executive functions. CASE 2 requires ongoing support throughout the day for her safety and well-being.

BRIEF – Revised Scores											
T-scores at or above 65 have potential clinical significance											
	Parent Form				Teache	Teacher Form					
	Raw	T-Score	%ile		Raw		T-Score	÷	%ile		
	Score				Score						
Inhibit	Missing D	ata			18		62		88		
Shift					- 16		60		86		
Emotional Control					- 11		51		77		
Behavior Regulation				-	- 45		59		84		
Index											
Initiate				-	- 19		78		97		
Working Memory					- 28		85		99		
Plan/Organize					25		76		95		
Organization of					11		57		85		
Materials											
Monitor					26		78		97		
Metacognition Index				-	- 109		78		97		
Global Executive	unable	unable	Unable		154		73		95		
Composite											

Discussion: CASE 2 is a pleasant and curious child with relative strengths in reading. Since infancy, she has had challenges in motor control, praxis, attention and visual motor skill acquisition with delays in developmental and adaptive skill areas. She has the diagnoses of autism and speech and language deficits and difficulty with sustained attention. These difficulties have interfered with her ability to benefit from her education, staying on task, socializing with peers, and completing her work independently. The results of this evaluation reveal significant sensory processing and praxis deficits with delays in developmental and adaptive skill areas including social skills and executive functions.

CASE 2 has difficulty with perceptual motor integration of her body and the environment. She is slow and inaccurate in processing information and has difficulty with perceptual model formation and retrieval that allows her to figure out what to do and how to do it while in action. She is most comfortable with familiar and repetitive tasks. When the steps are broken down she is capable of the components, but she has difficulty chaining action sequences together such as is needed with writing and during play with peers. Therefore, she has poor sustained and divided attention, and is easily frustrated. She currently does not persist in difficult tasks without the assistance, prompts, and redirection of adults. CASE 2 has difficulty with sustained attention especially to otherdirected tasks. As the working load increases, her persistence decreases. Tasks that simultaneously ask for postural control along with visual motor control, language interpretation, social interaction, and cognitive reasoning will be particularly challenging. Additionally, she has executive function and social skills deficits affecting her ability to be independent in organizing and completing her work and making new friends and engaging in a wide variety of activities with other children such as group projects or ball sports. She enjoys success when she accomplishes challenges and this motivation can be engendered for her to increase the amount and complexity of sensory motor interactions that make up more complex needed and desired activities throughout her day.

Reports on the SPM indicate that CASE 2 has some difficulty with sensory regulation impacting her activity level, attention, affect, and arousal level. She is sensitive to sounds while under responsive to other sensations from her body and the environment. CASE 2 has difficulty attending to salient information, sorting and blocking irrelevant information, and settling down into a single activity for a prolonged period. She will benefit from accommodations that assist her in processing multi-sensory environmental data while maintaining a homeostatic state with the sensory information she processes from her own body.

CASE 2 has difficulties with static and dynamic postural control and balance responses, requiring vestibular-proprioceptive processing. She has low tone and difficulty sustaining an upright stable position during sedentary tasks. She tends to lean on her arm or get up and down rather than sitting or standing still. She is cautious and fearful when moving rapidly through space since she isn't confident about her motor abilities and her position in space. The vestibular system contributes to a sense of body position in space by providing sensory data about head position and gravity. The proprioceptive system detects the muscles acting on the joints and provides a sense of the body's position and movement. The vestibular and proprioceptive systems work together to enhance muscle tone and motor skills and provide her information about where and how she is moving or supporting her position against the pull of gravity. These sensations work in concert with the visual system and allow a person to orient in space and rapidly perceive 3dimensional space. The vestibular system works in concert with the auditory system. In fact, they share their primary nerve, cranial nerve VIII. She may make noises or sing to help increase her auditory spatial awareness. The vestibular system is also intimately linked with spontaneous coordination of head, neck and eye movements. Many times children will have difficulty controlling their eve movements especially when shifting from different spatial planes, from varying distances, and when there is movement involved.

Decreased postural stability will impact her attention to tasks as well since she becomes rapidly fatigued just by the need to hold her body up against gravity. During stationery activities CASE 2 may experience postural fatique which is problematic if she has to sit too long while working. She may become uncomfortable, fidget, lose her attention to the task or show decreased motivation to do long writing tasks. This causes her to need frequent breaks, lose attention to task, resort to behaviors or mannerisms which provide additional sensations, and perform more slowly or less accurately than the other children during skilled activities such as writing. She will benefit from frequent movement breaks to increase her physical endurance and stamina and to increase her motivation to engage in physical activities. Frequent movement breaks and adjusting where and how she is positioned during sedentary tasks will be helpful. Working in various positions such as standing or lying down may help. She also needs opportunities throughout her day for physical activities so that she develops a better sense of her body and refines the way in which she interacts with other people and things in her environment. Tactile, vestibular and proprioceptive activities such as jumping up and down to wake up or rocking for calming are known for their regulating abilities. She needs a high level of physical activity and muscle effort to provide her nervous system the calming and activating sensations that she needs to regulate her alertness. attention, and general activity level. Increased gross motor experiences in which she can build dynamic balance reactions and greater strength and endurance are needed so that she can participate in sports activities and maintain her physical health.

CASE 2 has dyspraxia affecting her ability to initiate and plan novel interactions. This will affect her ability to initiate and accomplish physical skills, as indicated in the DP-3 such as dressing and managing fasteners, tool use such as when writing or using utensil, and playing playground games with other children. She has difficulty with complex, interactive or dynamic motor skills. She can coordinate her own movements, but when she has to learn the rules of a game, coordinate her actions with others, and predict future action sequences such as where and when the ball and players will arrive at a certain destination, she has difficulty motor planning and coordinating her movements. Speed will also play a role in her ability to perform skillfully or not. The faster the game or activity, the more she has to plan what she is going to do to accommodate the challenge.

Somatosensory awareness provides a perceptual foundation for refined movements and organizing actions and interactions. CASE 2 shows vulnerability in her ability to rapidly and accurately execute complex interactions. She has dyspraxia that includes motor planning sequences of actions, creative ideation, construction, imitation, following multi-step unfamiliar verbal instructions, and problem solving. New challenges are stressful and may create a sense of anxiety and frustration. It may take her longer than expected to do things that other children her

age can do quickly. She will have more difficulty when learning new skills or organizing multiple objects and tasks.

The more ways in which CASE 2 has to predict what she has to do during routines as well as when learning new things, the less stressful it will be for her and the better she will be able to problem solve what to do. She requires adaptive strategies that will be especially important when she gets older, has less adult support and structure, and is expected to accomplish more complicated challenges. CASE 2 performs better when she can predict the routine with a balance between structured and unstructured activities. She will benefit from learning social rules and she needs additional time to process the dynamics of a social situation. She needs to learn a variety of sensory regulatory strategies to assist her learning and participation and to participate in physical activities at regular intervals throughout her day so that she can stay organized and learn new skills.

Conclusion: CASE 2 is a cooperative, sensitive child who tries hard to do what is expected. She has the diagnoses of autism and speech and language deficits with limitations in her attention to task. She has significant sensory integration and praxis deficits including sensitivity to sounds and decreased responsiveness to touch, movement and proprioception. She has poor tactile discrimination, vestibular-proprioceptive awareness, and spatial organization. She has dyspraxia characterized by difficulties with ideation, motor planning, sequencing, construction, imitation and following unfamiliar instructions. She has social difficulties, delayed adaptive skill development and poor executive functions that decrease her ability to interact with peers, work independently at her level of intelligence, and work cooperatively with others. These fundamental abilities are essential for her to gain necessary skills and increase her independence to access the curriculum and benefit from her education.

Recommendations:

Occupational therapy is recommended as follows:

- a. One year of occupational therapy without significant breaks of one month or more.
- b. 1:1, for two one-hour sessions per week, in a specialized therapy room, by a therapist with post-graduate training in sensory integration, to address issues related to sensory integration, praxis, play, and fine and gross motor skills.
- c. 60-minutes per month for collaboration/consultation with parents and educational team.
- d. Reassessment at 6 month intervals is necessary to determine future recommendations.

Sensory strategies are important to help her alertness and attention and ability to self-regulate throughout her day. These accommodations may include:

- a. Engagement in physical activities several times each day that build her strength and endurance.
- b. Regular activity breaks to help her pay attention during sedentary tasks.
- c. Flexibility in the classroom so that she can move around while completing an activity.
- d. Opportunities to do her work in various positions such as standing, in bean bag chair, on large pillows.
- e. Mobile seating devices such as a peanut ball and t-stool that can be changed as needed. Additional options may include ball chair, sit-n-move cushion, or therapy ball
- f. Heavy work activities such as scooter board, pushing book carts, performing errands such as carrying boxes or supplies, and playing "tug-of-war".
- g. Frequently scheduled 30 second to 1 minute activity breaks that she enjoys approximately every 5 minutes. More rigorous activity breaks can be incorporated during all transitions between activities.
- h. Oral sensory opportunities such as gum, sour foods, or chewing on ice or crunchy foods.
- i. Spot lighted work areas
- j. Positive reinforcement with enjoyable sensory opportunities such as a fuzzy toy or jumping time with special attention for work well-done
- k. During testing, she needs additional time to process the information, additional time to respond and frequent breaks in order to sustain her attention. She needs a quiet area to

decrease distractions. If the testing process is novel, she will need additional practice to learn the way in which to respond to the test.

- I. It may be beneficial for her to sit in the middle section of her class towards the front and at the side and so that she can see other children and the teacher simultaneously, rather than turning around to see the other children.
- m. Visual reminders of unfamiliar sequences of activities that she has to do during the day
- n. Pressure garments such as dance-tards and sports-style Lycra undergarments.
- Set a timer she can see and allow her short periods to retreat if she becomes overwhelmed, avoidant or overstimulated. Let her know that she will come back to the activity in a certain period of time such as 1 minute.
- p. Create spaces that she can retreat to where she doesn't have to see others such as a cubicle or tent.

Sample Goals in preparation for setting goals and objectives include but are not limited to: #1 Self-Regulation

<u>Present Level of Performance:</u> CASE 2 requires multiple directions and adult prompts to stay on task and sustain her participation in activities throughout the day.

Objective #1. Given visual/verbal prompts CASE 2 will select an activity to assist her ability to self-regulate her activity level as measured by improved participation in classroom activities (increased number of activities; increased time on task).

By _____ Given a prompt and choice, CASE 2 will choose and complete one appropriate sensory strategy that assists her ability to stay on task during a 10 minute class session.

By _____ Given a prompt and choice, CASE 2 will request a sensory strategy that assists her to sustain her attention with no more than one avoidant episode during a 15 minute class session.

#2 Sustained Postural Control for Appropriate Sitting

<u>Present Level of Performance</u> – CASE 2 has difficulty sustaining an upright seated position either in the chair or on the floor during instruction. She often gets up or loses her attention if seated at the table.

Objective #2. CASE 2 will sustain a comfortable seated position and attend to task while sustaining her participation with the group with minimal prompts.

By _____, Given adaptive strategies/equipment, CASE 2 will be able to sustain a seated position during a group task for 10 minutes while maintaining her engagement with the group, 4/5 consecutive days.

By _____, Given adaptive strategies/equipment, CASE 2 will be able to sustain a seated position during group time for 15 minutes while maintaining her engagement with the group, 4/5 consecutive days.

By _____, Given adaptive strategies/equipment, CASE 2 will be able to sustain a seated position during group time for the AM or PM while maintaining her engagement with the group, 4/5 consecutive days.

#3 Motor Planning and Organization

<u>Present Level of Performance</u> – CASE 2 exhibits deficits in imitation, sequencing, and motor planning that interferes with her ability to independently figure out what to do without adult guidance especially when multiple steps are involved or when she encounters novel demands. Objective #3. To demonstrate improved praxis skills and independence, CASE 2 will demonstrate an ability to organize her belongings and routines without adult guidance.

By _____, CASE 2 will demonstrate an improved ability to organize her behavior for increased school performance to complete familiar AM or PM routine activities including transitions with no more than three verbal prompts/adult guidance 4/5 opportunities.

By _____, CASE 2 will demonstrate an improved ability to organize her behavior for increased school performance to complete familiar AM or PM routine activities including transitions with no more than two verbal prompts/adult guidance 4/5 opportunities.

By _____, CASE 2 will demonstrate an improved ability to organize her behavior for increased school performance to complete familiar AM or PM routine activities including transitions with no more than one verbal prompts/adult guidance 4/5 opportunities.

Objective #4 Social and Playground Skills

<u>Present Levels of Performance</u> – CASE 2 has difficulty with body awareness, grading the force and direction of her movements, imitating others via visual cues, and balancing that impedes her ability to interact with peers during non-instruction time at school. During these periods she currently has close adult supervision otherwise she engages in repetitive and solitary activities rather than playing and engaging cooperating with her peers.

Objective #4. To demonstrate a wider repertoire of interactive activities including enjoyable social engagement with peers and adults, CASE 2 will demonstrate improved ability to organize her body through improved balance, body awareness, imitation and awareness of people and objects in her environment and maintain her engagement in typical playground activities.

By _____, CASE 2 will demonstrate an improved ability to imitate her peers and sustain her engagement in activities during transitions, playground and other non-instruction time throughout the school day with no more than three verbal prompts/adult guidance in a 15 minute period 4/5 opportunities.

By _____, CASE 2 will demonstrate an improved ability to imitate her peers and sustain her engagement in activities during transitions, playground and other non-instruction time throughout the school day with no more than two verbal prompts/adult guidance in a 20 minute period 4/5 opportunities.

By _____, CASE 2 will demonstrate an improved ability to imitate her peers and sustain her engagement in activities during transitions, playground and other non-instruction time throughout the school day with no more than one verbal prompts/adult guidance in a 20 minute period 4/5 opportunities.

#5 Visual Motor Skills

<u>Present Level of Performance</u> – CASE 2 does not yet copy shapes and has difficulty cutting. Objective #2. CASE 2 will independently copy shapes such as circle, square and triangle and the letters of her name.

By _____, Given samples of common shapes on a page and minimal prompts CASE 2 will make identifiable copies of 4 shapes with 80% accuracy, 4/5 opportunities.

By _____, Given samples of letters on a page and minimal prompts CASE 2 will make identifiable copies of the letters of her name with 80% accuracy, 4/5 opportunities.

By _____, CASE 2 will make identifiable copies of 4 shapes and letters of her name with minimal verbal prompts with 80% accuracy, 4/5 opportunities.

Referrals/Recommended Services:

- 1. Assistive Technology evaluation including the use of I Pad applications.
- 2. 1:1 instructional support
- 3. Social skills training and facilitation that will allow her to participate in group activities, group instruction, unstructured activities she needs to be able to initiate conversation, sustain conversation, identify other's feelings, engage in appropriate perspective taking.
- 4. Evaluation by a specialist in allergies, immunology, and nutrition is necessary.

Additional Suggestions:

- 1. Provide CASE 2 opportunities for physical activities in which she can build strength and stamina. Swinging and moving frequently are advised. If she has difficulty sitting still, or prior to this demand, it may help to have her go out and swing for 5 minutes, do an errand, or run around the building.
- 2. It is important that CASE 2 is given activity breaks before during and after school. **Break**

times are a critical part of her day and must not be taken away due to missed work or other consequence. During her breaks, encourage CASE 2 to participate in physically active games in cooperation with other children so that she can build a broader repertoire of social skills. Active physical activity such as jumping jacks or push-ups will help her to regain her energy and focus on her work. It is helpful if she can do this successfully with other children.

- 3. Encourage tactile activities with a variety of textures, temperatures and pressure.
- 4. She may enjoy wrapping herself with a 4 yard length of 60 inch wide Lycra spandex fabric. She could wrap up in it or use it as a hammock to swing in. Provide heavy beanbag chairs that she can crawl between and jump into.
- 5. Pressure garments such as dance wear may help her feel better. Weighted garments, blankets or toys may be useful as well.
- 6. Weighted or pressure garments such as under-armor may be useful.
- 7. Heavy bean bag chairs might be comfortable for her to sit in and between.
- 8. Jumping, climbing, hanging, pushing and pulling activities will be organizing for her. Provide opportunities to play on bouncing equipment such as a trampoline.
- Recess or work breaks are a critical part of her day and must not be taken away due to missed work or other consequence. During breaks, encourage CASE 2 to participate in physically active games in cooperation with other children so that she can build a broader repertoire of social skills.
- 10. Interactive and cooperative games in which different children can make up and change the directions while maintaining their engagement in the game will be beneficial.
- 11. The Alert Program for Self-Regulation by Mary Sue Williams and Sherry Shellenberger.
- 12. Extra-curricular community-based activities such as swimming, tumbling, and horseback riding are encouraged.
- 13. In order for CASE 2 to develop optimally and feel healthy and happy, it is important that she maintains an active life-style.

Licensed Occupational Therapist