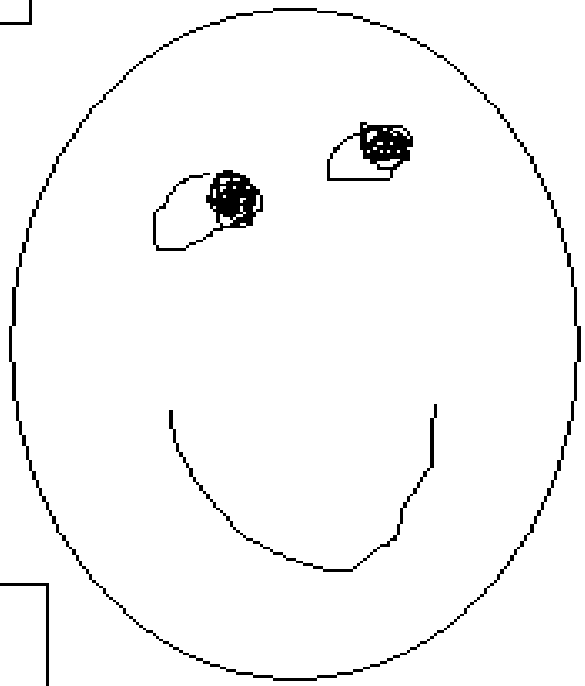
Children Who Struggle Socially

Joseph Falkner, MST/CCC-SLP

Charlie Test

Heath

Mars



Snickers

Butterfinger

Assumptions:

- Parents in attendance today are already attempting to coach their children regarding social skills
  - Social Rules
  - How to be polite/courteous
  - Teaching what to say/not to say

Who are these children who don't develop relationships as readily as others?

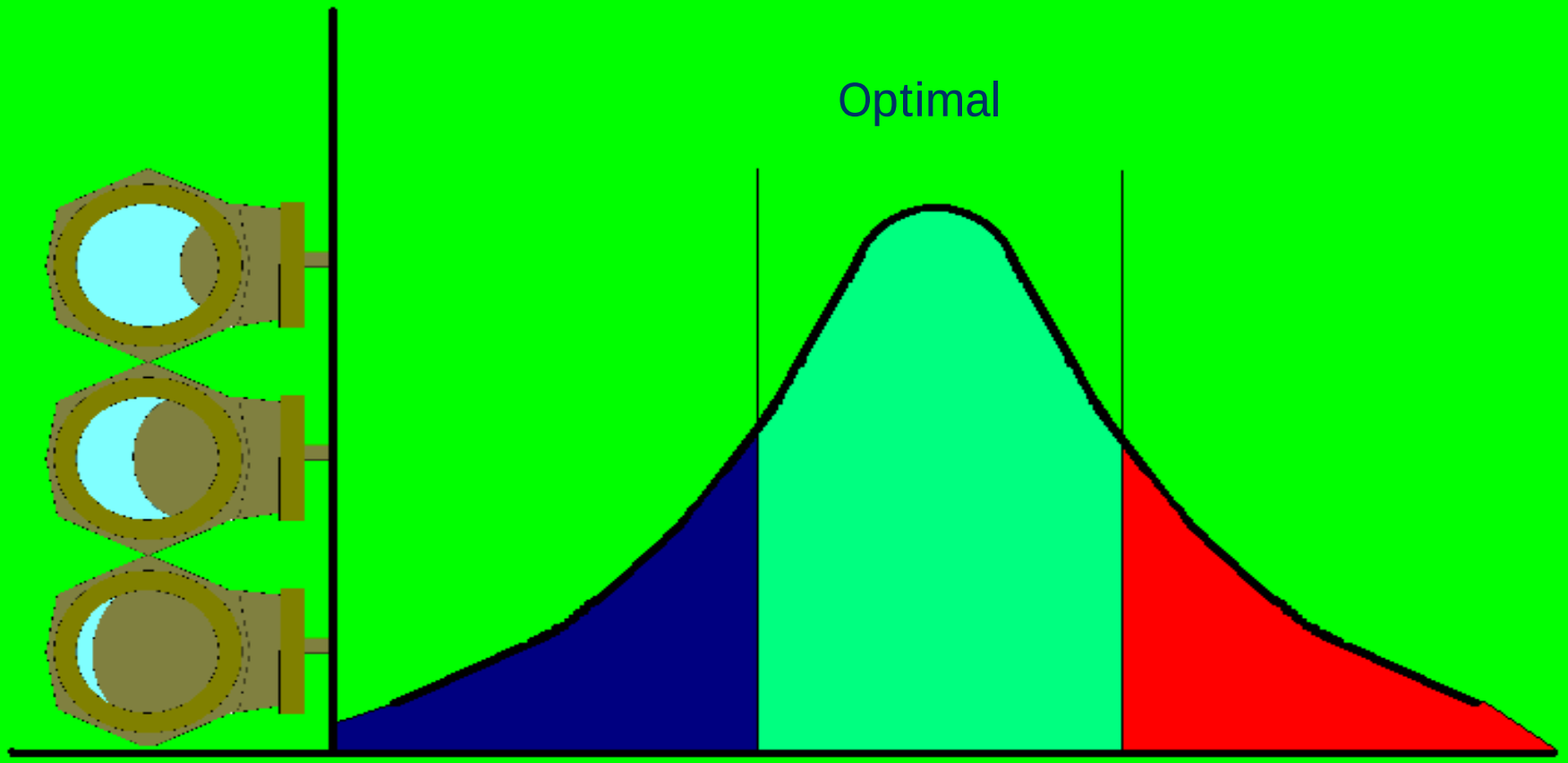
- Attention Deficit Disorder
- Autism/Asperger
- Pervasive Developmental Disability
- Oppositional Defiant Disorder
- Tourette's Syndrome
- Intellectual Disturbance
- Trauma
- Anxiety and Anxiety Secondary to other disorders
- Other

Words Used to Describe Individuals Who Struggle Socially

- Clueless
- Socially Naïve
- Tactless
- Inflexible
- Friendless
- Aggressive
- Unmotivated
- Bully
- Matter-of-fact
- Explosive
- Manipulative
- Socially incompetent
- Out-of-synch
- Uncooperative
- Noncompliant
- Oppositional

Why Do They Struggle?

Impact of Arousal on Social Interaction



Two Roads (Goleman, 2006)

- High Road
  - “Control system”
  - Relatively slow; tends to be more accurate
  - May allow reflection
- Low Road
  - “Automatic system”
  - Faster than it is accurate
  - Occurs without capability for reflection

Factors Impacting Social Awareness and Facility

- Perceptual issues/sensory integrative issues
- A tendency to get overwhelmed in stimulating environments
- Expressive/receptive language issues
- Difficulties using and understanding abstract, inferential, and figurative language
- Facial recognition problems
- Processing speed issues
- Memory issues: working, episodic/autobiographical
- Executive function issues
- Difficulty changing cognitive sets (shifting from one set of thoughts to another-inflexibility)
- Difficulty or failure to accurately perceive social cues/information
- Ego depletion and ego resilience

Development of Social Interaction

- Babies are born hard-wired for social interaction (amygdala)
- Mother and child's interactions subtly modify the nervous system of the other, leading to greater bonding
- Over time, child's social and cognitive ability behaviors modify as brain develops

Development of Social Interaction (cont.)

- As the child's capabilities change, mother allows for greater independence and autonomy within structured interactions which further allows for brain growth
- As the child gets older, the child's cognitive capabilities, emotional regulation, and social competencies allow, the child will start to interact and develop relationships with others
- The child will initially use their parents as a "secure base" for these interactions, but will over time develop new attachments that will further inspire changes in ability and brain structure

Attunement and Empathy

(Webster's Ninth Collegiate Dictionary)

- Definitions
  - Empathy: the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another
  - Attunement: to bring into harmony, to make aware or responsive

Empathy

- Empathetic to needs vs. wants
- Empathetic to their needs for:
  - Safety
  - Being liked
  - Being successful
- Empathy with child's experience

Attunement

- Attunement is…
  - A process
  - Being fully in the moment, being with the person
  - Both innate and learned
- Attunement isn’t…
  - What the other person needs to learn to do
  - Talking at the person
  - Something that takes place in absence of interaction

Social Intelligence vs. Social Skills

- Social Intelligence
  - “A short-hand term for being intelligent not just about our relationships but also in them.” (Goleman, 2006)
- Social Skills
  - “ Includes an array of interpersonal behaviors such as greeting others, approaching an individual or a group, listening to others, ...” (Snell & Janney, 2002)

Social Skills

- Implies…
  - Finite group of skills
  - Intrapersonal focused (i.e., what the person needs to know or do)
  - Generally, focused on skills acquisition problems, although may also focus on skills fluency problems (i.e., using skills fluently in a situation)
  - More “product” oriented

Social Intelligence

- Encompasses…
  - A much broader view of social interaction
  - Not only the skills necessary to interact, but both the social awareness and facility to interact
  - More “process” oriented
  - The “social synapse” (Cozolino, 2006)
    - “…the medium through which we are linked together into larger organisms such as families, tribes, societies, and the human species as a whole.”

Social Intelligence: Social Awareness (Goleman, 2006)

- "Refers to the spectrum that runs from instantaneously sensing another's inner state to understanding her feelings, thoughts, to "getting" complicated social situations."
- Includes:
  - Primal Empathy
  - Attunement
  - Empathic accuracy
  - Social cognition

Social Intelligence: Social Facility (Goleman, 2006)

- "...builds on social awareness to allow smooth, effective interactions.
- Includes...
  - Synchrony
  - Self-presentation
  - Influence
  - Concern

Key Principles to Working with Social Intelligence

- First, we must address any arousal issues
- The adult serves as social Interpreter and Mentor
  - Adults' intact system used to bolster the child's system
- Use relationship-based language
  - i.e., I understand that is how you see it.
- It develops as a part of experience, not just instruction
  - It is "learned" as the individual is a part of the "social synapse," a community of some sort

Addressing Arousal Issues

- Six Principles of Structure (Ory, 2004)
- Sensory Integration, Sensory Modulation, and Sensory Regulation
- Visual Supports: schedules, checklists, etc…
- Relaxation Techniques
- Brain Gym©

6 Principles of Structure (Ory, 2004)

- Predictability
- Concrete
- Positive Expectations
- Continuity
- Trust
- Flexibility within scructured choices

Predictability

- Predictability refers to the individual's ability to predict the actions, intentions, expectations, etc..., of the individuals in his/her environment
- It is more than just "consistency"
  - Consistency implies a sense of constancy
  - Doing the same thing over and over again with minimal variations

Predictability

- Predictability goes a step beyond consistency
  - In predictability, we act in such a way that the individual is able to perceive our constancy
  - We empathetically recognize the experience, and capabilities, of the child
  - We seek to take the child's perspective, and seek to understand how he/she perceives our interactions

Predictability

- We utilize our relatively intact nervous systems and egos to serve as both references and templates for the more fragile, or less intact, nervous system and/or ego of the child who struggles
  - We serve as interpreters of the world for the child
- We seek a synchronicity between our actions and words

Structure: Predictability

- The ability to predict
  - Person's actions
  - Activity
  - Rules/roles in activity
  - Transitions between activities
- It includes both:
  - The Authority Figure's ability to act in a predictable way
  - The individual's ability to perceive that predictability

Structure: Concrete

- Tangible aspects
  - Arrangement of room
  - Schedule
  - Expectations
  - Boundaries

Structure: Positive Expectations

- Reframes the student's behavior
- Changes the focus from the absence of negative behaviors to the presence of positive ones
- Introduces a narrative (story) of success to the student

Structure: Trust

- Relatedness
- Relationships
- One matches one's words with one's actions
- Genuineness of purpose

Structure: Flexibility

- Empathetic response to needs of the student
- Demonstrates understanding of the experience of the student
- Focuses on looking underneath the behavior to the individual (self)
- It involves the setting aside of our own stories to focus on the needs of the individual
- It occurs through the provision of structured choices, recognition, and empathy

Sensory Integration/Modulation/Regulation

- Definition (Ayres, 1989) – SI “is the neurological process that organizes sensation from one’s own body and from the environment and makes it possible to use the body effectively within the environment…The brain must select, enhance, inhibit, compare and associate sensory information in a flexible, constantly changing pattern.”

Sensory Modalities

- Vision
- Hearing
- Touch
- Smell
- Taste
- Proprioceptive
- Kinesthetic
- Vestibular
- Oral motor

Examples

- Vestibular
  - Rolling into and out of a blanket
  - Scooterboard
  - Trampoline
  - Movement in a wheelchair or secretarial chair
  - Platform swing, flexion swing, bolster swing, inner tube swing, hammock swing, net swing
  - Dancing, marching
  - Head movement
  - Vibrator in hand or mouth
  - Vibrating pillow
- Oral motor activities
  - Biting and resistive sucking
  - Deep pressure to hard palate and TMJ joint
  - Exer-tubing with know on the end
  - Sour foods
  - Crunchy foods
  - Chewy foods
  - Small straws
  - Crazy straws
  - Sports bottles
  - Plastic tubes

Visual Supports

Visual supports are tools that enable the individual to keep track of the day's events and activities, and at the same time helps him or her to develop an understanding of time frame and an appreciation of environmental sequence (Twachtman; 1995).

Benefits of Visual Supports

- Helps establish and maintain attention
- Gives information that can be quickly and easily interpreted
- Clarifies verbal information
- Provides a concrete way to teach and reinforce concepts such as time, sequence, cause/effect

Benefits of Visual Supports (cont.)

- Gives structure to understand and accept change
- Supports transitions between activities or locations
- Supports improved behavior by clearly showing expectations and visually depicting what will happen next
- Supports more independent function and improved confidence

Types of Visual Supports

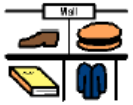
- Visually organizing the room
- Choice boards
- Schedules/Mini-schedules
- Checklists
- Information sharers
- Task organizers
- Management tools

_____ Schedule

done ✓

1	bus 	Done ✓	6	supper 	Done ✓
2	snack 	Done ✓	7	wash dishes 	Done ✓
3	homework 	Done ✓	8	watch TV 	Done ✓
4	video game 	Done ✓	9	bathe 	Done ✓
5	wash up 	Done ✓	10	bedtime 	Done ✓

_____ Schedule

		done ✓	I can...
1	drive 	Done ✓	
2	mall 	Done ✓	
3	snack bar 	Done ✓	
4	groceries 	Done ✓	
5	Drive home 	Done ✓	

Incredible 5 Point Scale

- 5 point scales utilized to provide the individual with a graphic representation of their own mood/affect, options for regulation, behavioral alternatives, etc...

_____ 5 Point Scale

Rating	Looks like...	Feels like...	Safe people can help to/I can try...
5			
4			
3			
2			
1			

_____ 5 Point Scale

Relaxation Techniques

- Yoga
- Breathing Exercises
- Music
- Brain Gym
- Reading

Music

- Effects of music
  - Increase or decrease anxiety
  - Increase or decrease pain
  - Increase or decrease muscle tension
  - Increase or decrease pulse rate
  - Increase or decrease blood pressure
  - Increase or decrease rate of breathing
  - Increase or decrease eating

Music (Fried, 1990) (cont.)

- Music, because of its abstract nature, may bypass intellectual control and contact lower centers of the brain directly.
- Auditory nerve impulses trigger a thalamic reflex that influences metabolism, sleep/ wake cycles, hormone release, pulse rate, blood pressure, rate of breathing, ect...

Music (Fried, 1990) (cont.)

- For calming and reducing tension
  - Pulse of the music should be at or below heart rate (72/min)
  - Rhythm should be smooth and flowing at all times to integrate internal body rhythms
  - Deep, sustained monotones have a meditational and calming effect
  - Pauses at slow rates harmonize and integrate internal body rhythms, breath, and heart rate
  - Slow, sustained melodies
  - Classical, new age, folk

Music (Fried, 1990) (cont.)

- For exciting and increasing tension
  - Pulse of music should be above heart rate 72-92/min
  - Pauses at fast rates are excitatory
  - Pitch sequences at pulse rate or faster
  - Some classical, rock

Interpreter and Mentor

- Interpreting the child's social world
- It requires that the person intervening takes the perspective of the child
- Attunement occurs with the child so that you can serve as interpreter and mentor
- Focus on child's level of mental/emotional arousal rather than specific content of "verbal" message

Relationship-Based Language

- Language of Safety, Relationship and Success

1. State things in the positive

   - "Walk down the hallway."

   - "Work quietly."

   - "Here is what I need from you for you to earn all your points this hour."

- Language of Threats, Judgment and Failure

1. State things in the negative

   - "Don't run."

   - "Don't talk."

   - "You're going to be in trouble if you talk again."

Relationship-Based Language

2. Success focused

- “Thanks for...

(helping; using a quiet voice; etc.”

- “Who wants to be the ‘problem-solver’?”

(recognize child(ren) who take(s) positive step)

2. Problem focused

- “You’re in big trouble now.”

- “You guys better knock it off or you’ll both be in trouble.”

Relationship-Based Language

3. Avoids negative assumptions

   - “Jon, remember that the rule in this house/building is...”

   (this is stated with firmness and authority, while tone of voice still says, “I like and respect you and expect the best from you)

3. Makes negative assumptions

   - “Take off your hat now.”

   (stated with challenging tone that implies the child intends to be “bad” and deserves punishment- the child then needs to defend against not feeling likeable)

Relationship-Based Language

4. Language of connectedness
   - "I appreciate your effort."
   - "I was disappointed when..."
5. Language of help
   - "Your ADHD seems to have you in its grip, how can I help you get a grip on it?"

4. Language of judgment
   - "Good boy."
   - "You 'screw up'."

5. Language of label
   - "He's my 'wild child'."
   -Child lives up to expectation

Experience

- Experience is the “medium” through which most of us gain our understanding of ourselves and the world
- It provides the “context” for learning
- It is the “means” by which the nervous systems of other’s interact and modify our own nervous systems

Using Experiences

- They must be “authentic”
- They must contain the opportunity for the individual to genuinely interact with the mentor/interpreter
- They must provide a means for the individual to regulate/modulate their mental/emotional arousal
- Important in the process of experience is the mentor/interpreter’s ability to “match rhythms”/attune with the child (Greenspan, 2006)

Working with Social Awareness

- Lexia© Cross-Trainer
- BrainBuilder© and Captain's Log©
- Social Skill Builder Software: My Community, My School Day, School Rules I and II, Birthday Party
- Paul Ekman: SETT and METT
- Simon Baron-Cohen: "Mindreading"
- Michelle Winner: Perspective-Taking
- Lavoie and Smith-Myles: The Hidden Curriculum

Lexia© Cross Trainer

- "...a suite of interactive software programs designed to improve cognitive development in students ages 7 to adult."
- "The software helps learning disabled, special needs, and mainstream students strengthen their thinking, memory, and problem-solving abilities."

BrainBuilder

- “...a ‘neurobic’ computer-based training program that is designed to assess and develop auditory and visual sequential processing abilities.”
- “The program consists of seven activities. Three focus on auditory processing, three on visual processing and one on attention and cognitive processing speed.”

Social Skill Builder Software

- Interactive computer programs using real life video to teach social skills to children and adolescents
- My Community, My School Day, School Rules I and II, Birthday Party

Ekman SETT and METT

- “Microexpression Training Tools (METT) and Subtle Expression Training Tools (SETT) provide ...instructional training to improve your ability to recognize facial expressions of emotion.”
- “METT will train...to see very brief (1/25th of a second) microexpressions of concealed emotion.”
- “SETT teaches you to recognize the subtlest signs of when an emotion is first beginning.”

Simon Baron-Cohen: "Mindreading"

- Mind Reading: the interactive guide to emotions
- "...a unique reference work covering the entire spectrum of human emotion. Using the software you can explore over 400 emotions, seeing and hearing each one performed by six different people."
- Incorporates both facial expressions and prosody

Michelle Winner: Perspective Taking and Social Thinking

- "PT (perspective taking) is a social executive task [which] requires one to consider not only a person's own thoughts but also those of the person(s) he or she is communicating with." (Winner, 2006).
- Social Thinking: thinking about others in a shared environment and regulating your own behavior to other people's thoughts or expectations (Kuzma, 2007).

Social Behavior Map

Behaviors That Are EXPECTED For Learning as Part of a Group in the Classroom

Expected Behaviors	How They Make Others Feel	Natural Consequences You Experience	How You Feel About Yourself
Sit where the group is sitting.	Happy	Calm voices	Good
Keep your eyes on the teacher or what she is talking about.	Proud	Pleased look on peoples' faces	Calm
Work on tasks the teacher assigns during work time.		People compliment or praise your behavior.	
Ask for help.	Calm	People may just let you work quietly so that you can work.	Happy
Touch only your own materials.		People might give you special opportunities or special tasks.	
Use fidgets to help keep your body calm.	Pleased	Students want to work with you.	Relieved
Keep your comments and questions focused on the class topic.		Students may want to hang out or play with you during non-work times.	
Take out your book, pencil, and paper at the start of class.		You earn a break time for concentrating well.	
Write down your homework assignment.	Successful	People laugh at something you say or do and they want to hang out with **you.**	Included
Put materials away at the end of class.			
Monitor your talking time so that you participate as a member of the group; not too much nor too little.			
Monitor your use of humor so that it blends in with the class and does not stand out.			

Behaviors That Are UNEXPECTED For Learning as Part of a Group in the Classroom

Unexpected Behaviors	How They Make Others Feel	Natural Consequences You Experience	How You Feel About Yourself
Your body does not look like it is part of the group (e.g. wandering, body turned away from the group).	Frustrated	Tense faces	Sad
Your eyes are not focused on the teacher or what she is referencing.	Annoyed	Angry or solemn sounding voices	Anxious
Refusing to work; including sleeping.	Irritated	People tell you what you should be doing (they nag you).	Mad
NOT asking for help.	Worried you are not learning as part of the group.	Students may not want to work with you.	Not included
Body is not calm and you are doing things that distract yourself or others.	Tense	Students may not choose to hang out or play with you.	
Smelling or touching people.		You are sent out of the classroom.	
Talking about things of interest to you, but your comments do not closely add to the class topic.		You do not get any special rewards.	
Not getting materials out at the start of class.		People laugh at something you say or do but they do not want to hang out with you.	
Not writing down your homework assignment.			
Not putting materials where they belong at the end of class.			
Cracking jokes or laughing during work times, distracting others or yourself.			

This sheet replaces page 253 in WORKSHEETS! for Teaching Social Thinking & Related Skills. *We apologize for the inconvenience.*

Richard Lavoie and Brenda Smith Myles: The Hidden Curriculum

- "...the unwritten, unspoken rules of school. It is the Hidden Curriculum that defines each school's unique culture. (Lavoie, 2005).
- Examples in school: function of homework, "in" and "out" clothing, "in" and "out" slang, friendships, lunchtime culture, etc...
- Home and community settings also have their own "Hidden Curriculums."

Working with Social Facility

- Gutstein: Relationship Development Intervention (RDI)
- Nowicki and Duke: Dyssemia
- Stanley Greenspan: Floortime
- Martinovich: Creative Expressive Activities

Gutstein: Relationship Development Intervention

- "RDI is ... [a] systematic program designed specifically to help children born with obstacles that prevent them from attaining relationship competence in the natural environment." (Gutstein & Sheely, 2002).
- Focuses on the process of experience sharing
- The adult serves as a "Coach" for the individual and helps the individual to gain an appreciation for social relationships

Example RDI Activities (Guttstein & Sheely, 2002; 2002)

- Nonverbal Towers (for Young Children)
- Appreciating Alternatives (for Children, Adolescents and Adults)

Nowicki and Duke: Dyssemia

- A term used to refer to a nonverbal social communication deficit .
- Includes 10 different areas:
  - Gaze and Eye Contact
  - Space and Touch
  - Paralanguage
  - Facial Expression
  - Objectics (Fashion)
  - Hands and hand gestures
  - Social rules/norms
  - Nonverbal receptivity
  - Conversational skills
  - Chronemics and use of time

Nowicki and Duke: Working with Dyssemia Example

- Paralanguage: have the child practice the same sentence or word while communicating different things.
- Nonverbal receptivity: have child bang drum in rhythm with you. As you alternate rhythm, nonverbally cue (i.e., head nod) the child to change his/her rhythm to match your new rhythm.

Stanley Greenspan: Floortime

- "Floortime is both a specific technique—in which for twenty or more minutes at a time a caregiver gets down on the floor to interact with a child—and a general philosophy that characterizes all daily interactions with the child.
- Two goals:
  - Follow the child's lead or harness the child's natural interests
  - Bring the child into the shared world

Stanley Greenspan: Floortime

- Matching Rhythms
  - First match the child and then vary the rhythm to help him regulate
  - Example: sitting posture and movement

Martinovich: Creative Expressive Activities

- “A fundamental goal in child and adolescent support is…building core skills and strengths toward a foundation for potential to be realized.” (Martinovich, 2006).

Martinovich: Example

- Combining Talents
  - Each person is given a different piece of paper on which to write. Write a list of the things you are interested in, your talents, or your skills.
  - Cut your list up so that each interest, talent or skill is on a separate piece. Put all of the pieces of paper in the middle of the table—each person on different colored piece of paper.
  - Now pull out three pieces of paper of different colors-construct a story using at least one word from each of the colors.

Helpful Websites

- www.socialthinking.com
- www.socialskillbuilder.com
- www.lexialearning.com
- www.paulekman.com
- www.jkp.com
- www.rdiconnect.com

“Typical” Rewards and Motivations (Jensen, 1998)

- Long-term
  - Better grades
  - Pleasing others
  - Graduation
  - Future employment
- Short-term
  - Choices
  - Privileges
  - Getting out on time or early
  - Point sheets

Factors Which May De-Motivate (Jensen, 1998)

- Past associations
- Unsuitable learning styles
- Lack of resources
- Language barriers
- Cultural taboos
- Fear of embarrassment/fear of failure
- Lack of respect
- Lack of feedback

Factors Which May De-Motivate (Jensen, 1998)

- Poor nutrition
- Prejudice
- Perceptual factors
  - Poor lighting
  - Bad seating
  - Wrong temperature
- Relationship with the future
  - Presence of clear, well-defined goals
  - Beliefs about the content, and context, of learning

Additional Reasons Some Children Struggle to Achieve Success?

- Pace of change
- Processing capabilities
  - Auditory
  - Visual
  - Integration
  - Processing speed
- Executive functions/Working memory

Looking at Selected Processes and Their Impact on the Child Who Struggles

- Vision
  - Components of the visual modality
    - Spatial relations
    - Visual acuity
    - Visual attention
    - Visual discrimination
    - Visual memory
    - Visual closure
    - Visual processing speed
    - Visual sequencing
    - Visual figure-ground
    - Visual/motor integration
    - Visual integration

Looking at Selected Processes and Their Impact on the Child Who Struggles- Vision

- Symptomatic Behavior
  - Difficulty recognizing letters, numbers, symbols, words, or pictures
  - Poor handwriting and copying
  - Difficulty with organization on paper
  - Frustration with having to:
    - Focus on visual stimuli for a long period of time
    - Copy information from the board
    - Read information
  - Difficulty finding specific items

Looking at Selected Processes and Their Impact on the Child Who Struggles- Vision

- Symptomatic Behavior
  - Difficulty remembering whether he/she has read the word before
  - Easily distracted by extraneous visual information
  - Difficulty discriminating between items that are visually similar
  - Difficulty with math problems

Looking at Selected Processes and Their Impact on the Child Who Struggles- Vision

- Symptomatic Behavior
  - Difficulty making sense of visual information that is incomplete
  - Difficulty with fill-in-the blank questions
  - Frequently bumps into doors, desks, etc...
  - Places things on the edges of tables or counters where they fall off

Looking at Selected Processes and Their Impact on the Child Who Struggles- Vision

- Social/Emotional Problems and Visual Processing
  - May “mis-read” the visual, social cues of others
    - Facial processing
    - Gestural processing
  - May have difficulty focusing on the visual, social cues of others
    - May focus on objects rather than people

Looking at Selected Processes and Their Impact on the Child Who Struggles- Vision

- Social/Emotional Problems and Visual Processing
  - Difficulty interpreting the emotions of others
  - Hyper-vigilance to visual stimuli
    - Perception of threat
  - Low frustration tolerance
  - May bump into people, knock people's things over ("socially clumsy")

Looking at Selected Processes and Their Impact on the Child Who Struggles

- Audition
  - Components of the auditory modality
    - Auditory acuity
    - Auditory attention
    - Auditory discrimination
    - Auditory association
    - Auditory memory
    - Auditory sequencing
    - Auditory figure-ground
    - Sound-symbol relationships
    - Auditory processing speed

Looking at Selected Processes and Their Impact on the Child Who Struggles- Audition

- Symptomatic Behavior
  - Confusion in sounds/words heard
  - Difficulty in spelling words that are dictated
  - Problem remember names and places that are heard
  - Requests a speaker to repeat what is said on frequent basis
  - Difficulty in following directions that have been given orally

Looking at Selected Processes and Their Impact on the Child Who Struggles- Audition

- Symptomatic Behavior (cont.)
  - Easily distracted by extraneous sounds
  - Misinterprets one sound or word for another
  - Confuses the sequence of sounds, words, and steps in a task when presented verbally
  - Trouble differentiating one sound from another
  - Inability to select and attend to relevant auditory stimuli

Looking at Selected Processes and Their Impact on the Child Who Struggles- Audition

- Symptomatic Behavior (cont.)
  - Slowness to respond to questions presented orally
  - Inappropriate responses to relatively simple, age-appropriate questions
  - Inability to gain meaning, or the complete meaning, from material presented orally

Looking at Selected Processes and Their Impact on the Child Who Struggles- Audition

- Social/Emotional Problems and Auditory Processing
  - Prone to temper tantrums/explosive behavior
  - Low self-esteem
  - Problems interpreting other's emotions
  - Low frustration tolerance
  - Mood swings
  - Hyperactivity/hyper-emotionality

Looking at Selected Processes and Their Impact on the Child Who Struggles- Audition

- Social/Emotional Problems and Auditory Processing (cont.)
  - Poor peer relations
  - Problems with turn taking
  - Impulsiveness
  - Hyperactivity
  - Aggressiveness
  - Noncompliance
  - Poor self-control

Looking at Selected Processes and Their Impact on the Child Who Struggles- Audition

- Social/Emotional Problems and Auditory Processing (cont.)
  - Poor general social skills
  - Prone to substance abuse

Looking at Selected Processes and Their Impact on the Child Who Struggles

- Auditory/Visual Integration/Coordination
  - Difficulty relating symbols to their relevant sounds
  - Difficulty watching and listening to something/someone at the same time
  - Difficulty listening and copying
  - Difficulty taking notes
  - Difficulty following along with an oral reader

Looking at Selected Processes and Their Impact on the Child Who Struggles

- Auditory/Visual Integration/Coordination
  - Difficulty listening and doing something at the same time
  - Difficulty integrating what they hear someone saying with what they see someone doing
  - Difficulty responding to feedback
  - Tendency to rely on the stronger of the two modalities

Looking at Selected Processes and Their Impact on the Child Who Struggles- Processing Speed

- Definition
  - The rate at which information is processed
  - This includes:
    - Sensation
    - Perception
    - Discrimination
    - Assimilation
    - Response generation

Looking at Selected Processes and Their Impact on the Child Who Struggles- Processing Speed

- Fast processing speed
  - Prone to quick judgments: may or may not be accurate
  - May make judgment before “message” is complete
  - Prone to making judgments without feedback from multiple systems: may have uneven rates at which different modalities are processed
  - Feelings of frustration that others are not as “quick”

Looking at Selected Processes and Their Impact on the Child Who Struggles- Processing Speed

- Slow processing speed
  - May take a long time to process information: adults/peers may have moved on before child has processed information
  - May rely on parts of information, rather than attempting to process whole
  - May be prone to feelings of low self-esteem, worthlessness
    - May perceive others frustrations with him/herself

We think about the world in the way that we experience it to be.
(Bogdashina; 2003)

Executive functions

(Pennington, 1991; Pennington & Ozonoff, 1996)

- The brain system believed to be responsible for managing processes needed in order to solve problems and attain future goals (usually associated with but not limited to the prefrontal lobes of the brain).

Executive Functions (components)

- Working memory
- Organizational skills
- Time management
- Planning
- Future-oriented behavior/goal-directed
- Self-regulation: affect

Executive Functions (components)

- Selective attention
- Maintenance of attention or vigilance
- Behavioral/response inhibition
- Task initiation
- Flexibility
- Goal-directed persistence
- Metacognition
- Abstraction/creativity

Interventions to Promote Executive Function Skills

(Dawson, Guare; 2004)

- Strategy 1: Intervene at the level of the environment
  - Making changes to the physical environment
  - Changing the nature of the task
  - Changing the ways cues are provided
  - Changing the way adults interact with students

Interventions to Promote Executive Function Skills

(Dawson, Guare; 2004)

- Strategy 2: Intervene at the level of the person
  - Teach the child executive skills
  - Motivate the child to use executive skills already within their repertoire
  - Coaching/modeling

Priming

- The act of making something ready.
- It means to set the brain up for learning.

Priming Benefits

- Optimize arousal
- Decrease anxiety
- Increase attention/concentration
- Activate memory
- Focus perceptual strengths
- Reduce perceptual confusion
- Familiarizes student with material

Priming Activities

- Pre-teaching
  - Explore the material
  - Read the story
  - Show the visual schedule
  - Practice with art supplies
  - Talk about and show the finished product
  - Review the rules
  - Social stories
  - Power cards

Perceptual Priming Activities

- Auditory
  - Music (Fried, 1990)
    - Music has a profound effect on us
    - There is an essential rhythm to our bodies
    - Music, because of its abstract nature, may bypass intellectual control and contact lower centers of the brain directly.
    - Auditory nerve impulses trigger a thalamic reflex that influences metabolism, sleep/ wake cycles, hormone release, pulse rate, blood pressure, rate of breathing, ect...

Perceptual Priming Activities (Music: Fried, 1990)

- For calming and reducing tension
  - Pulse of the music should be at or below heart rate (72/min)
  - Rhythm should be smooth and flowing at all times to integrate internal body rhythms
  - Deep, sustained monotones have a meditational and calming effect
  - Pauses at slow rates harmonize and integrate internal body rhythms, breath, and heart rate
  - Slow, sustained melodies
  - Classical, new age, folk

Perceptual Priming Activities (Music: Fried, 1990)

- For exciting and increasing tension
  - Pulse of music should be above heart rate 72-92/min
  - Pauses at fast rates are excitatory
  - Pitch sequences at pulse rate or faster
  - Some classical, rock

Perceptual Priming Activities (Music)

- Programs which Use Music/Sound to Effect Behavior
  - Tomatis
  - Listening with the Whole Body
  - The Listening Program
  - Auditory Integration Training
  - Hemisphere-Specific Auditory Stimulation
  - Hemisync
  - Brainsuite

Priming: Visual

- Puzzles
- Mazes
- Dot-to-dot
- Tic-Tac-Toe
- Visualization/imagery
- Connect 4

Priming: Olfactory

- Aromatherapy
  - Relaxing: basil, lime, marjoram, cedar, myrrh, chamomile, rose, sandalwood
  - Stimulating: bergamot, orange, clove, peppermint, cypress, rosemary, spearmint
- Stay Alert Scent Inhaler (Earth Solutions)
  - Stay Alert
  - Study buddy

Priming: Oral

- Chewing gum, fruit leather, licorice, gummy bears
- Chewing on rubber tubing
- Using straws for thick drinks
- Sucking on popsicles
- Eating frozen grapes or frozen fruit
- Sucking on hard candy
- Eating a crunchy snack such as pretzels or carrots

Perceptual Priming Activities (Earobics)

- A computer-based auditory-processing, phonemic-awareness, and phonological-processing program.
- It uses sophisticated computer training techniques, including adaptive training, acoustic enhancement of the speech signal, and systematic control of key learning variables
- The software carefully guides students through learning, giving them more help when they need it and fading cues as their skills develop.

Priming: Kinesthetic/Proprioceptive

- Yoga
- Tai Chi
- Isometrics
  - Pushing
  - Chair lifts
- Brain Gym
- Breathwork

Brain Gym

- A series of simple and enjoyable movements that are used to enhance the students experience of whole-brain learning.
- Examples
  - Neck rolls
  - Calf pump
  - Thinking cap

Breathwork

- Alternate nostril breathing
- Costophrenic/diaphragmatic breathing