Disabilities Intervention Strategies

Attention Deficit Hyperactivity Disorders (ADHD)

*Otherwise Known as...*
- ADHD: Hyperactivity/Impulsivity Type
- ADHD: Inattentive Type
- ADHD: Combined Type

What are the general characteristics of these disorders:
ADHD is an impairment in the individual’s ability to regulate his/her attentional systems resulting in atypical attention-related behaviors. ADHD is a syndrome that typically presents with inattentive, hyperactive and/or impulsive characteristics:

**Inattention**
- Fails to attend to details
- Difficulty sustaining attention
- Fails to finish tasks
- Has difficulty organizing tasks
- Avoids sustained effort
- Loses things
- Is distracted by extraneous stimuli
- Is forgetful

**Hyperactivity**
- Talks incessantly
- Leaves seat in the classroom
- May run around or climb
- Difficulty playing quietly
- Fidgets with hands or feet
- Motor excess

**Impulsivity**
- Blurts out answers
- Difficulty waiting for turn
- Interrupts or intrudes

Strategies for working with students¹:
Success in working with students with ADHD comes when you can eliminate much of the irrelevant “noise” for them:
1. Predictable routines, but not monotony (remember the brain seeks novelty)
2. Structured environment with specific times for each task
3. Focus on only what is key
4. Less verbal, more visual
5. Give frequent prompts to orient, engage and teach self-regulation

¹ For additional strategies, see: http://www.nasponline.org/resources/handouts/special%20needs%20template.pdf
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Autism Spectrum Disorders (ASD)

*Otherwise Known as...*
  - Autism
  - Asperger’s Syndrome (although soon to called “Autism”)
  - Pervasive Developmental Disorders (Not Otherwise Specified)

What are the general characteristics of these disorders:

Pervasive Developmental Disorders are characterized by varying degrees of:

- **Impaired communication skills** - ranging from mute to echolalia (repeating what they hear or a fixated idea) to difficulty understanding figurative language or higher order reasoning
- **Impaired social interaction**
  - seem indifferent to others
  - prefer to be alone
  - resist attention from others
- **Restrictive/repetitive/stereotyped patterns of behavior**
  - Repetitiveness – i.e., rocking back and forth, flicking fingers
  - Constancy in environment – i.e., same foods, same seat, fixation with certain objects/concepts
  - Intense preoccupation and/or interests
- **Unusual sensory experiences** – highly attuned and sensitive to sounds, textures and smells

Teaching Strategies:

Children with PDDs learn differently and need help with abstract thinking and generalization.

1. use visual aids whenever possible, including visual schedules
2. explain context and how content fits in with bigger picture
3. minimize repetitive written activities
4. avoid abstract language (e.g., metaphors, irony, sarcasms)
5. model the action you want students to use
6. provide consistent routines and expectations

Children with PDDs act differently. Focus on changing unacceptable behaviors rather than odd behaviors.

1. teach appropriate social responses, especially when working in cooperative groups
2. give students ample personal space but seat away from excessive auditory or visual stimulation
3. don’t confuse lack of tact with rudeness
4. have a strategy ready in case student becomes overstimulated or confused (e.g., a place to go, a person to talk with, a calming activity)
5. allow enrichment or reward activities related to student’s special interests

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2 For specific strategies for working with higher-functioning students with Autism, see:
Disabilities Intervention Strategies

Emotional and Behavioral Disorders

Otherwise Known as...

Anxiety Disorders
- Phobias
  - Social Phobia (fear of scrutiny, embarrassment)
  - Specific Phobia (fear of a situation or object)
- General Anxiety Disorder (GAD)
- Panic Attacks
- Obsessive Compulsive Disorder (OCD)
- Post-Traumatic Stress Disorder (PTSD)

Depressive Disorders
- Major Depressive Disorder
- Dysthymia (low grade sadness and withdrawal)
- Bipolar Disorder (exaggerated mood swings between depression and mania)

Behavioral Disorders
- Attention Deficit Hyperactivity Disorder (ADHD)
- Oppositional Defiant Disorder (ODD)
- Conduct Disorder
- Tic Disorder/Tourette’s Syndrome
- Eating Disorders
  - Anorexia Nervosa
  - Bulimia Nervosa
- Autism Spectrum Disorder

What are the general characteristics of these disorders:

Emotional and Behavioral Disorders primarily manifest as deficits in the way the person processes information and how s/he interacts with others:

- Reduced processing speed
- Poor planning and organization
- Memory deficits
- Attention deficits
- Delayed auditory processing
- Social deficits
- Low self-esteem
- Emotional outbursts
- Lack of motivation
- Frequent “shutting down”
- Reduced classroom participation and output

Teaching Strategies for Behavior:
1. Set clear consistent limits & expectations
2. Establish “awareness cues” for behavior
3. Avoid confrontation and power struggles
4. Remain calm and stay aware of your body language when addressing the student
5. Acknowledge and reinforce acceptable behavior
Disabilities Intervention Strategies

6. Give frequent, behavior-specific feedback

Teaching Strategies for Learning:
1. Discreet assistance focusing on the task
2. Gain attention before teaching
3. Moderate pace of instruction
4. Allow more time to understand and respond
5. Teach in small chunks
6. Frequently check for understanding
7. Reduce expected work output
8. Provide frequent feedback
9. Provide opportunities for multiple choice responding
10. Explore movement breaks to improve attention
Reading Disabilities

*Otherwise Known as...*

- Dyslexia
- Developmental Dyslexia

**What are the general characteristics of this disorder?**

A reading disability (dyslexia) is a brain-based type of learning disability that specifically impairs a person’s ability to read. These individuals typically read at levels significantly lower than expected despite having normal intelligence.

### Teaching Strategies:

**Younger students:**
1. Practice letter-sound relationships over and over again
2. Identify word patterns
3. Teach target vocabulary
4. Model comprehension strategies such as summarizing text, sequencing, main ideas, etc.

**Older students:**
1. Advanced word study – breaking down multisyllabic words, word recognition and word analysis
2. Fluency practice to increase automaticity
3. Teach target vocabulary (words likely encountered across texts)
4. Teach comprehension-monitoring strategies such as identifying difficult vocabulary or concepts, summarizing each paragraph, activating prior knowledge, etc.

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3 From the National Center for Learning Disabilities website: http://www.ncld.org/types-learning-disabilities/dyslexia/what-is-dyslexia
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Math Disabilities
Otherwise Known as...
Dyscalculia

What are the general characteristics of this disorder:
Dyscalculia is a persistent problem with processing numerical calculations apparent in one or more of the following aspects:

<table>
<thead>
<tr>
<th>Young Children</th>
<th>School-Age Children</th>
<th>Teenagers &amp; Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Difficulty learning to count</td>
<td>• Trouble learning math facts (addition, subtraction, multiplication, division)</td>
<td>• Difficulty estimating costs like groceries bills</td>
</tr>
<tr>
<td>• Trouble recognizing printed numbers</td>
<td>• Difficulty developing math problem-solving skills</td>
<td>• Difficulty learning math concepts beyond the basic math facts</td>
</tr>
<tr>
<td>• Difficulty tying together the idea of a number (4) and how it exists in the world (4 horses, 4 cars, 4 children)</td>
<td>• Poor long term memory for math functions</td>
<td>• Poor ability to budget or balance a checkbook</td>
</tr>
<tr>
<td>• Poor memory for numbers</td>
<td>• Not familiar with math vocabulary</td>
<td>• Trouble with concepts of time, such as sticking to a schedule or approximating time</td>
</tr>
<tr>
<td>• Trouble organizing things in a logical way - putting round objects in one place and square ones in another</td>
<td>• Difficulty measuring things</td>
<td>• Trouble with mental math</td>
</tr>
<tr>
<td></td>
<td>• Avoiding games that require strategy</td>
<td>• Difficulty finding different approaches to one problem</td>
</tr>
</tbody>
</table>

Teaching Strategies:
Understand what is at the root of the math learning problem. Does the student have the following prerequisite skills to learn mathematical concepts:

1. Sequencing
2. Spatial orientation/space awareness
3. Pattern recognition
4. Visualization
5. Estimation
6. Inductive Reasoning
7. Deductive Reasoning
8. Classification

Additionally:
9. Understand and teach to the student’s learning style (e.g., quantitative versus qualitative).
10. Help students make connections (e.g., connect symbols to verbal descriptions, link math problem solving to social situations).
11. Limit direct instruction and build on interactive teaching strategies.
12. When providing direct instruction, be systematic (carefully planned sequence) and explicit (modeling, explaining, guiding and practicing).
13. Encourage self-instruction and self-talk; what part of the math process does the student understand and what doesn’t s/he understand.
14. Encourage peer tutoring.
15. Math is a visual subject; use visual representation to show concepts.

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4From the National Center for Learning Disabilities website: http://www.ncld.org/types-learning-disabilities/dyscalculia/what-is-dyscalculia
Disabilities Intervention Strategies

Writing Disabilities
*Otherwise Known as...*

Dysgraphia
- Dyslexic Dysgraphia – poor spelling, poor legibility
- Motor Dysgraphia – poor legibility, poor copying skills
- Spatial Dysgraphia – poor legibility

What are the general characteristics of this disorder:
Dysgraphia is a learning disability that affects writing including motor and information processing skills. It can lead to problems with spelling, poor handwriting, and putting thoughts on paper. People with dysgraphia can have trouble organizing letters, numbers, and words on a line or page. This can result partly from:

- Visual-spatial difficulties: trouble processing what the eye sees
- Language processing difficulty: trouble processing and making sense of what the ear hears

Students with dysgraphia may have the following characteristics:

- Inconsistent letter formation
- Unfinished words or letters
- Generally illegible writing
- Talking to self while writing
- Watching hand while writing
- Inconsistent position on page with respect to margins and lines
- Slow copying or writing
- Omitted words in writing
- Inconsistent spaces between letters and words
- Cramped or unusual grip on pencil
- Unusual body, wrist or paper position

Teaching Strategies:

**Beginning Writers:**
1. Be patient and positive, encourage practice, and praise effort. Becoming a good writer takes time and practice.
2. Use paper with raised lines for a sensory guide to staying within the lines.
3. Try different pens and pencils to find one that's most comfortable.
4. Practice writing letters and numbers in the air with big arm movements to improve motor memory of these important shapes. Also practice letters and numbers with smaller hand or finger motions.
5. Encourage proper grip, posture and paper positioning for writing. It's important to reinforce this early as it's difficult for students to unlearn bad habits later on.

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5 From the National Center for Learning Disabilities website: http://www.ncld.org/types-learning-disabilities/dysgraphia/what-is-dysgraphia
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6. Use multi-sensory techniques for learning letters, shapes and numbers. For example, speaking through motor sequences, such as "b" is "big stick down, circle away from my body."
7. Introduce a word processor on a computer early; however do not eliminate handwriting for the child. While typing can make it easier to write by alleviating the frustration of forming letters, handwriting is a vital part of a person’s ability to function in the world.

Young Students:
1. Encourage practice through low-stress opportunities for writing. This might include writing letters or in a diary, making household lists, or keeping track of sports teams.
2. Allow use of print or cursive - whichever is more comfortable.
3. Use large graph paper for math calculation to keep columns and rows organized.
4. Allow extra time for writing assignments.
5. Begin writing assignments creatively with drawing, or speaking ideas into a tape recorder.
6. Alternate focus of writing assignments - put the emphasis on some for neatness and spelling, others for grammar or organization of ideas.
7. Explicitly teach different types of writing - expository and personal essays, short stories, poems, etc.
8. Do not judge timed assignments on neatness and spelling.
9. Have students proofread work after a delay - it's easier to see mistakes after a break.
10. Help students create a checklist for editing work - spelling, neatness, grammar, syntax, clear progression of ideas, etc.
11. Encourage use of a spell checker - speaking spell checkers are available for handwritten work.
12. Reduce amount of copying; instead, focus on writing original answers and ideas.
13. Have student complete tasks in small steps instead of all at once.
14. Find alternative means of assessing knowledge, such as oral reports or visual projects.

Teenagers and Adults:
1. Many of these tips can be used by all age groups. It is never too early or too late to reinforce the skills needed to be a good writer.
2. Provide tape recorders to supplement note taking and to prepare for writing assignments.
3. Create a step-by-step plan that breaks writing assignments into small tasks.
4. When organizing writing projects, create a list of keywords that will be useful.
5. Provide clear, constructive feedback on the quality of work, explaining both the strengths and weaknesses of the project, commenting on the structure as well as the information that is included.
6. Use assistive technology such as voice-activated software if the mechanical aspects of writing remain a major hurdle.
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Language Disabilities

Otherwise Known as...
Language Delay
Language-based Learning Disability
Expressive/Receptive Language Disorder
Specific Language Impairment

What are the general characteristics of these disorders\(^6\):

Language Delays - Typically found in children before age 2; most likely inherited and not environmental.
- uses only a few words during speech
- uses only a few phrases during speech
- speech is not coherent

Specific Language Impairment - Child’s spoken language doesn’t develop at the expected and acceptable rate even though sensory and cognitive systems appear normal.
- complexity of speech not developing with age
- little or no growth in vocabulary
- consistently poor grammar
- difficulty remembering recently used words

Expressive Language Disorder - Simple expression can be okay but difficulty retrieving and organizing words and sentences to express complicated ideas.
- below average vocabulary skills
- difficulty producing complex sentences
- improper use of correct tenses
- problems recalling words

Receptive Language Disorder - Can’t make sense out of certain sounds, words or sentences they hear; can appear inattentive; can also have expressive language disorder
- impairment in language comprehension
- impairment in language expression
- speech contains many articulation errors
- difficulty recalling early visual or auditory memories

Teaching Strategies:
1. When presenting information, make sure you are engaging the child. Establish \textit{eye contact}.
2. \textit{Repeat} directions/instructions and/or have the student repeat them for you.
3. Use \textit{concrete materials} to support learning concepts.
4. Break your tasks into \textit{chunks}, especially those requiring auditory attention.
5. Allow \textit{additional time} for the student to process and additional time for recall of information.
6. Provide repetition, examples and \textit{encouragement} regularly.
7. Be sure the child understands that s/he can request clarification at any time, make sure the child is comfortable \textit{asking for help}.
8. \textit{Slow down} when you speak and repeat instructions, directions often.

\(^6\) For more information, see the American Speech-Language-Hearing Association website:
http://www.asha.org/public/speech/disorders/lbld.htm
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9. Tap into the child’s prior knowledge regularly to help the child make meaningful connections.
10. Reduce pressure whenever possible and observe the child as much as possible to ensure that understanding is in check and always, always be supportive.