What is Down Syndrome?

- A congenital disorder that occurs when an error in cell division causes an extra version (full or partial) of chromosome 21
- Three different types:
  - Trisomy 21 – most common
  - Mosaicism
  - Translocation
- Each of these types typically result in mild to moderate cognitive impairment

Common Health Issues

- Congenital heart disease or heart defects
- Hearing and vision problems
- Respiratory problems
- Obstructive sleeping disorders
- Sensory processing disorder
- Feeding and swallowing difficulties

Hallmark Characteristics

- Mild to moderate cognitive deficits
- Decreased muscle tone
- Distinct facial features
- Compact structure of ears, nose, and throat
- Slow rate of development, including speech & language delays

Communication Needs

Strengths:
- Good social skills and strong ability to communicate using gestures, facial expressions, etc.
- Can often understand language well

Challenges:
- Difficulty with speaking – need to increase speech intelligibility
- Usually have difficulty with grammar (rules and structure of language)

For more information and resources, you can visit the National Down Syndrome Society (NDSS) website!
Role of the Speech-Language Pathologist (SLP)

- Target speech, language, and communication difficulties. May help child to:
  - Produce clear speech to improve intelligibility
  - Improve language skills, including grammar & comprehension
  - Use augmentative and alternative communication strategies
- Assess and treat feeding/swallowing difficulties
- Work with other professionals and the child’s family to help the child better communicate and be successful

Classroom Modifications for Down Syndrome

<table>
<thead>
<tr>
<th>Learning Abilities</th>
<th>Suggested Modification</th>
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<tbody>
<tr>
<td>- Repeat key ideas and directions</td>
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<td>- Allow extra time for response</td>
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<td>- Take frequent breaks and check for child’s understanding</td>
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<tr>
<td>- Provide demonstration with verbal instruction</td>
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<td>- Break directions into small steps</td>
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<td>- Be aware of classroom noise levels or distractions</td>
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<td>- Incorporate visual supports</td>
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<td>Language Development</td>
<td>- Ask parents for advice and effective communication strategies</td>
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<td></td>
<td>- Incorporate sign language, gestures, and visual cues</td>
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<td>- Be patient waiting for a response</td>
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<td>Motor Development</td>
<td>- Provide back support if child is sitting on the floor</td>
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<td>- Consider classroom layout and adjust for ease of movement</td>
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<td>- Provide extra supervision during active games</td>
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<td>- Ensure that the child has a properly sized desk and chair (feet fully resting on floor when seated)</td>
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<td>General Health</td>
<td>- Seat student at front to lessen impact of hearing and vision deficits</td>
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<td>- Reduce sensory distractions</td>
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