

Individuals with Down syndrome: Facts and Educational Insights

Down syndrome is a genetic condition that causes delays in physical and intellectual development. It occurs in approximately one in every 800 live births. Children with Down syndrome have an extra copy of the 21st chromosome that affects some or all cells. It is the most frequently occurring chromosomal disorder.

Children and adults with Down syndrome experience developmental delays, but they also have many talents and gifts and should be given the opportunity and encouragement to develop their skills.

Most children with Down syndrome have mild to moderate impairments but they are more like other children than they are different. Children with Down syndrome have a higher incidence of infection, respiratory, vision and hearing problems as well as thyroid and other medical conditions.

Most adults with Down syndrome are capable of working in the community and pursuing education beyond high school.

TIPS FOR THE CLASSROOM:

1. They are **visual learners**.
 - Provide visuals that are *uncluttered* and precise. Avoid *unnecessary graphics* that may add confusion to the objective and distract from your target lesson. For example, if the vocabulary word is dog, then have just a picture of a dog, not a dog fetching a ball. Also, pay attention to the *space on the page*. Items should not be too close together.
 - Point or gesture to help clarify your directions or words.
 - Demonstrate what you want or how to do something rather than just using words.
 - Use sign language to emphasize certain directions or expected behaviors.
2. Provide a **visual schedule**, written or with pictures, of the daily routine.
3. **Structure and routine** are very important. Once a routine is learned, they generally can follow it independently or with visual supports.
4. Allow **extra processing time**, possibly 30 seconds or more. Often there may be hearing and processing issues. They will need extra time to grasp what the expectation is. When you feel compelled to prompt the child for a response, wait another 10 seconds.
5. Keep **instructions short and clear** with a limited number of steps. **Say what you want to happen**. If you say, "Don't...." they may concentrate on the last word they hear and do precisely what you do not want them to do.

- Be aware of the classroom noise level. They may not be able to hear what you are saying.
 - Be sure you have their attention and they are listening.
6. Many times **receptive language (what they understand) is better than expressive language** so do not assume that they do not know. To check for understanding, use best practices such as “show me” or “choose the X item”.
 7. Avoid power struggles by **offering choices**. Avoid questions with yes/no answers. Instead you may say, “Would you like to put your backpack away by yourself or do you want me to help?”
 8. **Behavior issues** may be a result of:
 - Frustrations when needs are unmet because of the difficulty in understanding their speech.
 - Due to hearing problems, misunderstanding spoken words such as hearing “stand” instead of “hand” is common. Visuals will help differentiate sounds.
 - Focusing on only the last word heard if directions are oral.
 - Unanticipated changes in routine are easier with writing the change on a visual schedule, using a timer, or First/Then visuals.
 - Appearing noncompliant when they just do not understand expectations. For example, unless demonstrated, they may not understand that they need to circle the answer.
 - The lesson has gone for too long and they need a short break.
 - The “hidden curriculum” needs to be taught since it is not always obvious what expectations are. These are the behavioral expectations that we just assume students know or will acquire by watching others. An example would be when to answer questions in circle time as a group and when you must raise your hand to answer. This can be very confusing since there are no hard and fast rules or signals from a teacher as to their expectations.
 9. **Have fun** and include the student. They have a lot to offer!

Additional information is available at:

<http://www.dsact.org/#better-together>