Trisomy 21
(or Down syndrome)
How long has it been around?

For centuries, people with Down syndrome have been alluded to in art, literature and science.
How did it get its name?

- In 1866, a doctor named John Langdon Down studied and wrote about the condition. It then became known as Down syndrome.

- In 1956, Down syndrome was shown to be caused by an extra chromosome: 3 copies of the 21st chromosome. The medical term is Trisomy 21.
Trisomy 21

- Genes carry the codes for all our inherited traits. Genes are grouped in chromosomes.

- Normally, the nucleus of each cell contains 23 pairs of chromosomes, half from each parent.

- In Down syndrome, the cells usually contain 3 copies of chromosome number 21.
What causes DS?

Not contagious - Random

Older age of mother & father increases chances.

- 80% of Moms are under 35
- 6,000 babies/year in U.S.
- 400,000 people in U.S.
- Not related to race, religion, nationality or economic status
More alike, than different.

People with DS are more like their own families than others with DS. They have more in common with typical peers than differences.
Famous people with Down syndrome

Lauren Potter - Actor

Karen Gaffney - Athlete

Tim Harris - Restaurant Owner
Judith Scott

Link: http://youtu.be/46LdVzWoNhI?t=28s
The Future

- Life expectancy for people with Down syndrome has increased from 25 in 1983 to 60 today.
- Over the last 50 years huge progress has been made: from being institutionalized to being educated in classrooms with typical peers. This is thanks to community awareness and action.
- Individuals who have been educated with typical peers have higher rates of employment in their community.
- New post-secondary programs are being developed to allow individuals to have a meaningful college experience.
- More adults are able to experience living independently, with supports. Marriage and meaningful careers are being experienced.
- Progress is being made in medical research today.
What Supports Make A Difference?
Down syndrome is a leading cause of cognitive delay. Delay means mental processes take longer. Everything we do involves many steps in a mental process.

Hearing

Recognizing words

Understanding tone

Remembering all for whole meaning

Responding

Planning how to respond

Deciding response
Extra Time

- Help by giving extra time (silently count to 10)
- Reboot the computer or wait before you repeat?
Teamwork and Timing
Use Visual Support

- Individuals with DS have difficulty with auditory working memory. (Ex: The dog who chased the cat is black.)
- They have strength in visual working memory, and often have a strength in reading.
- Combine visual cues with speech or directions (gestures, written words, pictures)
Plan for Physical Activities

- DS causes low muscle tone, or very relaxed muscles. This requires extra work for simple tasks like running, writing and even speech.
- Slow down
- Plan on the best path and times to rest for a long trek or trip walking around the mall.
“What? Tell me again, OK?”

“Slow down please, I couldn’t understand.”

“Can you spell it?”

“Did you mean ‘x’ or ‘y’?”

“Did this happen in real life, or is it from a movie?”

“Did this happen today, or another day?”

Redirect: “You love your dog, don’t you? We are talking about ‘x’, what do you think about ‘x’?”
Correct with Kindness

- Don’t be afraid to give correction. Wouldn’t you want to know?
- “You have some chocolate on your chin. Do you need a napkin?”
- “Wait. Your turn is after ...”
- “We can listen to your song now, and then it’s my turn to pick the song.”
• Often times individuals with DS know they are not as good as others in tasks. This can lead to feeling anxious with a new task.

• Be positive and encouraging.

• Allow them to watch an activity first.

• Have someone explain the activity while they are watching.

• After awhile, invite them to join in.
Provide Choices

- Being told what to do or needing help frequently can make someone feel powerless.
- Sometimes having a choice can empower and build self-esteem.
  - “Do you want to walk with me or ...?”
  - “Do you want a pen or pencil?”
  - “Which one do you want to carry?”
Support Independence

- Give someone with a disability the chance to do something by themselves first (versus “learned helplessness”).
- Ask if they would like help.
- Show them how to do the task.
- Let them try. Support, if needed.
- Failing is OK. We all learn from that.
- Create opportunities for them to help you.
Active Training
(Role Playing & Discussions)
Time to Reflect

Why people with DS want to be included in the classroom
http://www.youtube.com/watch?v=9gaSx44pEvk&feature=youtu.be

Karen Gaffney: The hardest thing we will ever do . . .
http://www.youtube.com/watch?v=H7kRH0l7f9o

What was the most surprising thing you learned?

What was your favorite activity?

What is one thing you could do to help someone else feel more included?
Resources

For more information on Down syndrome:

- National Down Syndrome Congress - http://ndsccenter.org/resources/
- Down Syndrome Association of Central Texas - http://dsact.org

For more information on Inclusive Education:


For more on the history of Down syndrome:


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