

Let's talk Neurodiversity!

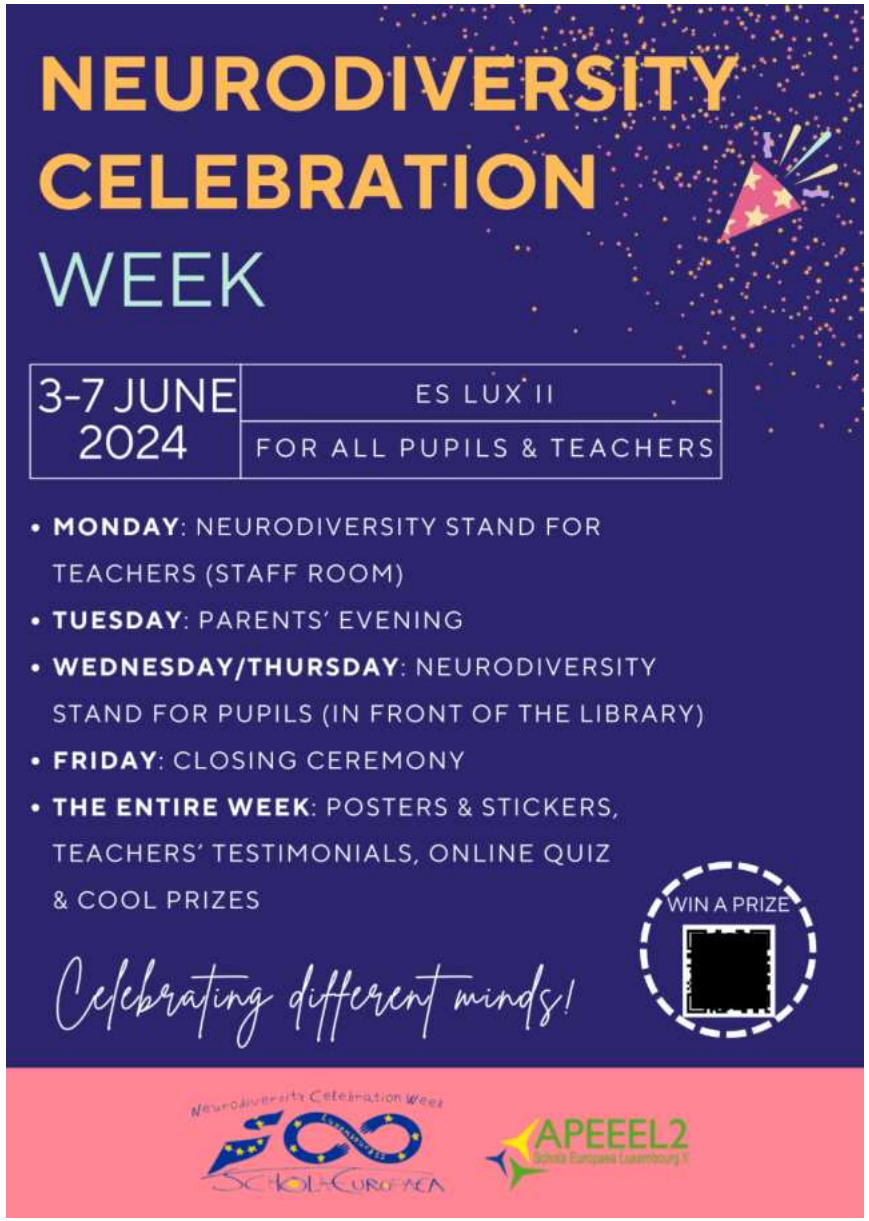
S2-S4 High Potential Pupils

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Neurodiversity Celebration Week, June 3-7, 2024

Summary

- Neurodiversity celebration week
- What is neurodiversity?
- Why does neurodiversity matter ?
- Autism
- ADHD
- OCD
- High potential
- Tourette syndrome
- DYS-profiles
- Neurodivergent celebrities
- Gender bias
- Neurodiversity and bullying



This presentation was realized by a group of High Potential students from our school as part of the Neurodiversity Celebration Week. The purpose : provide information on neurodiversity while challenging misconceptions.



Look for the QR code from June 3 to 7, flash it, do the quiz on neurodiversity and you might win one of the 10 prizes.

What is Neurodiversity ?

The origins

The concept is widely considered to have been coined in 1997 by Australian sociologist Judy Singer (“mother of neurodiversity”). While the term now covers a broad umbrella of different diagnoses, it has its origins in the autistic community.



Definition

Everyone has a differently-wired brain and their own unique way of thinking, interacting and experiencing the world.

Neurodiversity describes the idea that people experience and interact with the world around them in many different ways. This happens because the human brain is so complex that no brain is exactly alike.

What is Neurodiversity ?



There are several different types of neurodevelopmental conditions, including:

- Autistic spectrum disorder (ASD)
- Attention deficit hyperactivity disorder (ADHD)
- Learning difficulties, such as dyslexia and dyscalculia, etc.
- Tourette Syndrome
- High Potential
- OCD, etc.

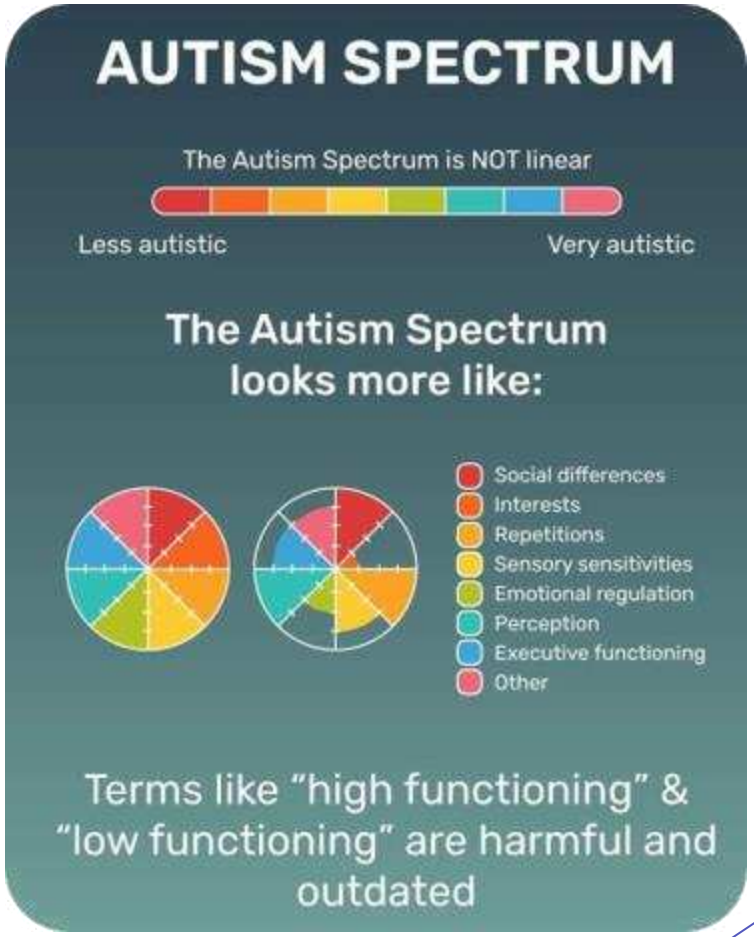
Why does neurodiversity matter?

- The concept of neurodiversity is the acceptance that all humans are different, with unique minds, needs and abilities.
- This approach moves beyond labels such as autism, dyslexia or ADHD, and recognises that difference in ability is natural and it can contain unique gifts and contributions.
- The human brain has a wide spectrum of functions, any differences should be acknowledged as just another way of being or doing things.
- About a fourth of a school classroom is neurodivergent.



Autism

- ASD (Autism spectrum disorder) is a developmental disability caused by differences in the brain.
- The abilities of people with ASD can vary significantly. For example, some may have advanced conversation skills where others may be nonspeaking. Some might need a lot of help in their daily lives, others can work and live with little or no support.
- There is a difference in diagnosis in between genders (girls/women tend to get a diagnose later than boys).
- Autism affects how a person perceives the world and interacts and socializes with others, making it challenging for them to pick up social cues and interpret them.

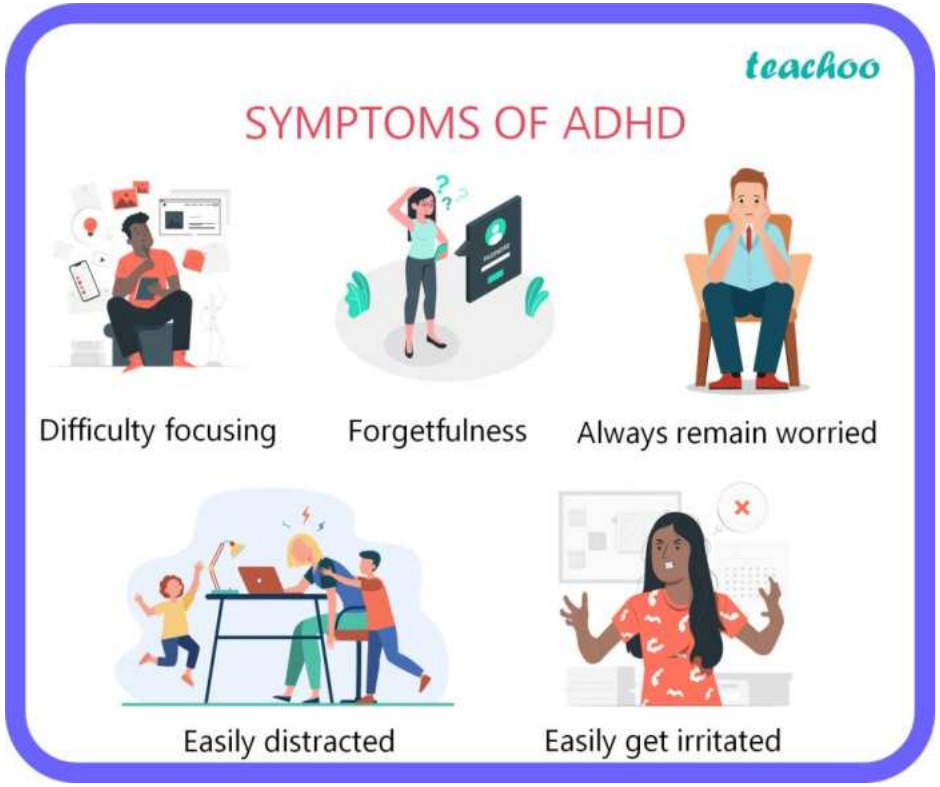


Fun facts about Autism

1. Autism affects all nationalities, creeds, religions, races, and sexes.
2. Autistic individuals present symptoms in different ways.
3. Autism can be genetic.
4. Being nonspeaking at a younger age does not mean autistic children will never speak.
5. If an identical twin is autistic, there is a 60-96% chance that the other twin will also be autistic.
6. Autistic individuals may be creative and find passions for music, dance, art, theater, etc.
7. Autistic females and non-Western groups have been understudied groups within research.

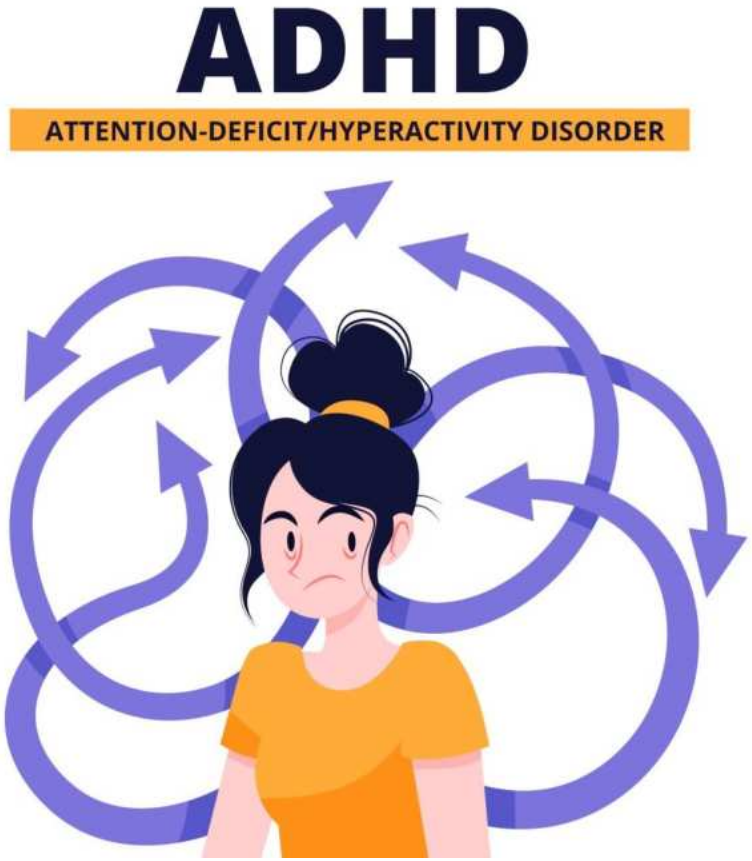


ADHD



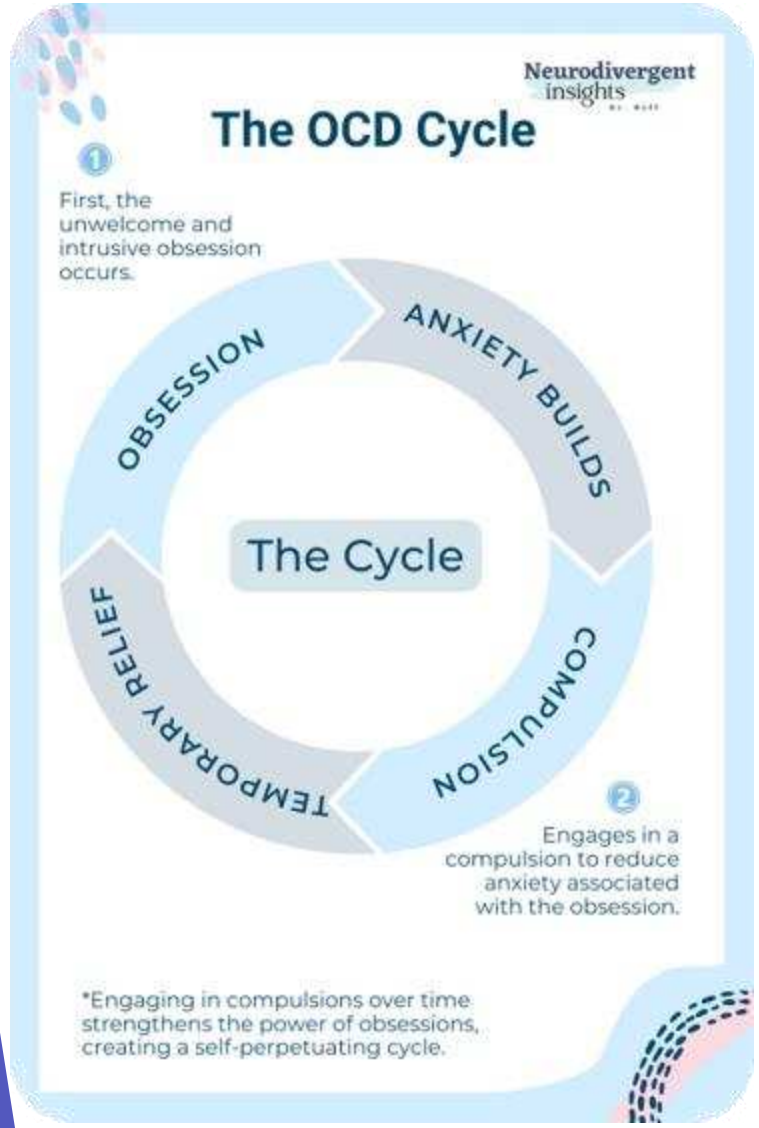
- ADHD = “attention deficit hyperactivity disorder”
- ADHD is a neurodevelopmental disorder, and it comes with some advantages (e.g.: people with ADHD can be very fun, energetic, out-of-the-box thinkers, calm under pressure, etc.)
- There is a difference in diagnosis in between genders. (girls/women tend to get a diagnose later than boys/men)

Fun Facts about ADHD



- People with ADHD don’t always have problems with paying attention, if there is something they like, they can spend hours doing it –> this is called Hyperfocus
- ADHD'ers have a "Dopamine based brain" --> this is a brain that functions better with interest
- Screens and bad parenting don't cause ADHD
- Having ADHD has nothing to do with lack of intelligence
- People don’t recently have more ADHD they are just diagnosed better today

OCD



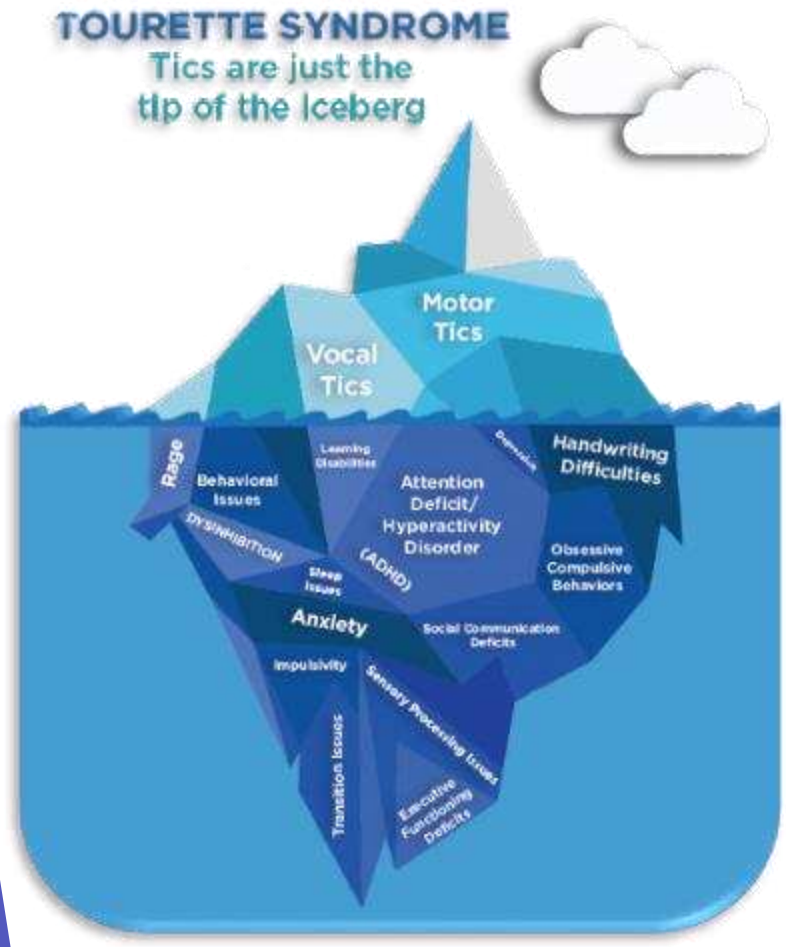
- Obsessive-Compulsive Disorder is a mental health condition characterized by intrusive thoughts and repetitive behaviors.
- The "obsessive" part of OCD refers to intrusive thoughts, images, or urges. These thoughts can be about anything.
- The "compulsive" part of OCD refers to repetitive behaviors or actions that a person feels compelled to do. These behaviors can be physical, such as handwashing or checking locks.

High Potential

- "High potential" (or "gifted“) describes individuals who demonstrate special abilities: advanced cognitive abilities, heightened sensory perception, or talents in specific areas (mathematics, language, the arts, etc.).
- Note that "high potential" or "gifted" is not only determined by IQ scores. While high IQ can be an indicator, there are other factors involved, including creativity, motivation, and social-emotional characteristics.
- Misconceptions about High Potential are very common, for example people like to think that High potential people have everything easy for them. It’s the exact opposite, although being high potential does come with some perks, it also make a lots of things more difficult, for example emotional regulation.

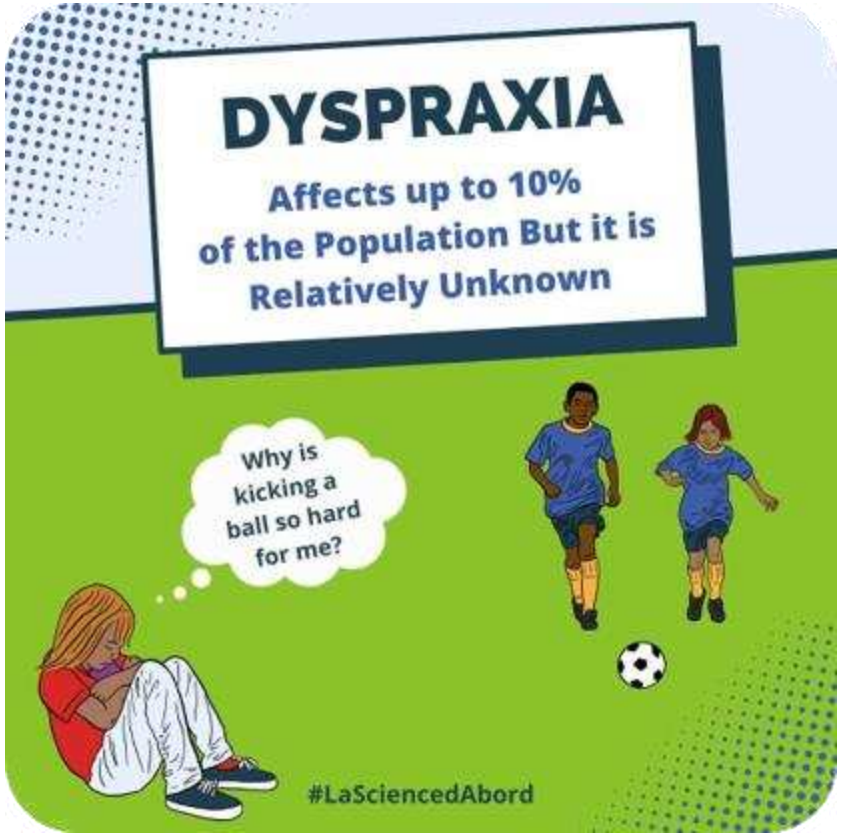


Tourette Syndrome



- Tourette Syndrome (TS) is a condition of the *nervous system*. TS causes people to have "tics".
- Ticks are sudden twitches, movements, or sounds that people do repeatedly.
- People who have tics cannot stop their body from doing these things.
- The ticks are made worse with stress or having another friend with the tick.
- People with TS can be faster at assembling sounds into words (phonology) and are often high-achieving, creative and empathetic (understanding and caring).

Dyspraxia or DCD (Developmental Coordination Disorder)



- Dyspraxia is a condition affecting general coordination
- When you have dyspraxia, you also have dysgraphia
- Sometimes dyspraxia can be misperceived as clumsiness.
- Dyspraxia can affect your fine motor skill, such as your handwriting, ability to tie your shoes and doing up buttons.

Dysgraphia



- Dysgraphia is a condition that interferes with the writing process : spelling, legibility, word spacing and sizing, expression.
- Dysgraphia might include the following symptoms:

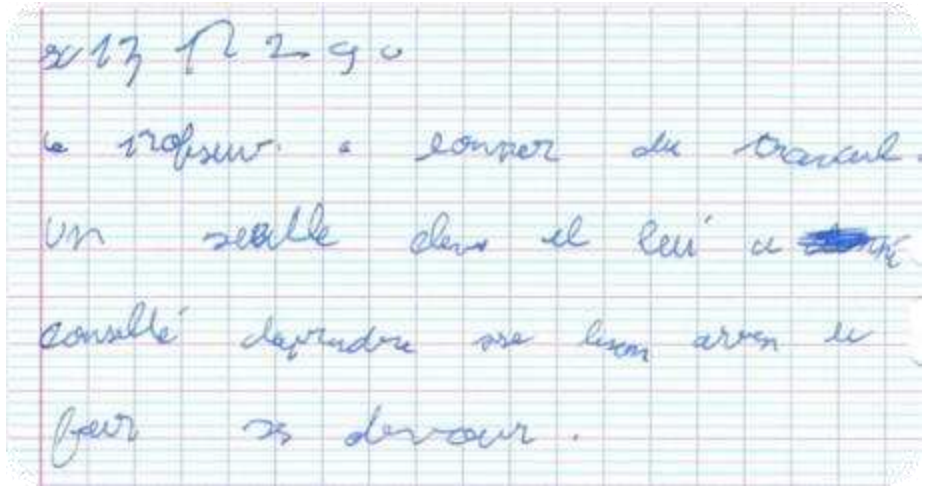
• Trouble forming letters shapes

• Trouble with sentence structure or following rules of grammar when writing, but not when speaking

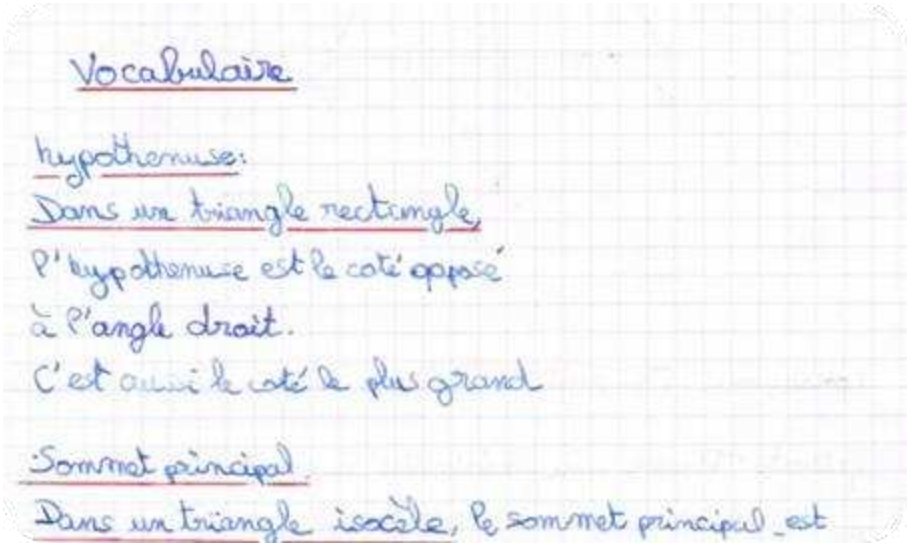
• Difficulty organizing or articulating thoughts on paper, etc.

Dysgraphia can look like this:

11-year-old pupil, speed is ok but there's a legibility problem.
Diagnosis: dyspraxia + dysgraphia



11-year-old pupil, the speed is very slow, there's no legibility problems.
Diagnosis: dysgraphia



These two examples show that even when then writing is nice and legible, the speed can already be sufficient to explore the condition.

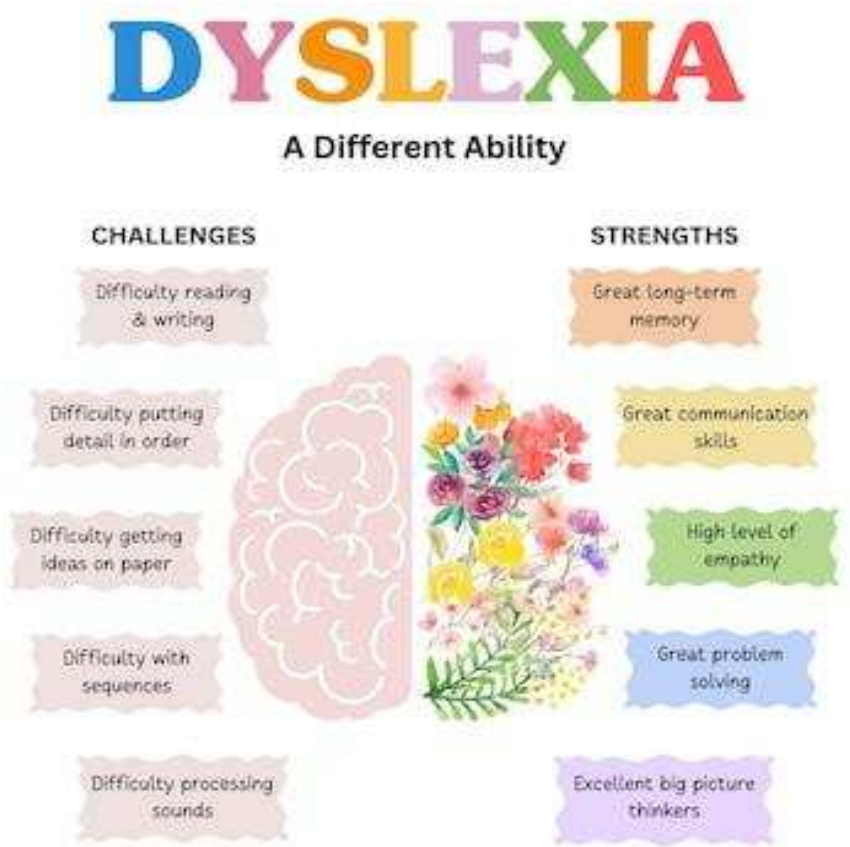
Dyslexia

- Dyslexia affects reading and writing skills.
- Dyslexia can also impact on other areas such as organizational skills.
- Many dyslexic individuals show strengths in areas such as: reasoning, visual and creative fields, good problem solving using their talent at making connections. They are often:

☐ Observant
☐ Excellent big-picture thinkers
☐ Have high levels of empathy
☐ Have strong narrative reasoning



Misconceptions about Dyslexia



- **Misconception: Dyslexia is rare.**
  Fact: In the United States, research has shown that dyslexia affects 20%, or 1 in every 5 people.
- **Misconception: People with dyslexia can't read.**
  Fact: Most dyslexic children and adults are able to read, even if it is at a basic level. Children are likely to reach a certain point in reading ability with the inability to move beyond a 3rd-grade reading level.
- **Misconception: Gifted children cannot be dyslexic or have a learning disability.**
  Fact: Dyslexia and intelligence are not connected. Many dyslexics have very high IQs and have gone on to accomplish outstanding things in their lives.

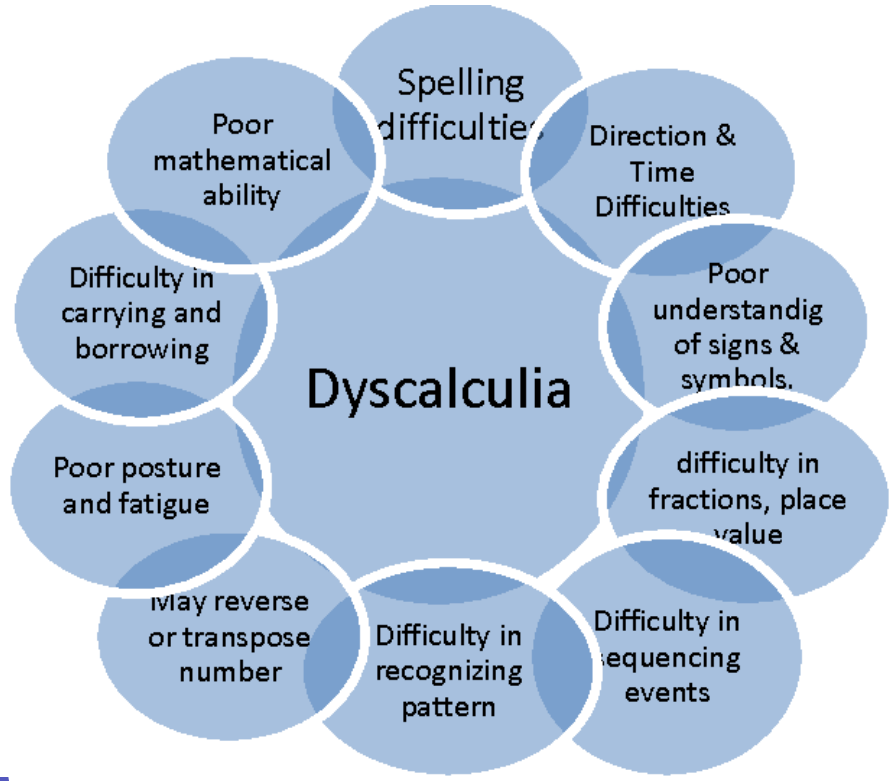
Dysorthography

- Dysorthography is a writing disability that develops in children as a difficulty to write words correctly and follow grammatical rules.
- This disorder tends to affect children who have other language disorders or delays, such as dyslexia.
- The most common symptoms tend to be:



- spelling mistakes
- article confusion and misuse
- not using apostrophes or using them incorrectly
- confusing letters, writing words together, or mistaking spoken and written words

Dyscalculia

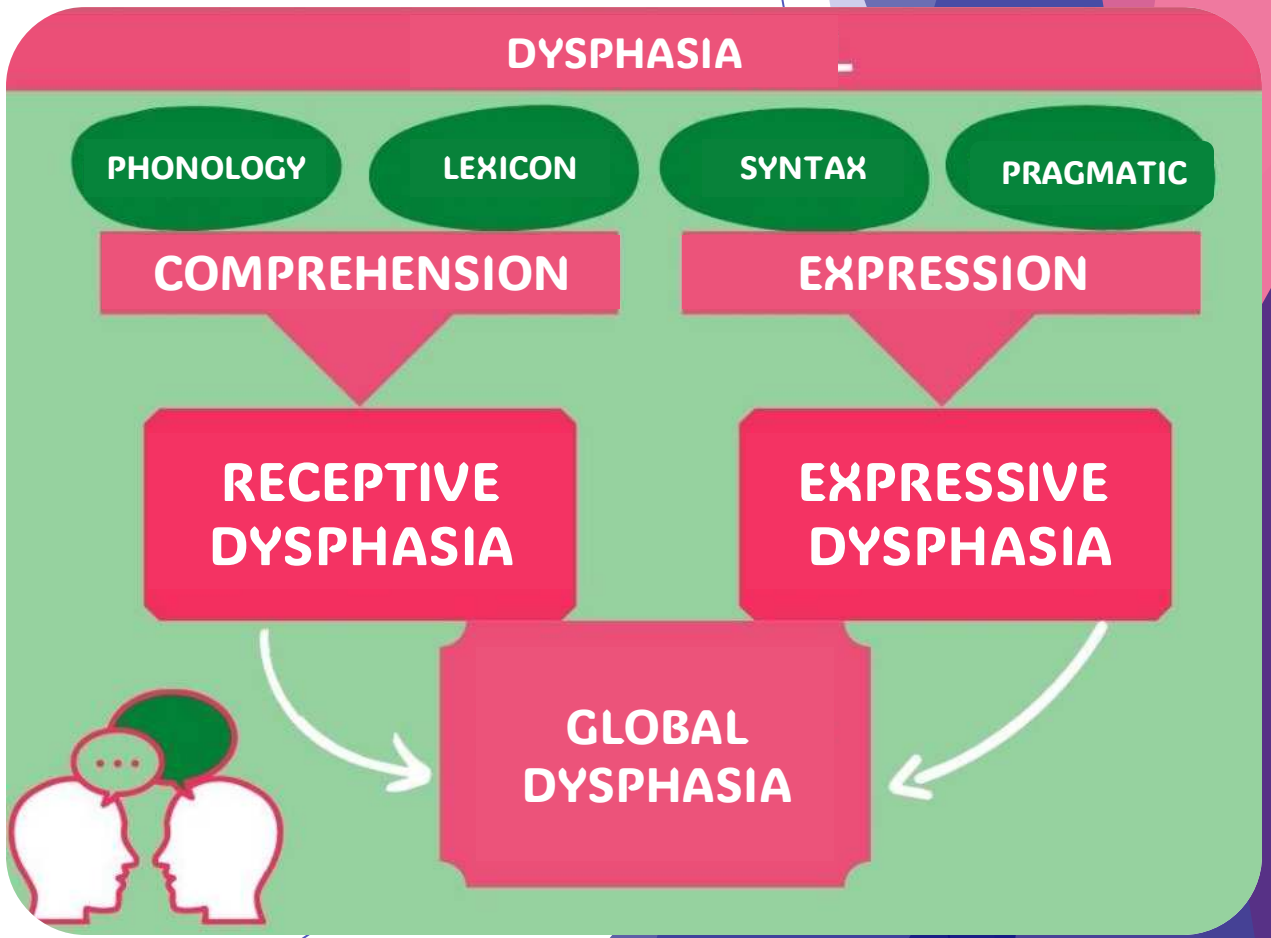


- Dyscalculia is a learning disorder that affects a person's ability to understand number-based information and math.
- People who have dyscalculia struggle with numbers and math because their brains don't process math-related concepts like the brains of other people. However, their struggles don't mean they're less intelligent or less capable than people who don't have dyscalculia.
- About 5% of the population have dyscalculia
- They often have strengths such as intuitive and strong strategic thinking.

Dysphasia/DLD

- Dysphasia is a neurodevelopmental disorder that interferes with the learning, understanding and use of language.
- Dysphasia interferes with learning, understanding, and using language.
- Symptoms include:

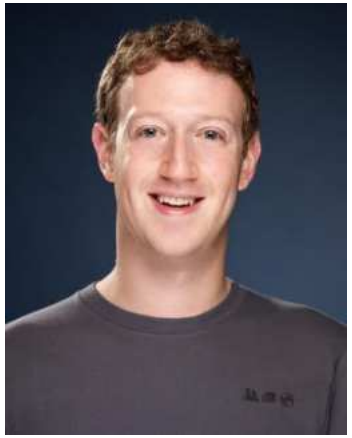
- Trouble understanding vocabulary
- Trouble understanding longer sentences
- Limited vocabulary
- Trouble pronouncing sounds
- Trouble forming ideas



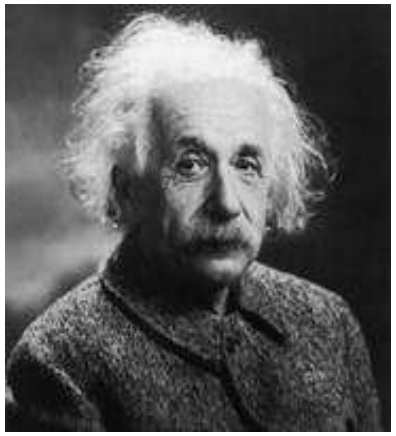
Neurodivergent celebrities



Satoshi Tajiri
Creator of Pokemon
Autism



Mark Zuckerberg
Co-founder of Facebook
Autism



Albert Einstein
Theoretical physicist
Dyspraxia, dyslexia & autism



Greta Thunberg
Climate activist
Autism



Emma Watson
Actress
ADHD



Billie Eilish
Singer
Tourette syndrome



Steven Spielberg
Film director
ADHD



Solange Knowles
Singer, Songwriter, actress
ADHD



Simone Biles
Famous Gymnast
ADHD



Kendrick Lamar
Singer, Songwriter
ADHD

Gender Biases

- Gender bias and stereotypes can also influence the diagnosis of neurodivergent girls and women. There is a common misconception that neurodivergent conditions are primarily male conditions and that women are less likely to be affected. Social and cultural factors can also play a role in the misdiagnosis of neurodivergent women and men.
- Women are often judged to be more socially aware, empathetic, and skilled at masking their differences to fit in, which can result in their neurodivergent traits being overlooked or dismissed.
- Masking is a coping mechanism that involves concealing one's neurodiverse traits, behaviors, or characteristics to align with societal norms and expectations. It's like wearing a mask to camouflage the true self, at the expense of one's mental and emotional well-being.

Neurodiversity and bullying

- Bullying is the use of force, coercion, hurtful teasing or threat, to abuse, aggressively dominate or intimidate. The behavior is often repeated and habitual.
- Children with ADHD are nearly twice as likely to be bullied as their neurotypical peers.
- According to a recent survey carried out by Ambitious about Autism, 75% of autistic young people have experienced bullying behavior and only half of young people said they felt safe at school.
- The concept of "Masking" mentioned in the previous slide can be linked to bullying. Neuroatypical pupils and their negative experiences at school internalize that their differences may be perceived as "non-normal". Thus, they learn to 'camouflage' to protect themselves from bullying.

What can you do ?

- Don’t tease or make fun of anyone in your class who is different or who is finding something difficult. Instead, be kind, understanding and encouraging.
- Never forget that you have the power to make a positive difference to someone who may be having a difficult time.
- Don't stay silent when you witness bullying.
- Try to learn more about neurodiversity and the different profiles and conditions.



Thank you for your attention !