

Neurodiversity, a teacher's ally



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Gertrude Jekyll

(1843–1932)

She was one of the most
influencing garden designers of
the XX Century.

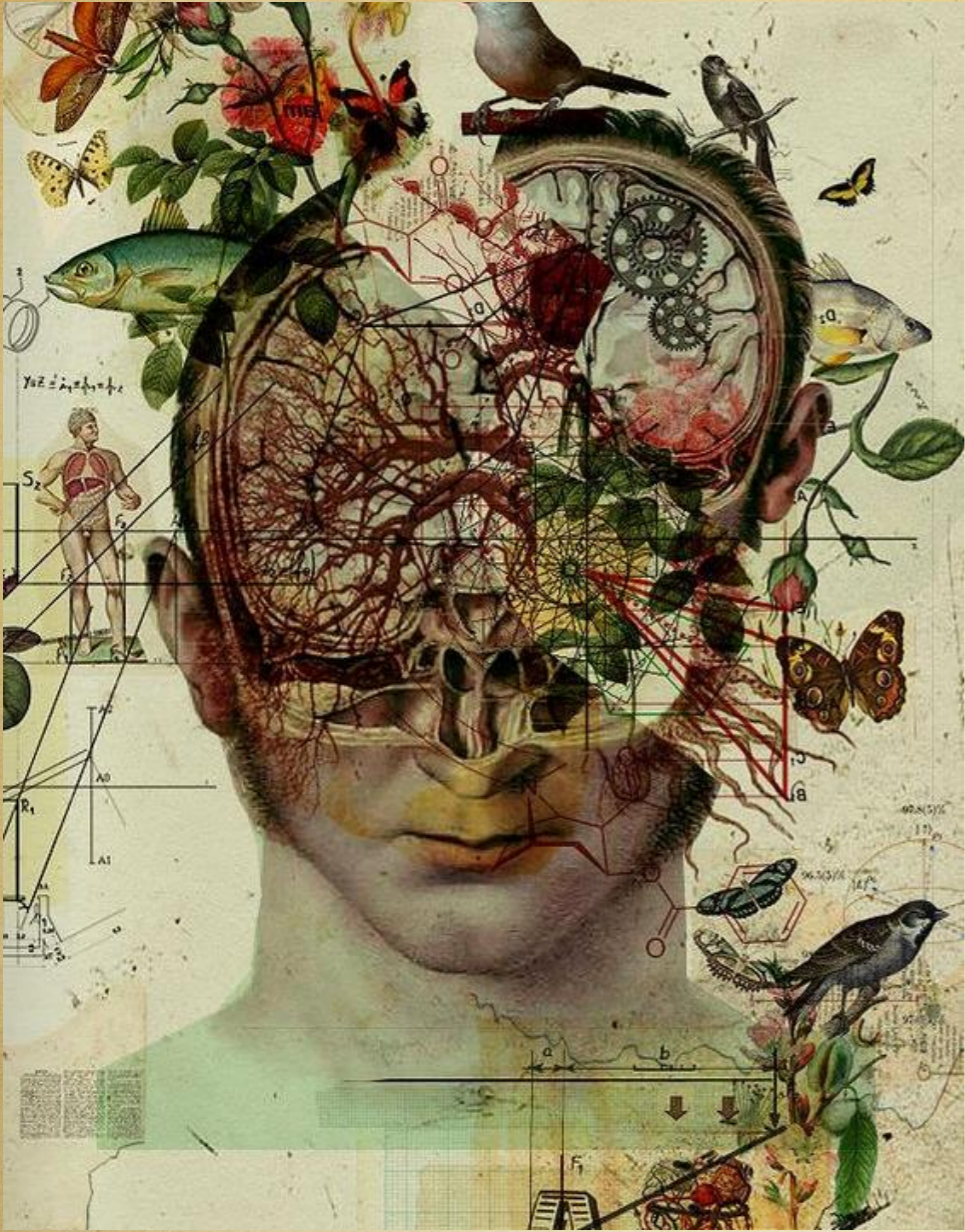
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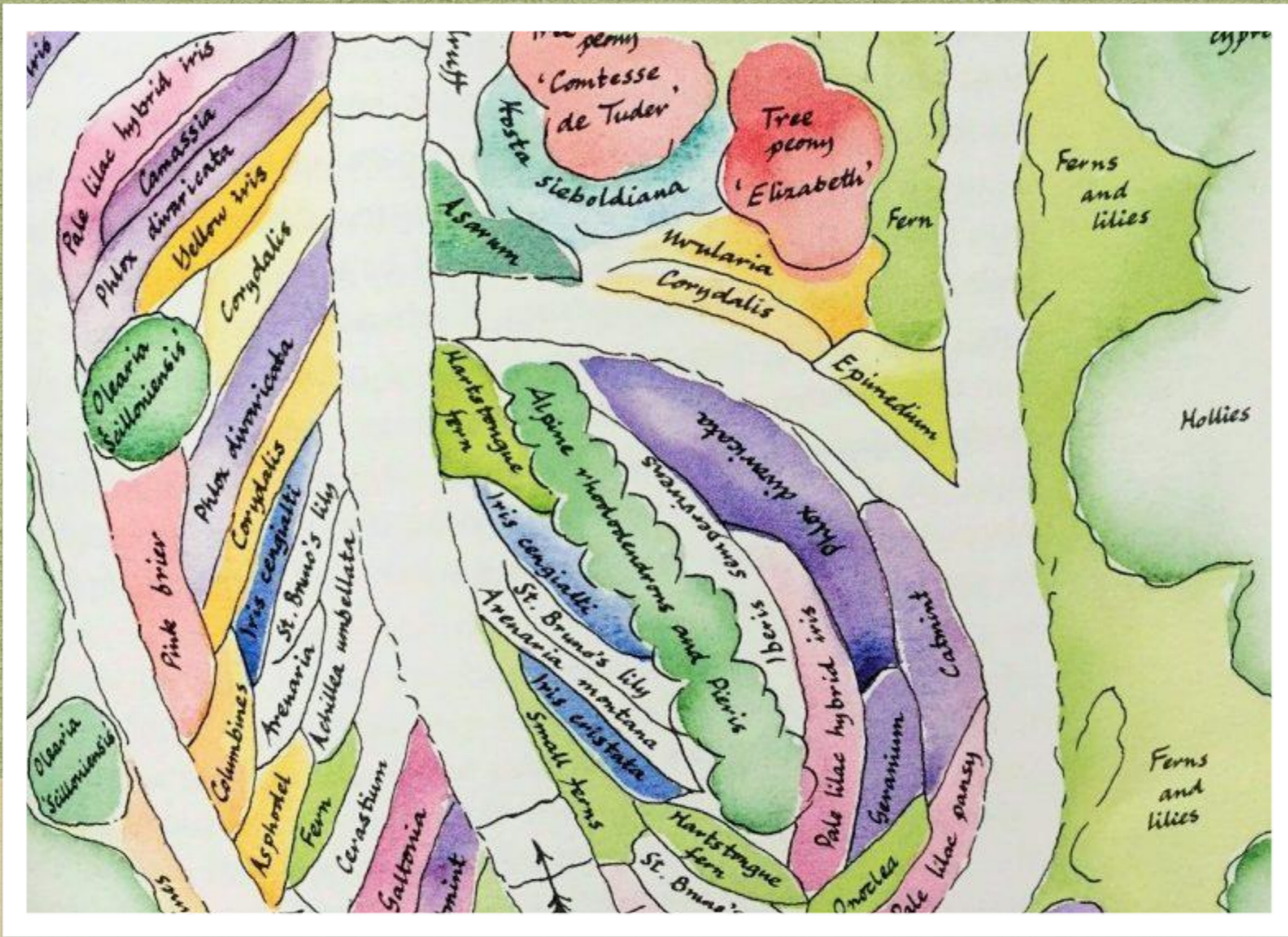






NEURODIVERSITY

1. What do we understand by Neurodiversity?
2. How does Neurodiversity affect my planning and/or teaching?
3. How does Neurodiversity affect learning?
4. Why an analogy with Jekyll's gardens?



Plan of a garden by Gertrude Jekyll

What is Neurodiversity?

- ~ Neurodiversity: Coined by journalist Harvey Blume and autism advocate, Judy Singer.
- ~ Neurodiversity is a viewpoint that brain differences are normal, rather than deficits.
- ~ This concept can help reduce stigma around learning and attention issues.

8 Basic principles

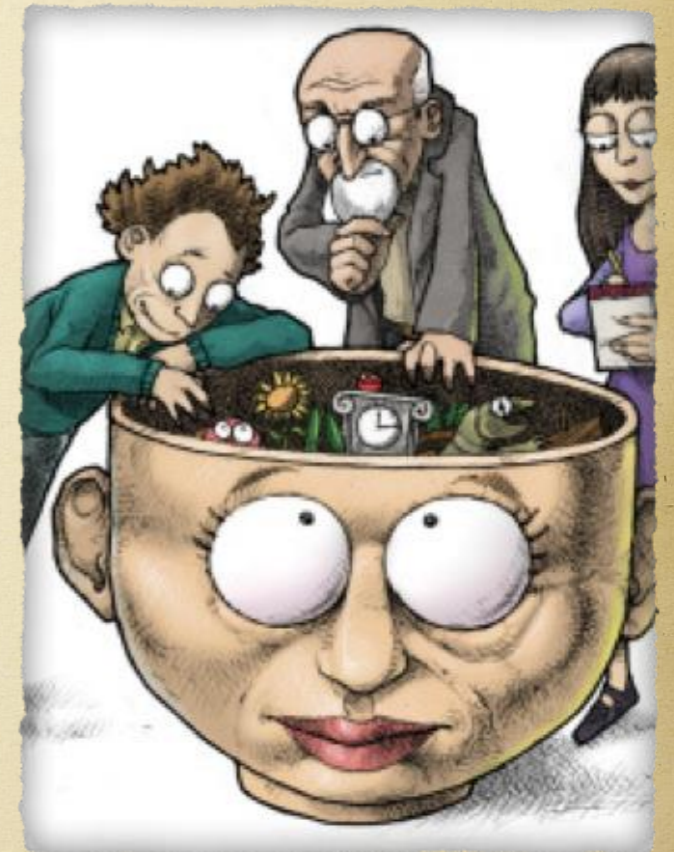
according to T. Armstrong

1. The human brain works more like an ecosystem than a machine.
2. Human brains exist along continuums of competence.
3. Human competence is defined by the values of culture to which you belong.
4. Whether you are regarded as Disabled or Gifted depends largely on when and where you were born.



8 Basic principles according to T. Armstrong

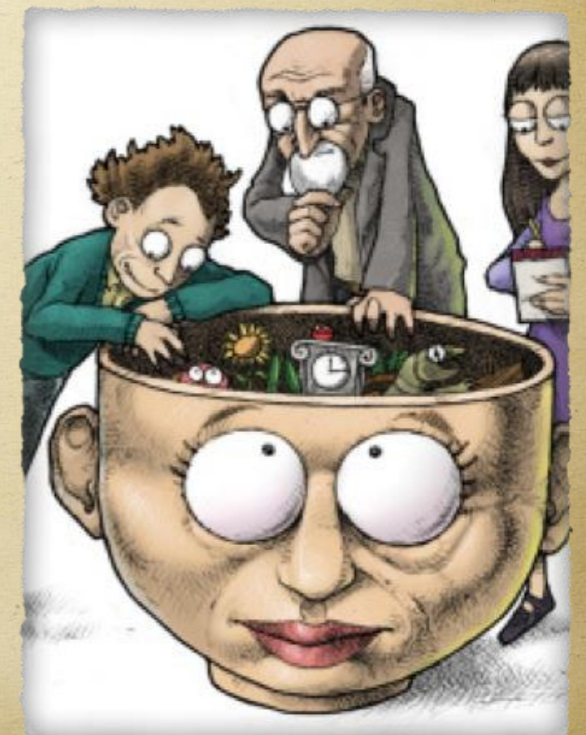
5. Success in life is based on adapting one's brain to the needs of the surrounding environment.
6. Success in life also depends on modifying your surrounding environment to fit the needs of your unique brain (Niche Construction).



8 Basic principles according to T. Armstrong

7. Niche construction includes career and lifestyle choices, assistive technologies, human resources and other life-enhancing strategies tailored to the specific needs of a neurodiverse individual .

8. Positive niche construction directly modifies the brain, which in turn enhances its ability to adapt to the environment.



2 Frequent Allies

‣ ADD / ADHD

‣ Dyslexia





ADD / ADHD

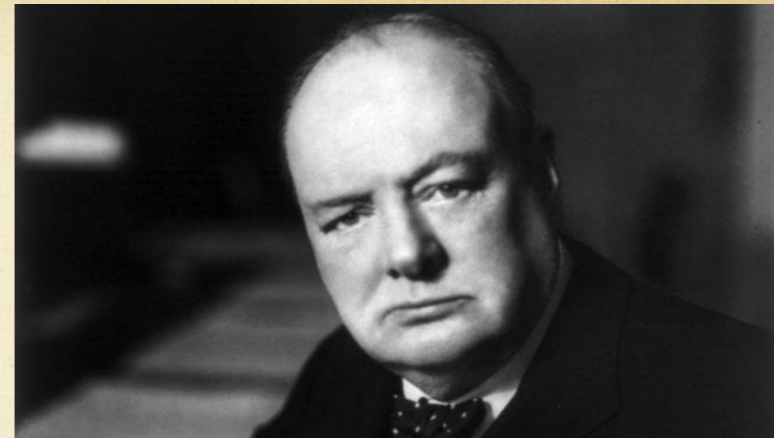
Inattentive symptoms of ADHD:

- Makes careless mistakes in school work, overlooks details.
- Is easily distracted or sidetracked.
- Has difficulty following instructions.
- Doesn't seem to be listening when spoken to directly.
- Has trouble organising tasks and possessions.
- Often fails to finish work in school or chores in the classroom
- Often avoids or resists tasks that require sustained mental effort, including doing homework.
- Often loses homework assignments, books, jackets, backpacks, sports equipment.

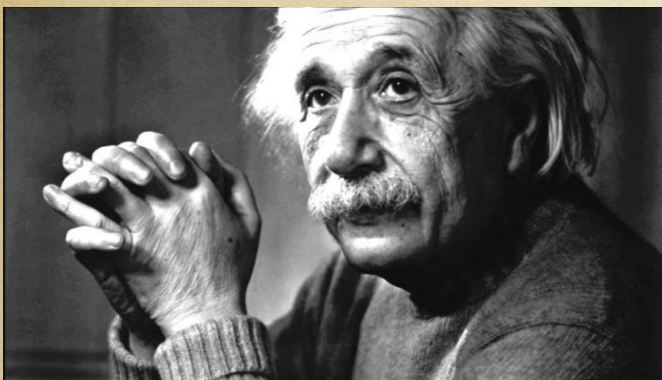
Hyperactive or impulsive symptoms of ADHD:

- Often fidgets or squirms.
- Has trouble staying in his seat
- Runs and climbs where it's inappropriate.
- Has trouble playing quietly
- Is extremely impatient, can't wait for his turn.
- Always seems to be "on the go" or "driven by a motor".
- Talks excessively
- Blurts out answers before a question is completed.
- Interrupts or intrudes on others conversations, activities, possessions.

Well known ADD/ADHD representatives:



Winston Churchill
Steve Jobs
Steven Spielberg
Albert Einstein
Bill Gates
Michael Phelps



According to <http://www.adhd-support.org.uk/famous.htm>



ADD/ADHD learners are great allies,
How do you think they may collaborate?

Strengths of ADD/ADHD learner

- Sincere. They say what they really feel and this is reflected in their actions, thanks to their spontaneity.
- They are good at motivating others.
- They feel comfortable being the center of attention or leading the group.
- They have the facility to meet new people and in the same way to combine several groups of friends with different interests.
- They are very good storytellers.
- If hyperactivity and impulsivity are predominant, they can become the great discoverers and promoters of new plans and activities.

- They are sensitive.
- When something they like they will do it with a contagious enthusiasm. In addition to being able to deepen and become experts in that topic.
- They are excellent improvisers.
- They are quick finding alternatives.
- His creativity is his greatest asset so it is not surprising that his solutions are always the most original.



THINK - PAIR - SHARE

THINK PAIR



SHARE

- Please, taking into account the characteristics of children with AD / ADHD, name one or two changes that you would make in class to allow ADD/ ADHD learners and their classmates make the most of your lessons.
- Which challenges do you think are going to emerge? Can you anticipate any solutions?

☀ Some Tips

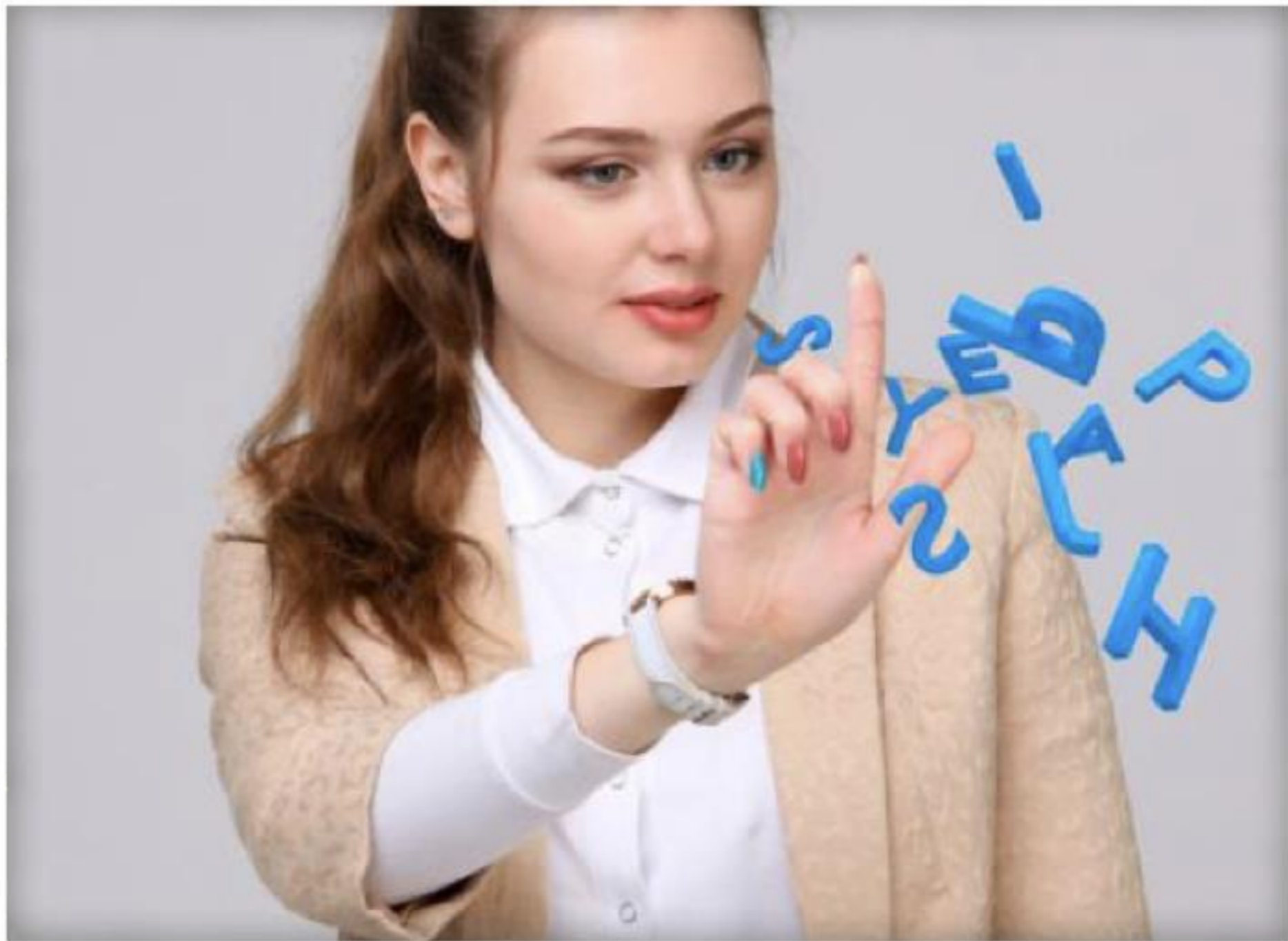
- Predictability and stability.
- Set learning expectations
- Set behaviour expectations
- Indicate the necessary materials
- Highlight key points
- Teacher should be available for those learners, by walking around in the classroom.



More tips

- Avoid exposing them.
- Use audiovisual material.
- Prefer team work.
- Frequent sessions of feedback on their performance and survey of needs with the student.
- Encourage self-assessment and self-correction.
- Flexibility with the times.





DYSLEXIA

Successful Dyslexic people :

Walt Disney

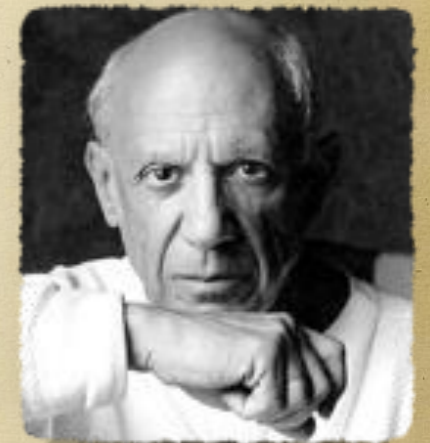
Whoopi Goldberg

Steven Spielberg

Agatha Christie

Pablo Picasso

John Lennon



Do you find any of these features familiar?

Adapted from Julia LoGiudice
dyslexia.com

- Highly intuitive – known to have “street smarts.” Is often “dead on” in judging personalities of others.
- Able to sense emotions and energy of others.
- Remembers struggling in school.
- Frequently have dyslexic children and experience guilt when seeing own child struggle. Insecurities arise while reading to own children or helping them with homework.
- Easily distracted/annoyed by noises and other things in environment.
- May appear to “zone out” and be unaware that it is happening.

- Enjoys video games.
- Misspeaks, misuses, or mispronounces words without realizing it.
- May be or was very athletic.
- May have excellent recall of events that were experienced.
- May confuse past conversations or be accused of “not listening.”
- Difficulty remembering names of people without tricks, but remembers faces.
- Difficulty remembering verbal instructions or directions.
- Poor recall of conversations or sequence of events



“I was considered slow. While my classmates were reading their textbooks I drew in the margins”.



Milton Ernest "Robert" Rauschenberg (October 22, 1925 – May 12, 2008) Robert Rauschenberg (1925-2008) was a major American painter, sculptor and printmaker, whose radical combination of action painting with found objects in the 1950s helped prepare the way for Pop Art.



<https://youtu.be/11r7CFIK2sc>

Strengths of Dyslexic learners

Summary from Eide and Eide 2012 and Armstrong (2010)

- Ability to see "the whole picture". The so-called "interconnected reasoning" causes the dyslexic to "see connections that other people had not seen before."
- Remarkable ability for spatial reasoning
- Remember the facts as experience, examples or stories and not as abstractions.
- "Narrative reasoning", ability to "learn from experience".
- Ability to reason clearly in dynamic situations, in which the facts involved are not yet fully presented or are changing - finances, but also geology or palaeontology.

Tips for the classroom

- ✓ Use the strengths of the students.
- ✓ Use audiovisual media.
- ✓ Prioritise Experiential Learning.
- ✓ Choose the content, tasks and activities carefully.
- ✓ Use technology as support
- ✓ Support and stimulate the student.
- ✓ Provide a friendly, non-threatening environment, without major interference.



Positive construction of the context for the development of all students:

- Awareness of strengths
- Strategies for strength-based learning
- Network of teachers trained or eager to learn how to work with a diverse student body.
- Improvement of the school facilities.
- Careful selection of teaching resources.





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Thank you!

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Resources

Armstrong, T. The power of Neurodiversity. Unleashing the advantages of your differently wired brain. (2010). Da Capo Press, MA, USA.

Eide, B.L. and Eide, F.f. (2011) The Dyslexic Advantage: Unlocking the Hidden Potential of the Dyslexic Brain. Plume; Reprint edition (July 31, 2012). London, UK.

<https://www.understood.org/es-mx/friends-feelings/empowering-your-child/building-on-strengths/neurodiversity-what-you-need-to-know>