

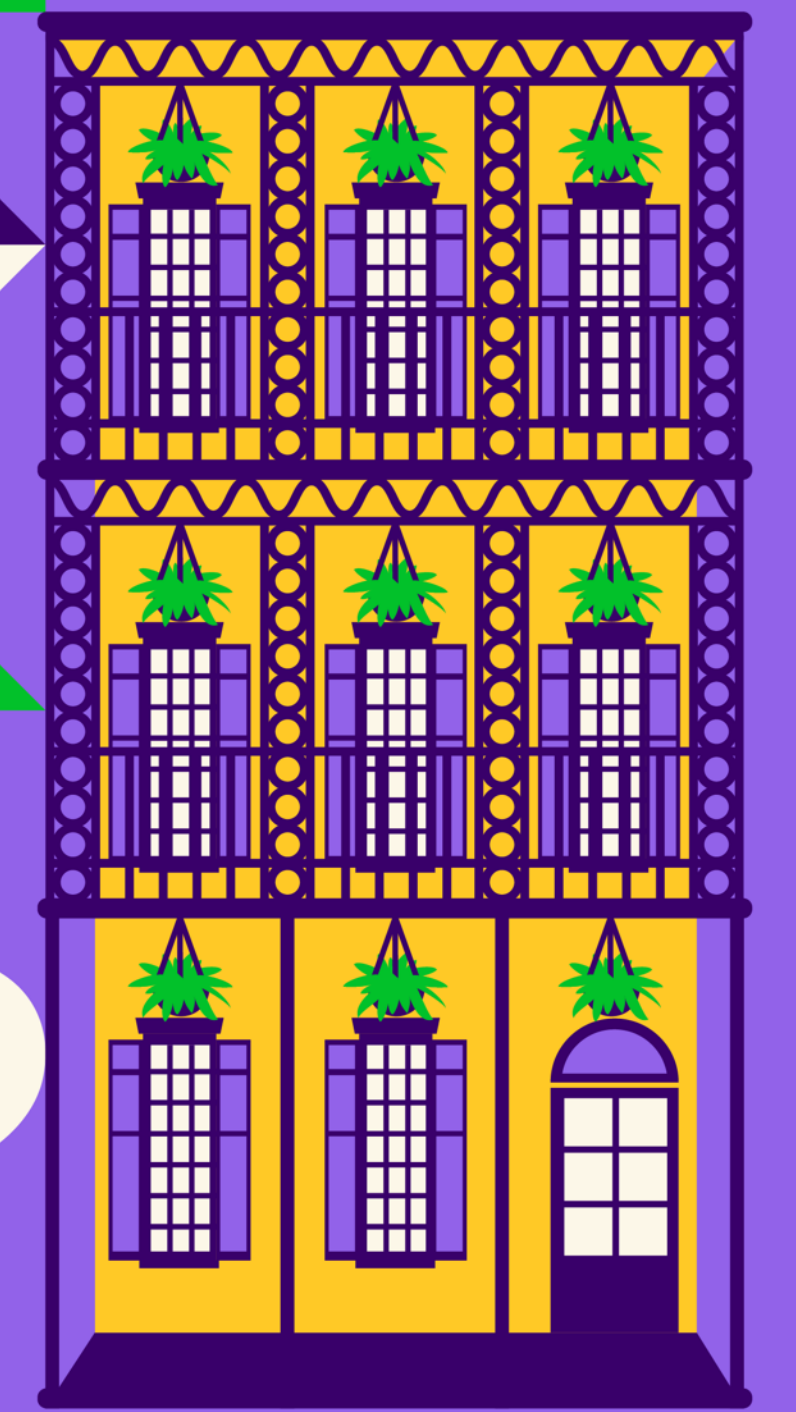
Scrum Alliance®

GLOBAL SCRUM GATHERING

MAY 19 – 22, 2024 | NEW ORLEANS



SM



Embracing Neurodiversity

A Blueprint for Inclusive
Scrum Teams

By Brian Milner



MOUNTAIN GOAT
SOFTWARE

mountaingoatsoftware.com

Poll: Are you Neurodivergent?

Vote Here:

<https://pollev.com/brianmilner279>



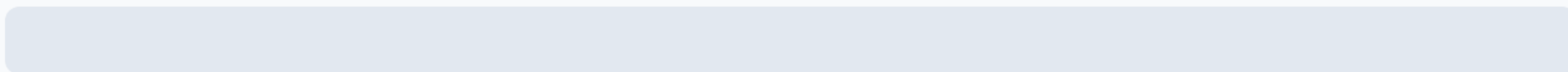
Some Neurodivergent condition examples:

- Autism Spectrum Disorder (ASD)
- ADHD
- Dyslexia
- Dyscalculia
- Dysgraphia
- Dyspraxia
- Tourette Syndrome
- Sensory Processing Disorder
- Auditory Processing Disorder
- Hyperlexia



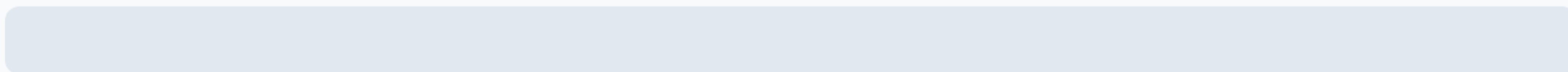
Would you consider yourself to be Neurodivergent?

Yes



0%

No



0%



**20% of the
World's
Population**

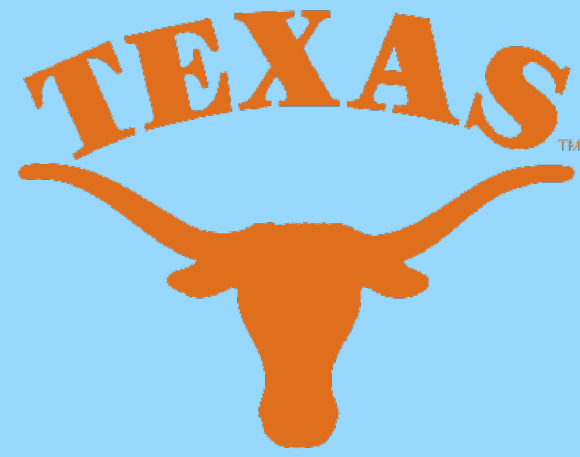


**30% - 40%
Unemployed**

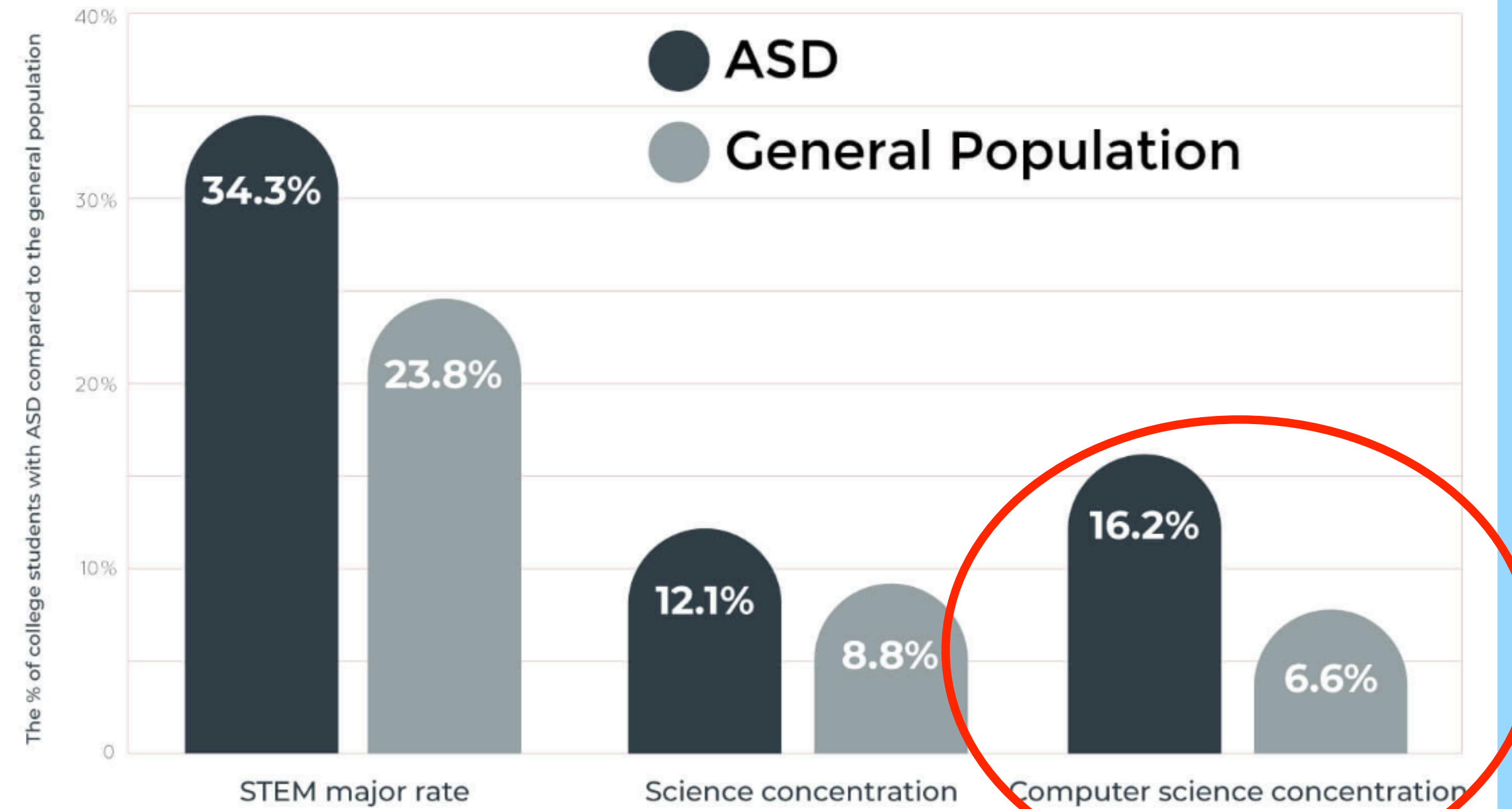


**1 in 42 Boys
Diagnosed
with Autism**

• 1 in 189 Girls



STEM Participation Among College Students with Autism Spectrum Disorder (ASD)



NCBI, "Science, Technology, Engineering, and Mathematics (STEM) Participation Among College Students with an Autism Spectrum Disorder." (2020)
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3620841/>

Chances are, you have a Neurodivergent person on your team right now and more are coming in the future!





Brian Milner

SVP Agile Training & Coaching

Mountain Goat Software

- Host of The Agile Mentors Podcast
- Software Development over 25 years
- Working with Agile teams for over 15 years
- Diagnosed with ADHD as an adult
- Immediate family members with Autism and other neurodivergent types

NOT a medical professional

Some Definitions...

- **Neurodivergent** describes people whose neurological development and functioning are atypical
- **Neurotypical** describes people whose neurological development and functioning are considered typical
- **Masking** is hiding natural behaviors and traits to conform to social norms and expectations
- Person-first or Identity-first language preference



Why Businesses Should Care



Belonging

According to a Deloitte study:

- 40% of employees feel lonely and disconnected at work
- A higher feeling of belonging though increases performance by 56%, employer net promotor score by 167%, decreases sick days by 75%, and turnover risk by 50%



Benefits of Neurodiverse Hires

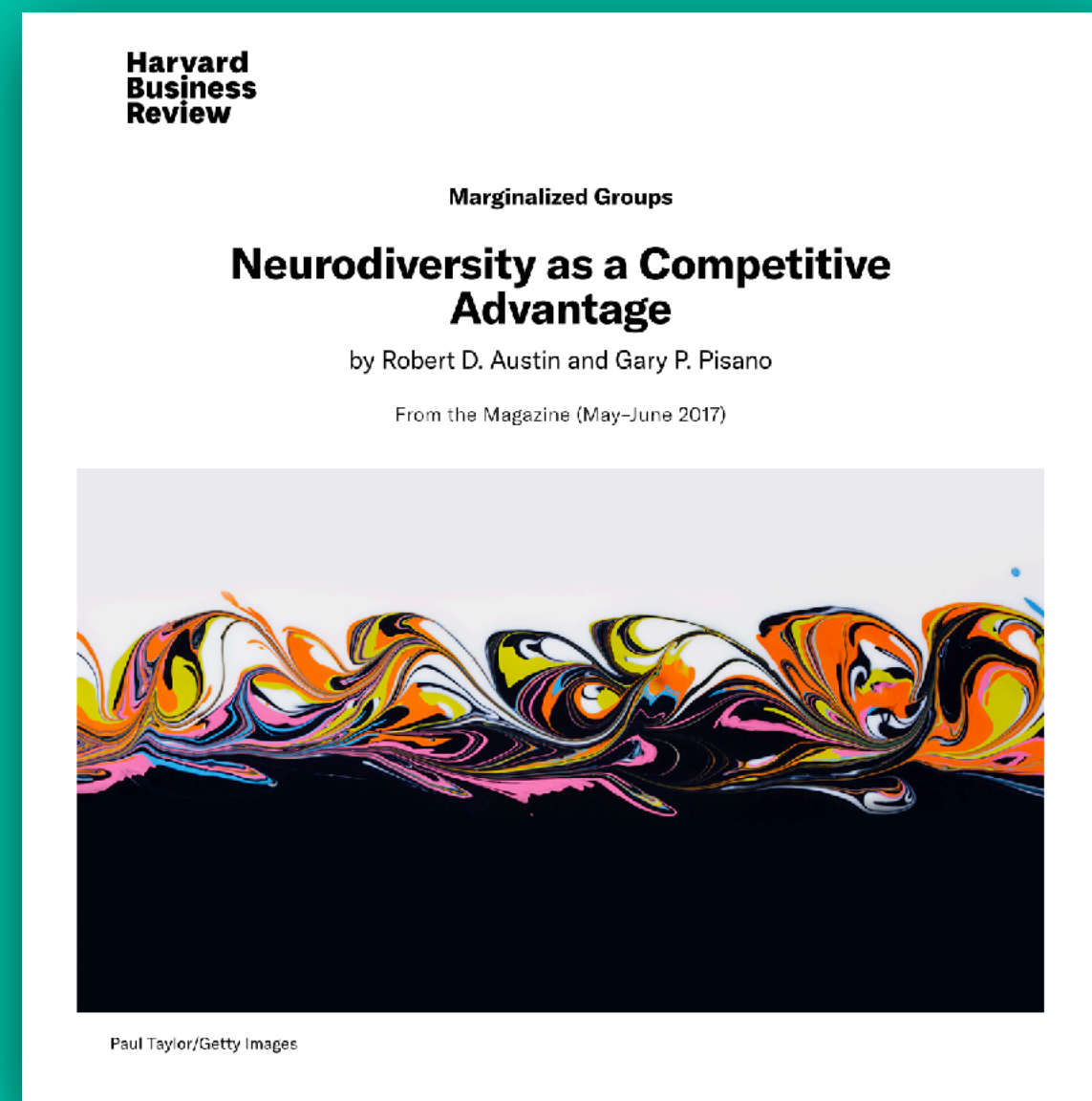


- 40% faster at problem-solving¹
- Higher creativity & less risk averse²
- Strengths in big-picture thinking, spatial reasoning, & narrative memory³

1. Human Brain Mapping study by Université de Montréal and Harvard University.
2. Creativity and ADHD: A review of behavioral studies, the effect of psychostimulants and neural underpinnings. Neuroscience & Biobehavioral Reviews
3. Strengths of Dyslexia - Dyslexia Support South by Chris Cole



A Competitive Advantage



- 90%–140% more productive with ZERO errors
- Testing teams 30% more productive

Neurodiversity is a Competitive Advantage
by Robert D. Austin and Gary P. Pisano
Harvard Business Review



Why You Should Care



Individuals & Interactions Over Processes & Tools



Our Purpose

Our purpose is not to understand how every team or organization works best.

Our purpose is to understand how OUR team or organization works best.



At a crossroads

Scrum Masters are being devalued.

If we are to remain relevant to businesses, we MUST go beyond time boxes and merely scheduling meetings. We MUST provide deeper value in the form of soft skills such as team building, conflict resolution, and personality blending.



Removing Barriers



Autism Spectrum

Challenges:

- Seemingly blunt, rude or not interested in others
- Finding it hard to understand what others are thinking or feeling
- Taking things very literally
- Missing "social cues"
- Anxiety in social situations
- Sensitivities to light, sound, or texture
- Stimming

Advantages:

- Exceptional Memory
- Precise / Detail oriented
- Visual Thinker
- Honesty and Reliability
- Punctual
- Adherence to the rules
- A drive for perfection
- "Outside the box" thinker
- Logical thinking ability



ADHD

Challenges:

- Fidgeting
- Time blindness
- Disorganization
- Poor planning
- Forgetfulness
- Starting new things vs finishing
- Increased sensitivity to criticism
- Inability to deal with stress
- Quick temper

Advantages:

- Highly Creative - thought leaders
- Can hyperfocus when interested
- Open to new ideas
- Greater tolerance for risk
- Increased sense of self awareness
- Empathetic
- Strong sense of fairness
- People pleasers
- Leaders



Dyslexia

Challenges:

- Reading is hard work
- Trouble spelling
- Sometimes bad at math
- Short attention span
- Can easily get lost or lose things
- Difficulty with technology at times
- Trouble doing things such as currency conversion
- Hard time following written instructions

Advantages:

- Strong memory
- Excellent puzzle solving skills
- Brilliant spacial reasoning
- Abstract thinkers
- Can be good conversationalists
- Excel at critical reasoning
- Can learn fast when shown how
- Entrepreneurial
- Can more easily detect "things out of place"



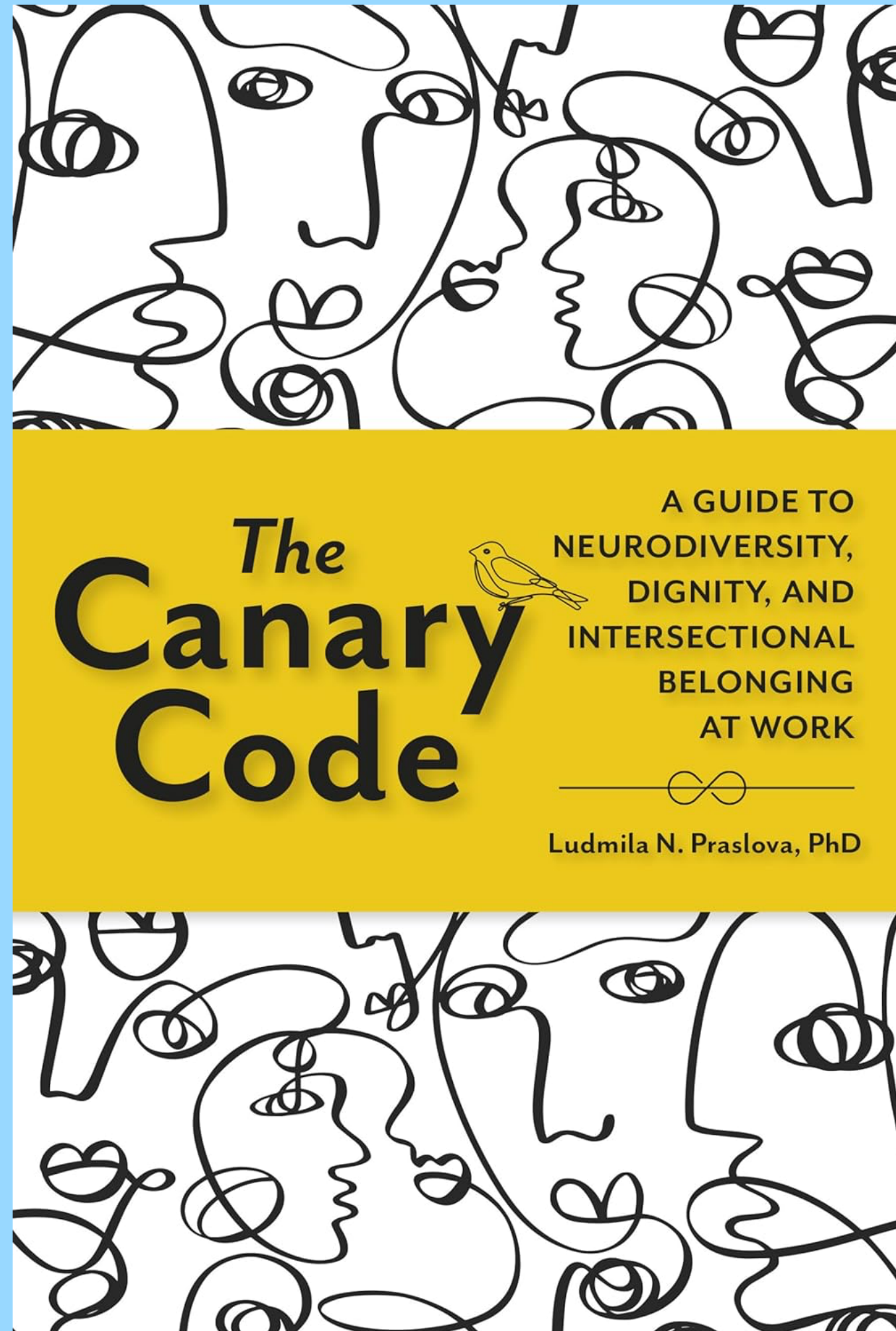
And others...

- Dyspraxia
- Dyscalculia
- Tourettes
- OCD
- Anxiety
- Synthesia
- Hyperlexia

All contain their own challenges and disadvantages. Our job is to put them in the best position to be successful



Canary Code Inclusion Model



Source: Ludmila N. Praslova



Removing Access Barriers

- Extended Interview processes.
- Providing up front questions, allowing for advocates, avoiding open-ended questions.
- Allowing notes, extra time to answer questions, and even deferring questions.

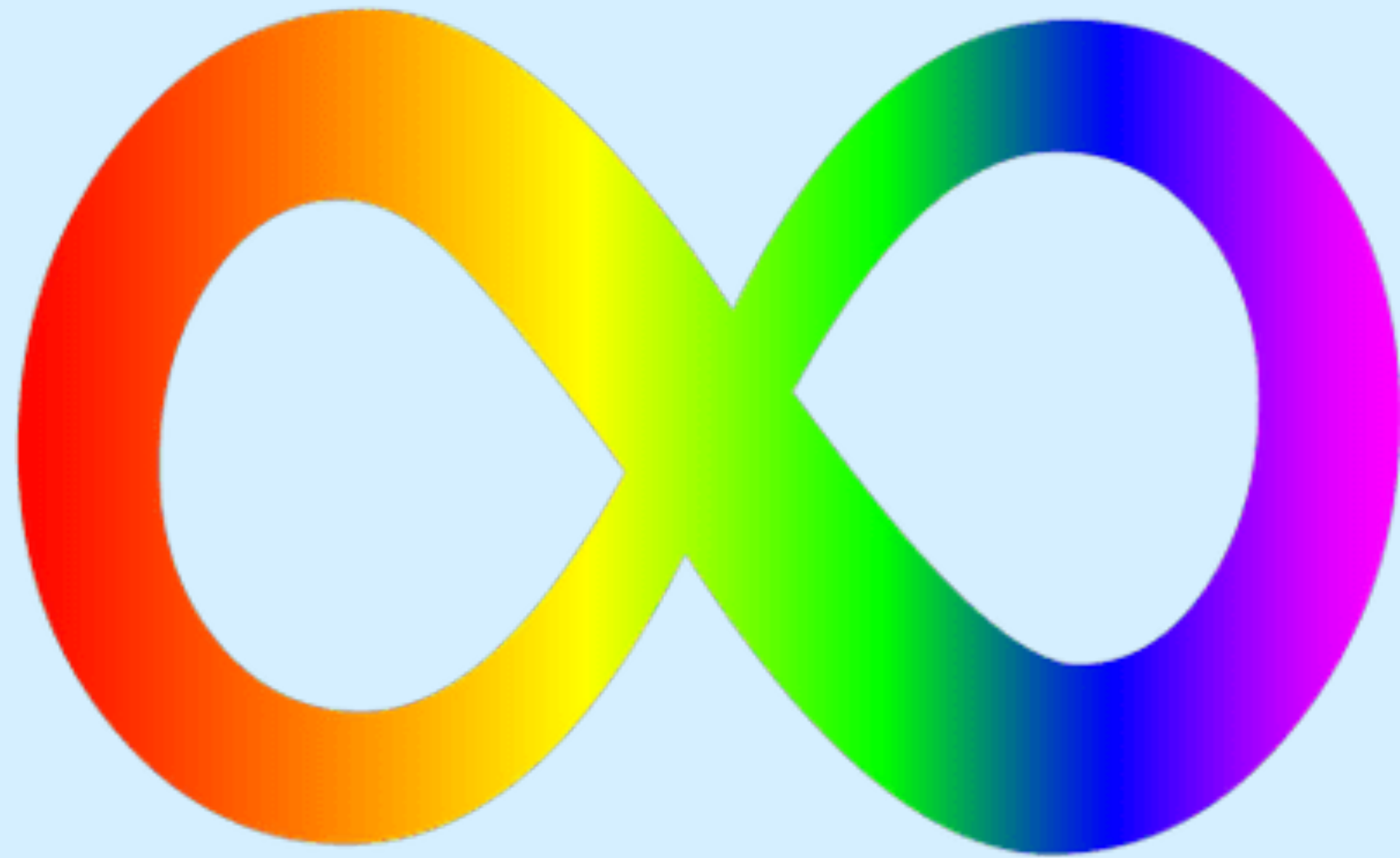


Removing Success Barriers

- Support systems, buddies, mentors, and job coaches.
Clear communications.
- Softer lighting, noise-canceling headphones, and quiet areas in the office.
- Work when and where it works.



Work Adjustments for Autism



- **Provide clear directions (also Close Captioning)**
- Create quiet spaces or provide noise cancelling headphones
- **Allow for different environmental options**
- **Mentor in one-on-ones about social interactions**
- Allow for time flexibility
- Don't put them in a position that would make them uncomfortable (ex: eye contact or presenting)



Work Adjustments for ADHD



- **Give one project at a time**
- Build in breaks for movement
- Make fidget toys normal
- Provide quiet spaces to work
- **Allow alternative work schedules**
- Use reminders
- **Keep meetings short and focused**
- Celebrate small wins



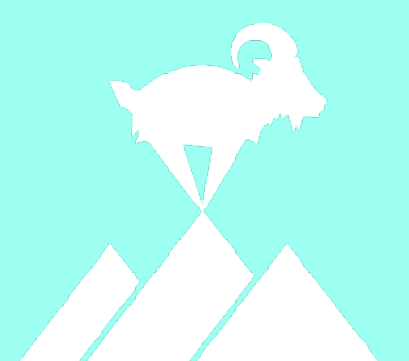
Work Adjustments for Dyslexia



- **Share important content in multiple ways (video/audio)**
- Provide text-to-speech options
- **Use dyslexia-friendly fonts (Sans-Serif based fonts)**
- Avoid asking them to transcribe in meetings
- **Provide extra time to review anything requiring reading**



Exercise



Changes in your Teams



Brainstorm 1 change you could make on your team to be more inclusive of neurodiverse individuals



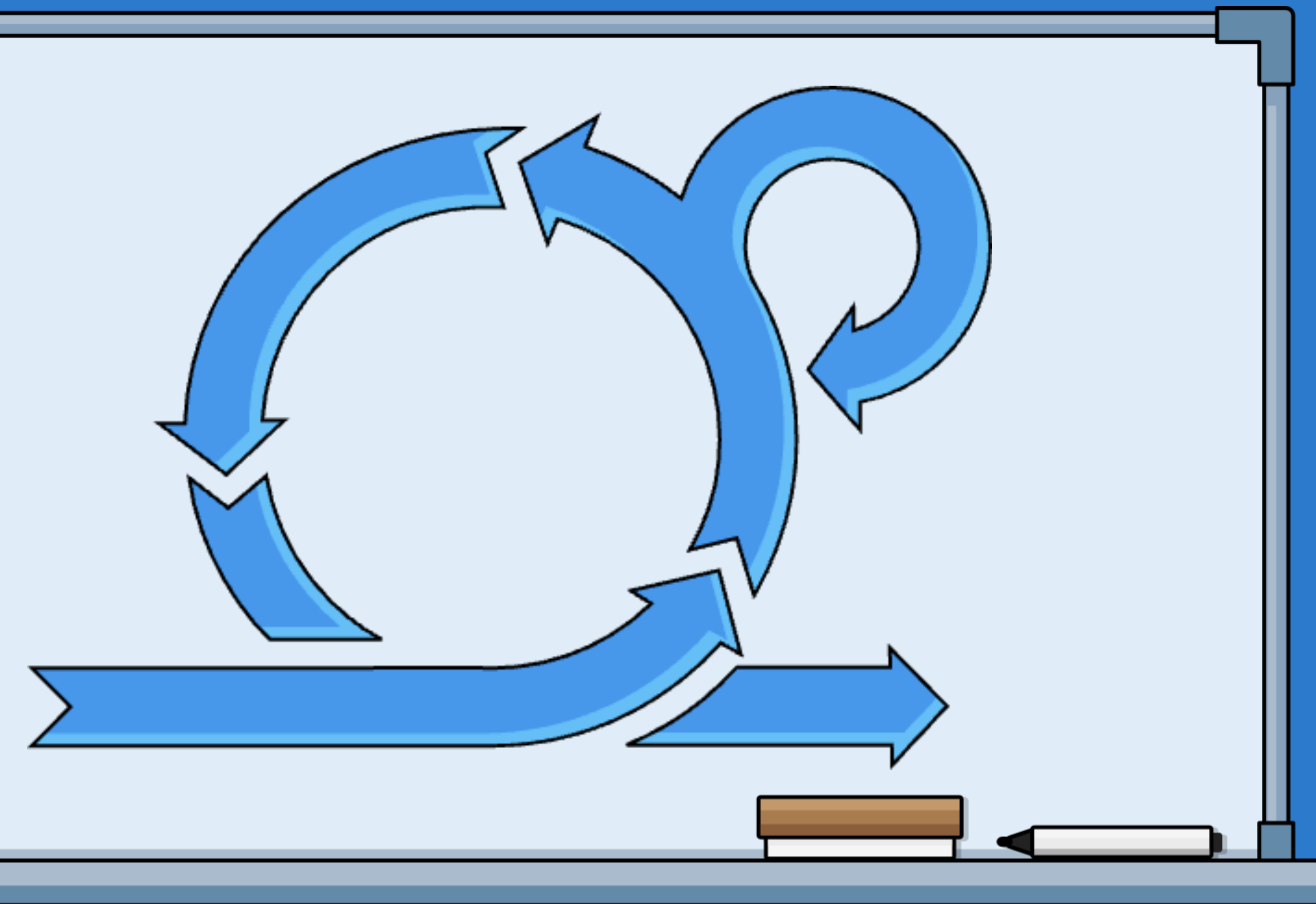
Simple Changes



- Send out information in advance
- Read items out loud
- Break up long meetings
- Be flexible about camera use
- Turn on closed captioning
- Establish Personal User Manuals



Scrum Meeting Changes



- Send out candidate items prior to Sprint Planning
- Be flexible with Daily Scrum formats
- Provide a "Right to Pass" on presenting in Sprint Reviews
- Collect data for Retrospectives in appropriate formats & throughout the Sprint



John Elder Robinson

Author and Scholar in Residence
William & Mary College



“Neurodiversity is the idea that neurological differences... are the result of normal, natural variation in the human genome.

Many individuals who embrace the concept of neurodiversity believe that people with differences do not need to be cured ; they need help and accommodation instead.”





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