

DYSLEXIA

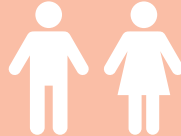


Dyslexia is a learning disorder that affects one's ability to read, spell, write, and speak. Children who have dyslexia are often smart and hardworking, but they have trouble connecting the letters they see, to the sounds those letters make.



DEMOGRAPHICS

dLEsYXla



About 5% to 10% of Americans have some symptoms of dyslexia, such as slow reading, trouble spelling, or mixing up words.*

Dyslexia affects just as many females as it does males. One cannot grow out of dyslexia.**

GENETICS



Around 30-40% of students with dyslexia have a family history of dyslexia.***



If one identical twin has dyslexia, the other twin has about 70% likelihood of being dyslexic.***

Best Practices for Students with Dyslexia



Use images, diagrams and infographics to support testing materials/tests



Allow the student extra time to complete timed assessments



Allow the student to use audio books and video to digest content if possible



When teaching subjects like math, allow the student to use tactile objects such as money



Avoid large blocks of text and keep the text aligned left



Allow the student to use spellchecker on a computer



Make content on screens scalable and high contrast



Have the student read aloud their written work before submitting

* Dyslexia Center of Utah

** International Dyslexia Association

***U.S. National Library of Medicine National Institutes of Health

ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)



Attention deficit hyperactivity disorder (ADHD) affects children and teens and can continue into adulthood. ADHD is the most commonly diagnosed mental disorder in children. Children with ADHD may be hyperactive and unable to control their impulses. It's usually discovered during the early school years, when a child begins to have problems paying attention.



RATIO

11 percent of American children, ages 4 to 17, have the attention disorder.*



Boys are over twice as likely as girls to have ADHD.

TYPES**

1

INATTENTIVE The student remains relatively calm but exhibits significant inattention across most subjects and domains.

2

HYPERACTIVITY Student is able to focus but displays a lack of impulse control and high activity levels.

3

COMBINED This is the most common form of ADHD where the student struggles with attention and regulating behavior.

Best Practices for Students with ADHD



Encourage the student to sit in the front of the classroom near the teacher



Avoid having the student near a door or a window



Use visuals: charts, pictures, color coding



Divide long-term projects into segments and assign a completion goal for each segment



Establish eye contact with any student who has ADHD



Vary the pace and include different kinds of activities. Many students with ADHD do well with competitive games or other activities that are rapid and intense.



Allow the student frequent breaks and let him/her squeeze a rubber ball or tap something that doesn't make noise as a physical outlet



Create a quiet area free of distractions for test-taking and quiet study

* Centers for Disease Control and Prevention (2016)

**Johns Hopkins Medical

AUTISM



Autism Spectrum Disorder (ASD) is a complex developmental disability; signs typically appear during early childhood and affects a person's ability to communicate and interact with others. ASD is defined by a certain set of behaviors and is a "spectrum condition" that affects individuals differently and to varying degrees. There is no known single cause of autism, but increased awareness, early diagnosis/intervention, and access to appropriate services/supports can lead to significantly improved outcomes.



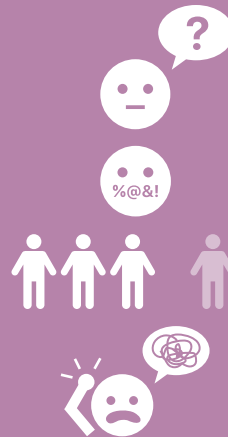
NUMBERS

3.5 million Americans live with Autism Spectrum Disorder.*



1 in 68 **eight-year-old** children have Autism Spectrum Disorder (ASD).**

SIGNS



- Learning disability such as delayed speech development
- Inappropriate language
- Social withdrawal
- Difficulty expressing needs; may use gestures

Best Practices for Students with Autism



Use simple sentences and bullets when possible



Do not use bright colors



Use concrete visual methods to teach number concepts



Avoid long blocks of text



When possible avoid fluorescent lights due to the flicker



Avoid sensory overload such as strong odors and loud noises in enclosed classrooms



Students with autism are literal; do not use figures of speech



Give the student extra time to process spoken language

* Autism Society Organization

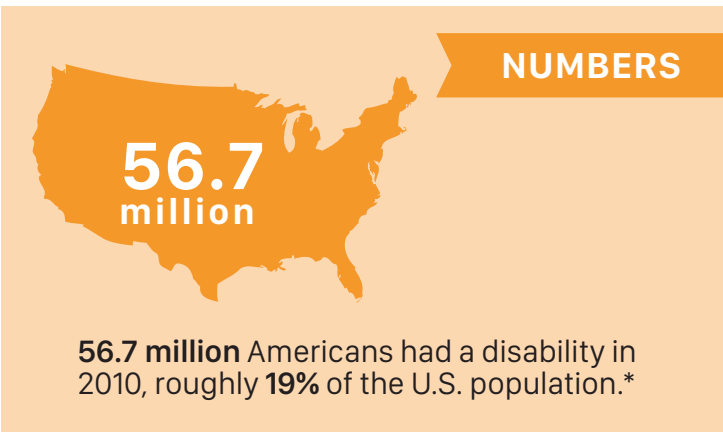
**Centers for Disease Control and Prevention

PHYSICAL DISABILITY



PHYSICAL DISABILITY

Although physical disabilities disproportionately impact older people, it is important to design content that is accessible for people who are low vision/blind, hard of hearing/deaf and with motor impairments.



BLIND



62,528 U.S. students attended elementary or primary school in 2016 and qualified for Braille, large-print, or audio-based learning materials.**

Best Practices for Students with Low Vision and Blindness

- Use text with high contrast
- Publish all information on a webpage
- Make links and buttons descriptive
- Allow for screen magnification

DEAF



Somewhere around **20,000 deaf and hard of hearing students** attend post-secondary educational institutions each year.***

Best Practices for Students Who Are Hard of Hearing or Deaf

- Use subtitles or provide a transcript
- Use a linear layout
- Write in plain language
- Allow alternative ways to communicate outside of verbal communication or oral presentations

PHYSICALLY IMPAIRED



Children and youth with physical impairments comprise **1.5% of the total population** of students with disabilities who receive special education services.**** Many students have accompanying neurological impairments which may impact organizational and independent work skills.

Best Practices for Students with Physical Disabilities

- Make large clickable buttons
- Design webpages that can work with keyboard navigation
- Design with mobile phones and touch screens in mind
- Allow for adjustable timeout of sessions

* Latest Census Bureau disability report
** The National Federation for the Blind
*** The National Center for Educational Statistics
**** National Science Teachers Association