



# **ECHO IDAHO: AUTISM**

The Role of the Speech Language Pathologist

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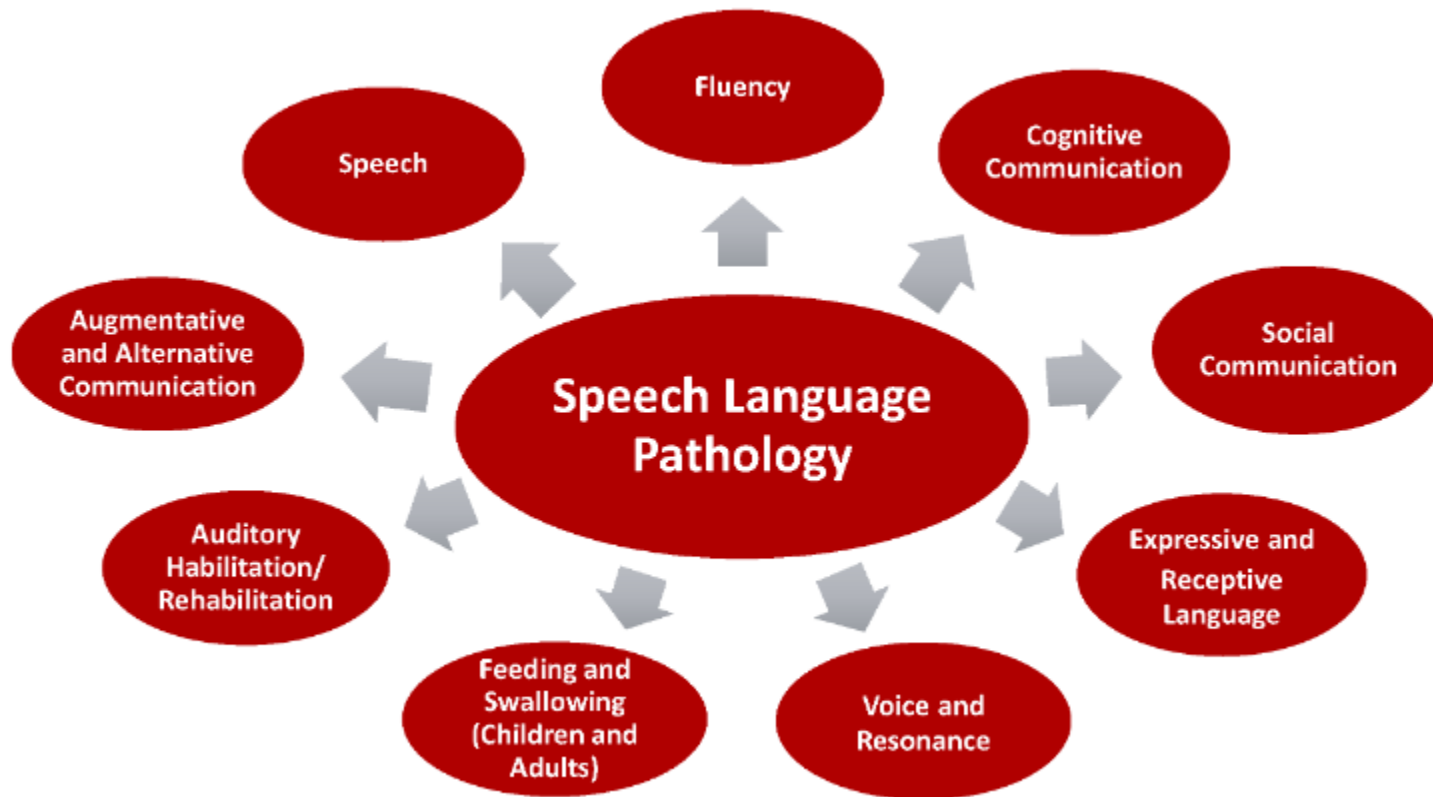
# Learning Objectives

- Understanding the different areas that SLPs treat and assess
- Differential Diagnosis specific to Autism
- Communication deficits in children with Autism
- Speech language pathologist's role

# What is SPEECH LANGUAGE PATHOLOGY?



# Speech Language Pathologists Areas of Practice



# Speech Language Pathologists

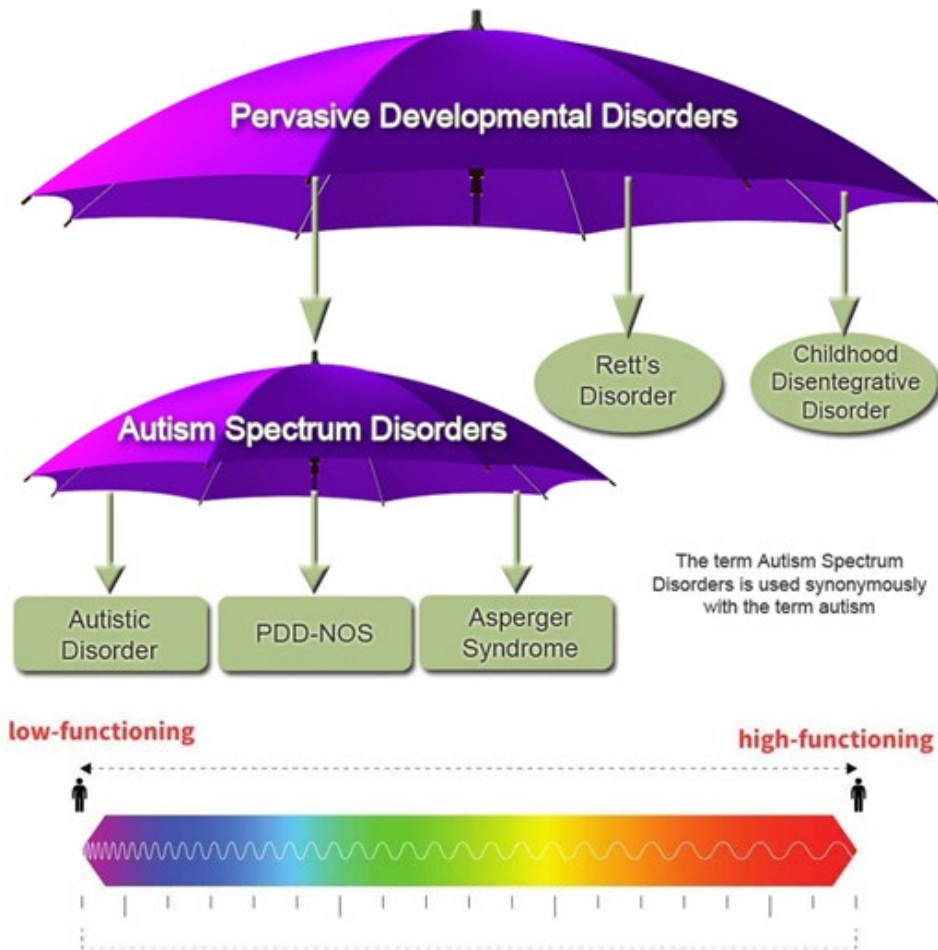
## Assess for and Treat:

- Speech Disorders
  - Articulation disorders – difficulty producing certain sounds
  - Phonological disorders – rule-based errors affecting more than one sound
  - Fluency – stuttering and cluttering
  - Voice and Resonance – vocal quality, pitch, loudness, resonance
  - Apraxia – motor planning and coordination issues
  - Dysarthria – motor weakness issue
  - Cleft palate related issues
- Language disorders - can be receptive or expressive and spoken or written
  - Morphology disorders
  - Syntax disorders
  - Language content or semantics
  - Language function or pragmatic/social language (Selective Mutism, Social Communication Disorder)
  - Literacy and pre-reading skills
  - Aphasia – can affect speaking and/or comprehension

# Continued

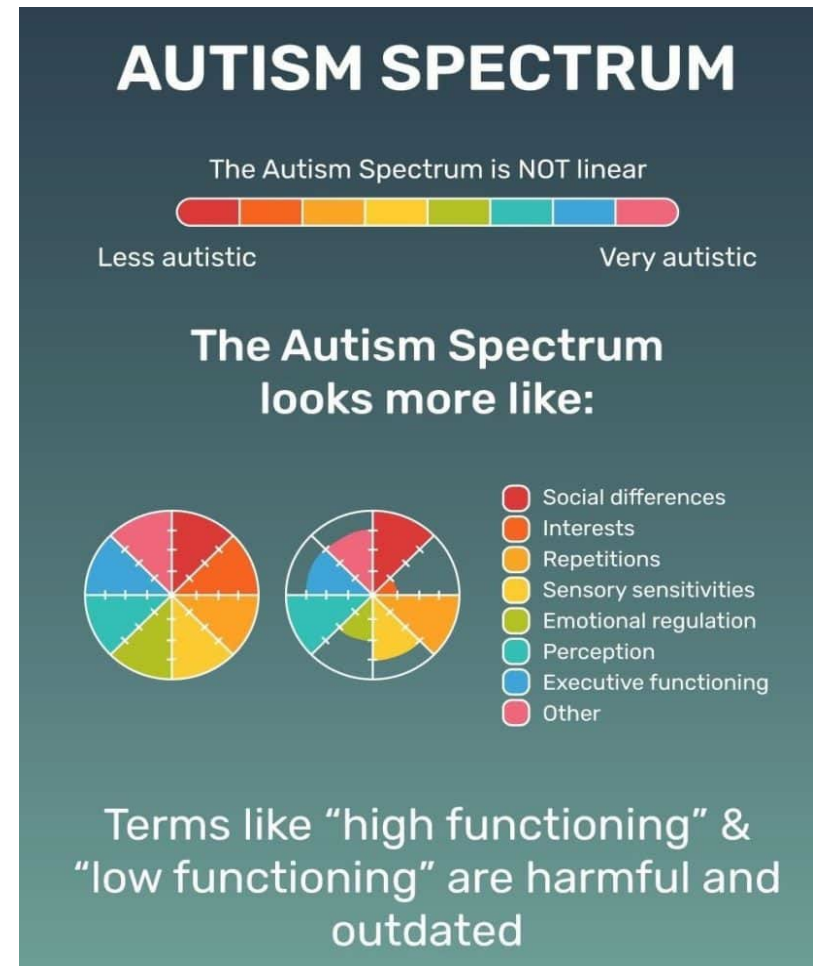
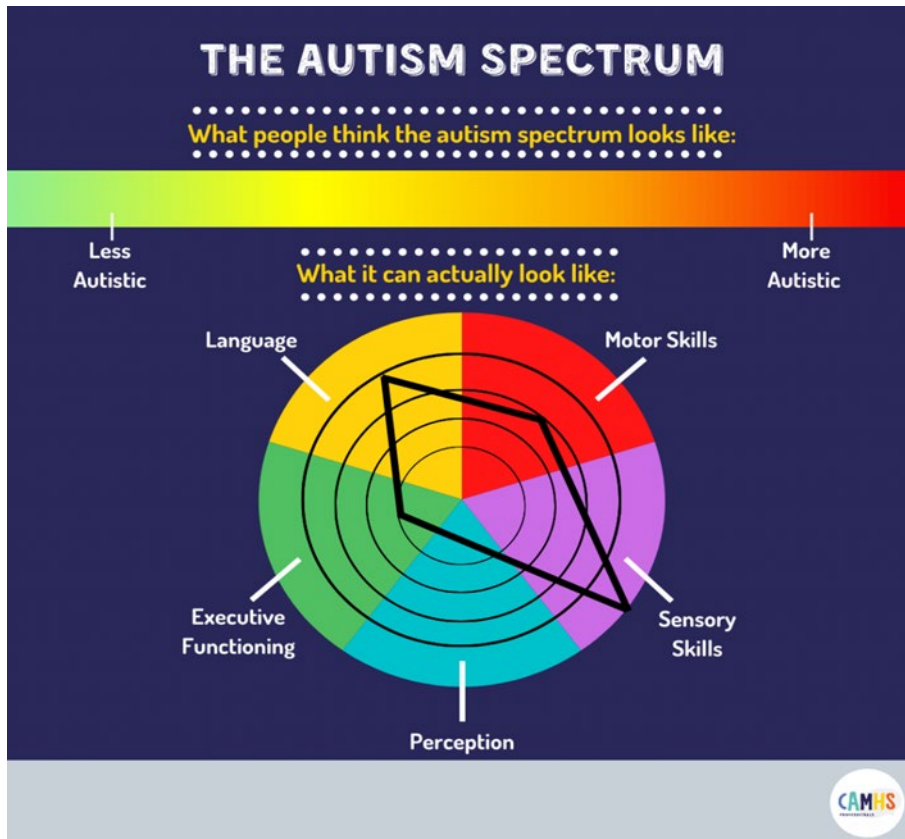
- Hearing disorders or hard of hearing issues and Aural Habilitation
- Central Auditory Processing Disorders (CAPD)
- Cognitive communication – attention, memory, organization, problem solving, orientation, perception, impulsivity
- Prosodic differences – involving the tone, stress pattern, rate of speech, pausing and rhythm of speech
- Feeding and swallowing – Dysphagia, feeding disorders, oral motor training, swallowing therapy (for Tongue Thrust/Orofacial Myofunctional Disorder)
- Augmentative and Alternative Communication needs

# Autism Conceptualization



- Images from [understandingasintheclassroom.weebly.com](http://understandingasintheclassroom.weebly.com) and [aheartforallstudents.com](http://aheartforallstudents.com)

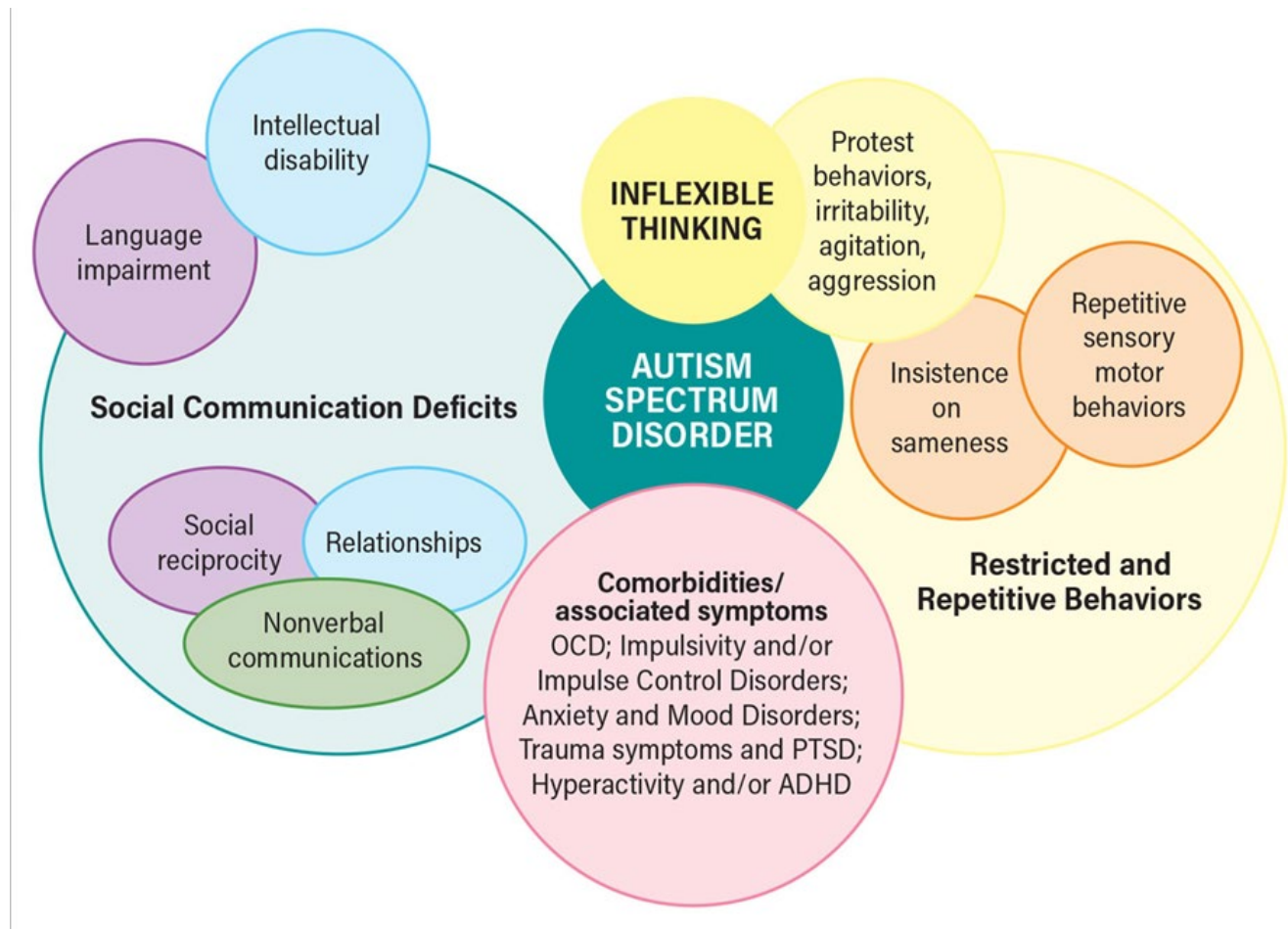
# Holistic Conceptualization



- Images from [camhsprofessionals.co.uk](http://camhsprofessionals.co.uk) and [getgoally.com](http://getgoally.com)



# Social Communication Deficits in ASD



• Image from psychiatryonline.org

# Areas that SLPs Assess and/or Treat Specific to Autism from ASHA

- Joint attention:
  - Odd body orientation with other people
  - Often focused on the object not the person and difficulty directing someone's attention
  - Difficulty seeking comfort or being comforted and understanding the emotions of others
- Social emotional reciprocity:
  - Difficulty making bids and responding to bids from others for attention
  - Difficulty engaging in and maintaining social interactions or play routines and conversation
  - Difficulty managing communication breakdowns
- Social Cognition (older kids):
  - Difficulty understanding and managing their emotions, thinking about other's perspectives and developing appropriate social behaviors

# Language Differences Continued

- Language and language-related cognitive differences
  - Delayed or different acquisition of language or odd use of language:
    - Can be a loss of language or odd intermittent use of words or language – often will hear nouns and attributes more than verbs or other language
    - Echolalia, scripting from shows, songs, repetitive and rigid language – always inquire about this
  - Differences in use and understanding of nonverbal and verbal communication:
    - Difficulty integrating and coordinating eye contact, facial expressions and gestures (quality and quantity issue) both with and without language and difficulty understanding these behaviors in others
    - Odd use of gestures or odd requesting - such as pulling or pushing person to what they want
    - Expressive language is often greater than receptive language

# Language Differences Continued

- Vocal development differences:
  - Odd responses to another person's vocalizations
  - Odd vocal productions and Apraxia
  - Odd prosody – speech may sound robotic, flat or odd
- Symbolic play differences:
  - Acquisition of functional and conventional use of objects is delayed or odd
  - Rigid or repetitive play and limited cooperative play

# Language Differences Continued

- Conversation differences:
  - Difficulty understanding and knowing how much information to offer
  - Turn-taking and topic maintenance difficulties
  - Difficulty sharing a topic or having a specific interest in a topic or asking for information
  - Repairing a breakdown or clarifying something
  - Difficulty understanding nonliteral language
- Literacy differences
  - Reading for comprehension, difficulty understanding narratives or expository text that requires multiple perspectives
  - Summarizing the main point or providing information through writing
- Executive functioning differences
  - Flexibility issues, difficulty with problem solving, organizing, planning/sequencing
  - Inhibition difficulties

- Sensory and feeding challenges
  - Sensory modality difficulties – responsiveness to sensory stimuli including sounds, smells, tastes, light, tactile input, movement, visual input and social input
  - Difficulty with food based on presentation, texture or type and limited/restricted diet
- Behavioral and emotional challenges
  - Difficulty with transitions, generalizing new skills, social withdrawal, odd or different expression of emotions and difficulty recognizing and understanding them, restricted interests or patterns of behavior

# What Do I See in Practice:

- Odd or specific interests in things like letters, numbers, colors, including hyperlexia
- Interest in specific objects or parts of objects or have specific objects they carry or take places
- Odd gazing or using a mirror oddly
- Picky eating or odd/limited eating and diet
- Using my hand as a tool, refusal to engage with objects themselves
- Licking, rubbing, mouthing objects
- Odd finger posturing or body movements

- Difficulty using or understanding pronouns
- Difficulty recognizing or responding to their own name or familiar names of others
- Difficulty sharing or showing
- Difficulty asking and answering questions or following directions
- Sing-song or odd intonation, echolalia
- Repetitive or scripted language
- Odd or delayed speech development
- Difficulty with joint attention and are often focused on the object
- Difficulty with shared enjoyment, play, relational or symbolic play and turn-taking
- Difficulty understanding cause and effect, difficulty imitating
- Hyperlexia
- Difficulty being comforted, comforting others or responding appropriately to others emotional states



# Assessment and Differential Diagnosis

- Social Communication Disorder – difficulty with social communication such as understanding social rules and implicit social behaviors and does not include restricted, repetitive behaviors
- Selective Mutism – avoidance of social communication and interactions with anxiety and an absence of restricted, repetitive behaviors
- Autism Spectrum Disorder
- Social differences in kids with trauma, neglect or abuse history
- Cultural differences
- Language evaluation within a comprehensive team assessment

# Referrals and Interventions

- Audiologic evaluation
- Occupational or physical therapy
- Pediatric dentistry
- Pulmonology - sleep disturbance
- Gastroenterology
- Neurology
- Genetic testing
- Otolaryngology – enlarged tonsils, nasality issues, vocal fold concerns, velopharyngeal insufficiency, palatal concerns
- Behavioral interventions and counseling
- Psychology or neuropsychology for other neurodevelopmental or psychiatric conditions
- Medication management

# Speech and Language Disorders in ASD Population

- NIH estimates that 63% of kids diagnosed with ASD have language impairment
- These differences affect social/pragmatic language development and the understanding and use of social language
- We can see differences in other areas of language (phonology, syntax, semantics)
  - Odd or formal use of lang, idiosyncratic lang use
- Apraxia of speech can impact two thirds of children initially diagnosed with ASD

# Differences Between Girls and Boys

(Dean, Harwood & Kasari, 2017)

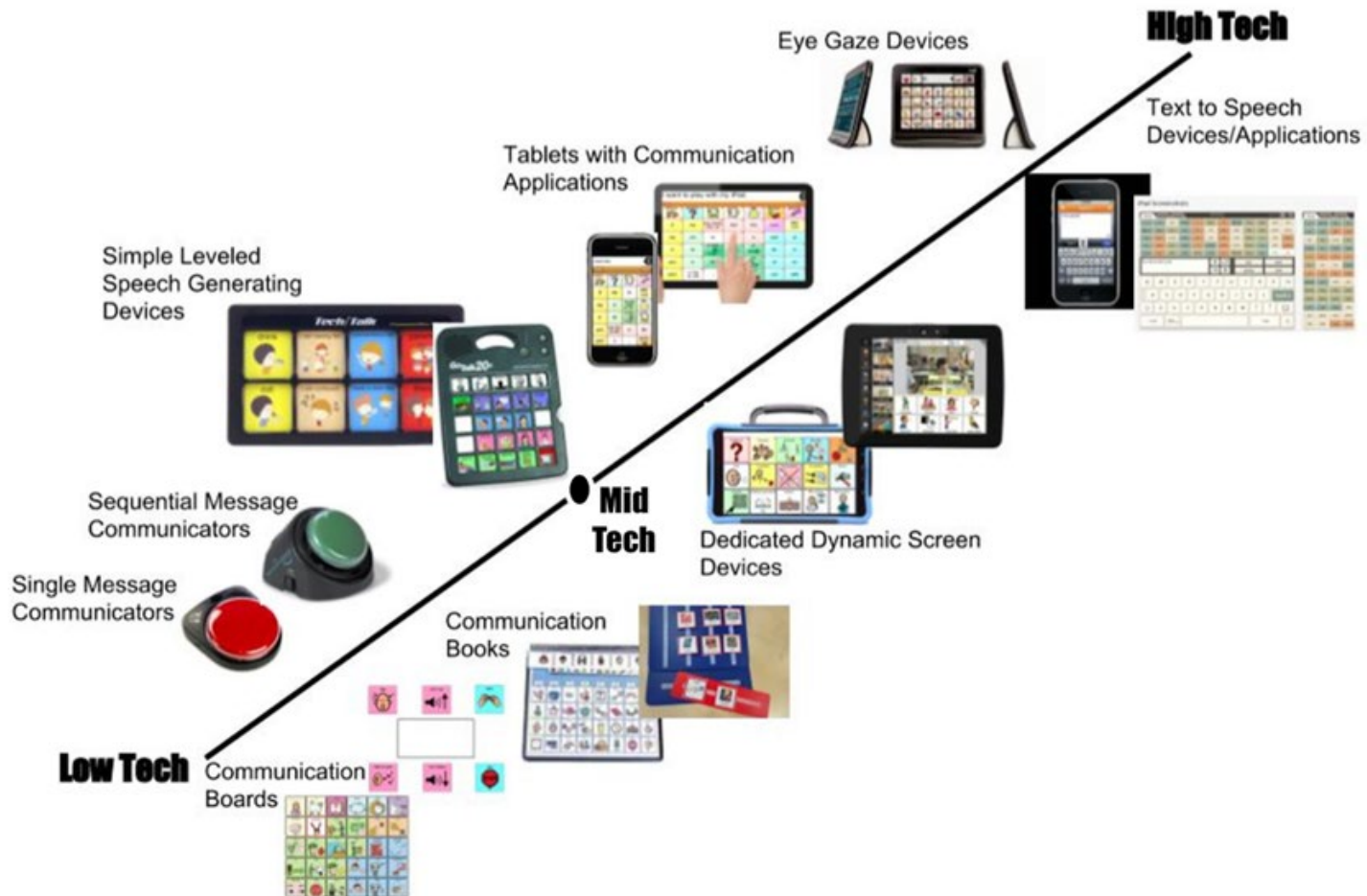
- Girls with ASD
  - Stay in closer proximity to peers, better able to capitalize on social opportunity
  - Spend more time in joint engagement
  - Spend more time talking as a primary activity
  - Appear to use more compensatory behaviors to gain access into peer groups
- Boys with ASD
  - Tend to play alone rather than participating in organized games
  - Spend more time alone
  - Spend more time wandering as a primary activity

- Comprehensive multidisciplinary assessments look at the whole system and are helpful to determine strength and difference areas and these help to inform a child's overall treatment plan
- Whether a child has been diagnosed or not with ASD or another neurodevelopmental condition, they can be engaged in therapeutic services (ST, OT, PT, Behavioral therapies) to address areas of need

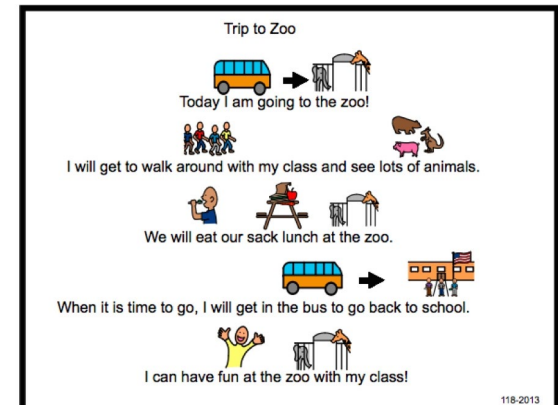
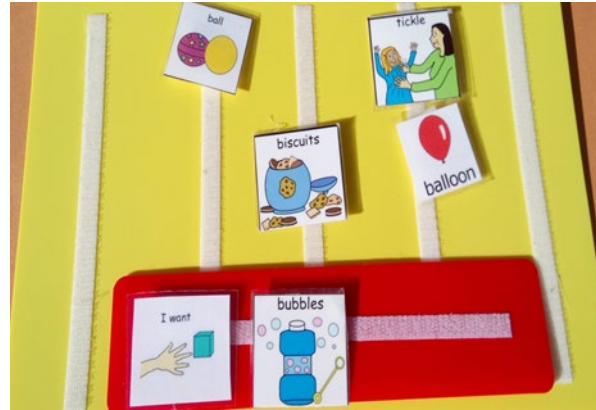
# Treatment

- Its important to know where a child is in their cognitive and language development (prelinguistic or linguistic) in order to determine effective treatment interventions
- Family centered therapy
- We use many different treatment modalities including:
  - AAC, activity/visual schedules, sign language, computer-based instruction, video modeling, CBT based therapy, ESDM and Floortime/DIR, social communication interventions

# Augmentative and Alternative Communication (AAC) Devices



# Picture Exchange Systems, Visual Schedules, Social Stories and Sign Language



- Images from [toddlertalk.com](http://toddlertalk.com), [www.additudemag.com](http://www.additudemag.com), [pinterest.com](http://pinterest.com), [theautismpage.com](http://theautismpage.com), [myclasswork2015.blogspot.com](http://myclasswork2015.blogspot.com)



# Role of the SLP

- Complete a thorough assessment and determine goals and treatment modalities
- Understanding the differences between girls and boys with ASD and cultural differences
- Referring for other services or other specialties
- Collaboration with other services (OT, PT, counseling, behavior intervention, school)
- Educating families and caregivers about speech and language development, autism and available services
- Be an advocate for the child and their family

# How to Help Parents:

- Empower them in the process
  - Understand where the family is at with the process
  - Check in with them about their child and how they themselves are doing
  - Be able to offer resources
- Ask them what goals they want to work on
  - Include them in the goal setting and treatment process
  - Set goals and measure progress and outcomes
  - Come alongside the family to support them

# Remember....

- Our brains and our communication skills are like rubber bands
- They are meant to be stretched and used
- Parents are skilled at anticipating their child's wants and needs but their child needs opportunities to stretch and learn and practice new skills and learned skills



# Key Points

- Speech language pathologists are skilled at assessing and treating social pragmatic language and assessing for autism
- Often parents will notice differences in their child's development and socialization around 14 months of age (Chawarska et al., 2007) and will start asking questions to their pediatrician
- ACT EARLY!! - Early intervention at the first sign of concern improves the outcomes for autistic children
- Refer these kids for evaluations to look at speech and language development or overall development or refer them for treatment



• Image from vectorstock.com

# References

- ASHA – American Speech Language Hearing Association: Autism Spectrum Disorder [www.asha.org](http://www.asha.org)
- ASHA – American Speech Language Hearing Association: Speech Sound Disorders – Articulation and Phonology [www.asha.org](http://www.asha.org)
- ASHA Leader: Apraxia a common occurrence in Autism, study finds from Sept. 1, 2015 issue  
<https://doi.org/10.1044/leader.RIB1.20092015.18>
- ASHA – American Speech Language Hearing Association: Communication Milestones [Communication Milestones: Age Ranges \(asha.org\)](http://www.asha.org)
- Centers for Disease Control and Prevention: [cdc.gov](http://cdc.gov) (Information for families)
- National Institutes of Health: [nih.gov](http://nih.gov)
  - Developmental Language Disorder and Autism: Commonalities and Differences on Language

# Additional Resources

- ASHA: [Communication Milestones: Age Ranges \(asha.org\)](https://asha.org)
- CDC: Information for families
  - [Milestone checker app \(available in English and Spanish\): https://www.cdc.gov/ncbddd/actearly/milestones-app.html](https://www.cdc.gov/ncbddd/actearly/milestones-app.html)
  - Milestone checklists: <https://www.cdc.gov/ncbddd/actearly/milestones/index.html>
  - Websites for families:
    - Infant and Toddler Nutrition, [healthychildren.org](https://www.healthychildren.org)
    - Just in Time Parenting
    - Family to Family
    - Positive Parenting Tips
    - Parent to Parent USA
    - State Children's Health Insurance Program (SCHIP)
    - Physical Developmental Delays: What to look for
    - Support for Social and Emotional Learning
  - Resources to Help Promote Your Child's Development:
    - Talking is Teaching: Talk, Read, Sign
    - Vroom
    - Zero to Three

# Additional Resources

- Additional resources:
  - Easter Seals: Autism Services
  - Birth to 5: Watch me Thrive