

# Augmentative and Alternative Communication Supports for Children with Autism Spectrum Disorders



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Center for Autism and Related Disorders  
at Kennedy Krieger Institute



# What is Augmentative-Alternative Communication (AAC)?

- all forms of communication other than verbal language that are used to indicate wants and needs
- includes gestures, facial expressions, written language, picture communication boards, voice output devices, etc.
- used to support previously established modes of communication or to replace non-functional modes of communication





# When should an AAC device be used?

- When the individual possesses an “expressive disorder that interferes with or prevents a child’s ability to develop and use oral language” (National Joint Committee for the Communication Needs of Persons with Severe Disabilities, 2014)
  - Severe articulation disorders
  - Non-verbal
  - Minimal language
  - Language processing difficulties



A black and white photograph showing several hands of different ages and skin tones stacked on top of each other, symbolizing support and unity.

# Why are AAC supports so important for children with ASD?

- Improve functional communication skills
- Increase participation in activities of daily living
- Increase independence in completing activities of daily living
- Increase participation in academic instruction
- Increase personal safety
- Improve social communication skills
- Decrease frustration which can lead to a decrease in undesirable behavior (i.e., self-injury and aggression)





# Which children with ASD would benefit from AAC supports?

- Most, if not all, children with ASD can benefit from some form of AAC support

Children with mild-moderate social/ communication deficits

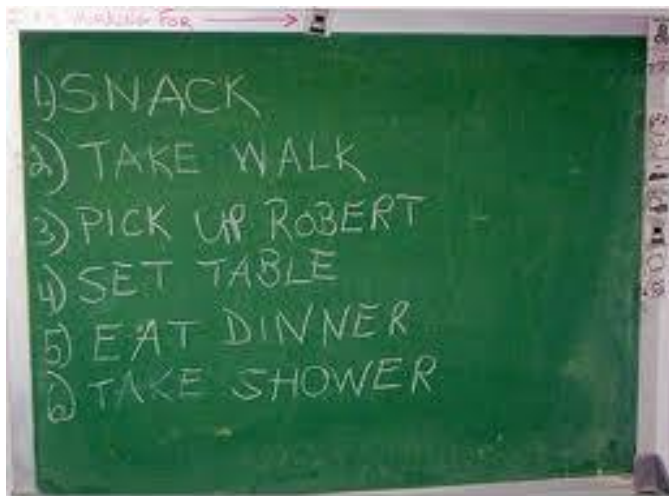
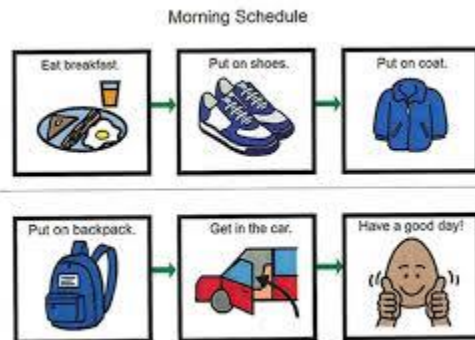
- Visual schedules
- Social stories
- Topic Boards

Children with moderate-severe social/ communication deficits

- Visual schedules
- Picture Communication systems
- Voice output devices



# AAC Supports- Visual Schedules





# AAC Supports- Social Stories

I do a good job of taking care of myself everyday

I'm proud of my efforts

I keep my body clean

I wash my face and hands

I wash my hair

I wear clean clothes

I pick out clothes to wear

I get dressed

I wear a jacket when it's chilly

I check my self in the mirror

I comb or brush my hair

I blow and clean my nose

I brush my teeth

I clip my finger nails

I clip my toe nails

I use lotion and sunscreen

I take my medicine

Sometimes I feel angry

All people feel angry some times

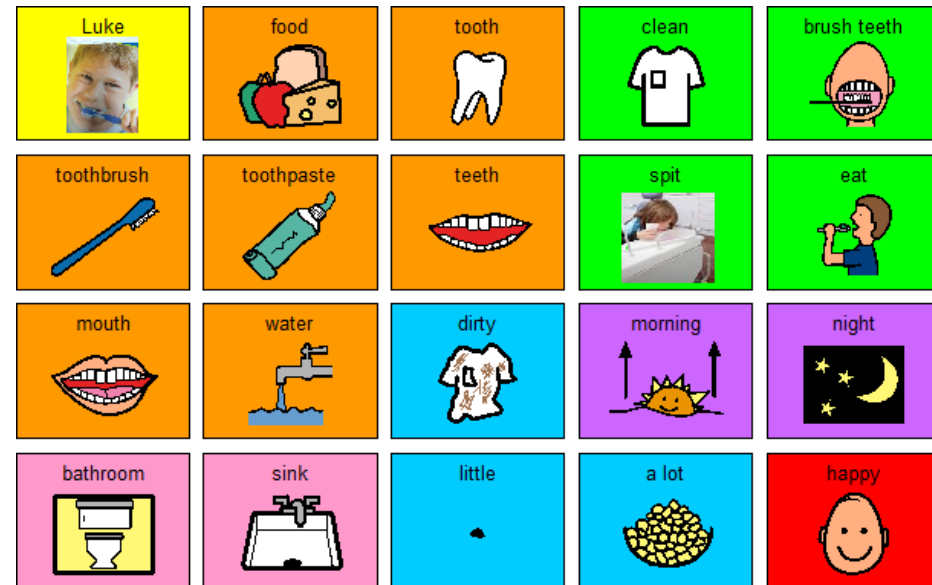
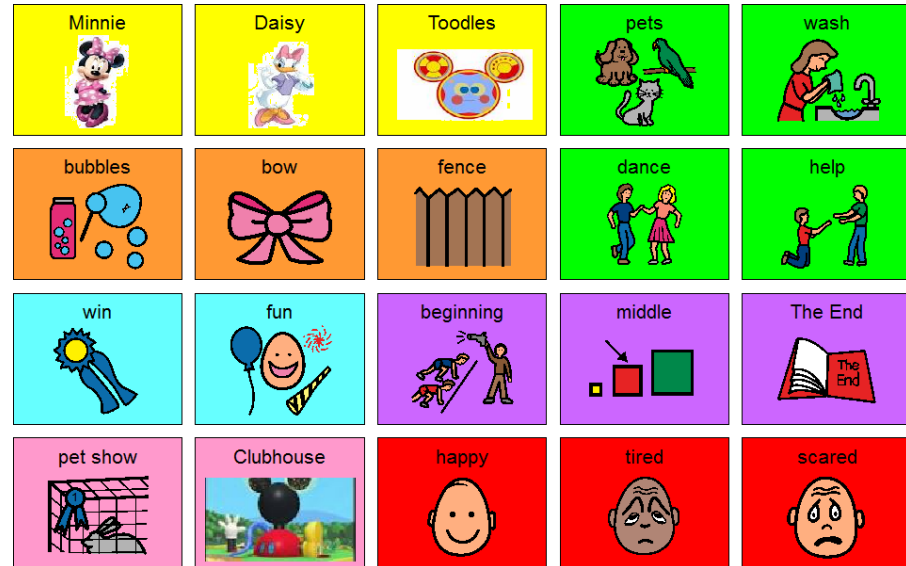
When I feel angry I will find my what

I can tell the about that I am angry

I can tell my words and say I am angry

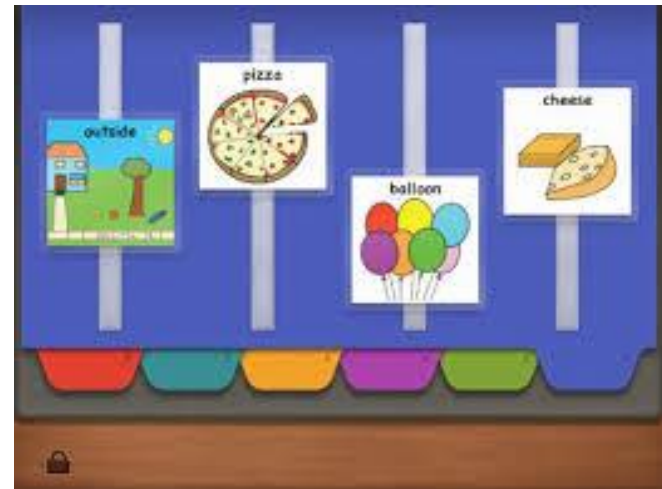


# AAC Supports- Topic Boards





# AAC Supports- Picture Exchange Communication System



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# AAC Supports- Flip 'N Talk



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# AAC Supports – Sign Language





# AAC Supports- Voice Output Devices

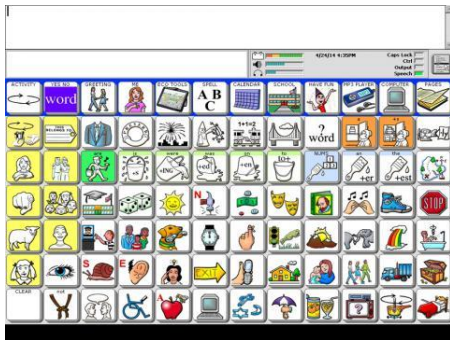



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# AAC Supports- iPad AAC apps



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# How can we determine which supports are most appropriate for a child with ASD?

- Pursue a speech and language evaluation
  - County-based resources
    - Request an Assistive Technology Evaluation through the child's public school system
  - Private sector resources
    - Kennedy Krieger Institute's Center for Autism and Related Disorders (CARD): AAC Evaluation, Picture Exchange Clinic, Functional Communication Clinic (phone: 443-923-7630)
    - Pathfinders for autism: [www.pathfindersforautism.org](http://www.pathfindersforautism.org)
    - American Speech-Language-Hearing Association: [www.asha.org](http://www.asha.org)



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# AAC Evaluations at CARD

- Standardized language assessment to obtain a level of language functioning
- Language Sample during play- based activities
- AAC Device trials- no/low- tech through high-tech







# AAC Evaluation through the school system

- Does not include language testing
  - Children should have language testing every 3 years
  - Based on speech and language goals
- Trials
  - Request made at IEP
  - 30 day trial
  - Put on IEP
    - Specific device should NOT be placed on IEP

| INDIVIDUALIZED EDUCATION PROGRAM (IEP) DRAFT |                                | IEP Draft #                    | Student Information               |
|--|--------------------------------|--------------------------------|-----------------------------------|
| STUDENT AND SOCIAL INFORMATION               |                                | PARENT/GUARDIAN I              |                                   |
| First Name: [ ]                              | Last Name: [ ]                 | First Name: [ ]                | Last Name: [ ]                    |
| Address: [ ]                                 | City: [ ]                      | Home Phone: [ ]                | Cell Phone: [ ]                   |
| State: [ ]                                   | Zip Code: [ ]                  | Email: [ ]                     | Home Address: [ ]                 |
| Grade: [ ]                                   | Date of Birth: [ ]             | IEP Team Meeting: [ ]          | IEP Meeting Date: [ ]             |
| Sex: [ ]                                     | Race: [ ]                      | IEP Meeting Location: [ ]      | IEP Meeting Location: [ ]         |
| Ethnicity: [ ]                               | IEP Team Member Name: [ ]      | IEP Team Member Role: [ ]      | IEP Team Member Organization: [ ] |
| IEP Team Meeting Date: [ ]                   | IEP Team Meeting Location: [ ] | IEP Team Meeting Location: [ ] | IEP Team Meeting Location: [ ]    |
| IEP TEAM PARTICIPANTS                        |                                | IEP TEAM MEETINGS              |                                   |
| IEP Team Member Name: [ ]                    | IEP Team Member Role: [ ]      | IEP Meeting Date: [ ]          | IEP Meeting Location: [ ]         |
| IEP Team Member Name: [ ]                    | IEP Team Member Role: [ ]      | IEP Meeting Date: [ ]          | IEP Meeting Location: [ ]         |





# AAC treatment- Functional Communication Clinic at CARD

- Parent Training
  - 6-12 weeks
  - Generalization
- Topics
  - Use of flexible language
  - Communicative functions
  - Initiating communication
  - Book activities
  - Activities of Daily Living
  - Play





# AAC treatment- Vocabulary Choices for children with Autism Spectrum Disorder

## Core and Fringe Vocabulary vs. Key Vocabulary



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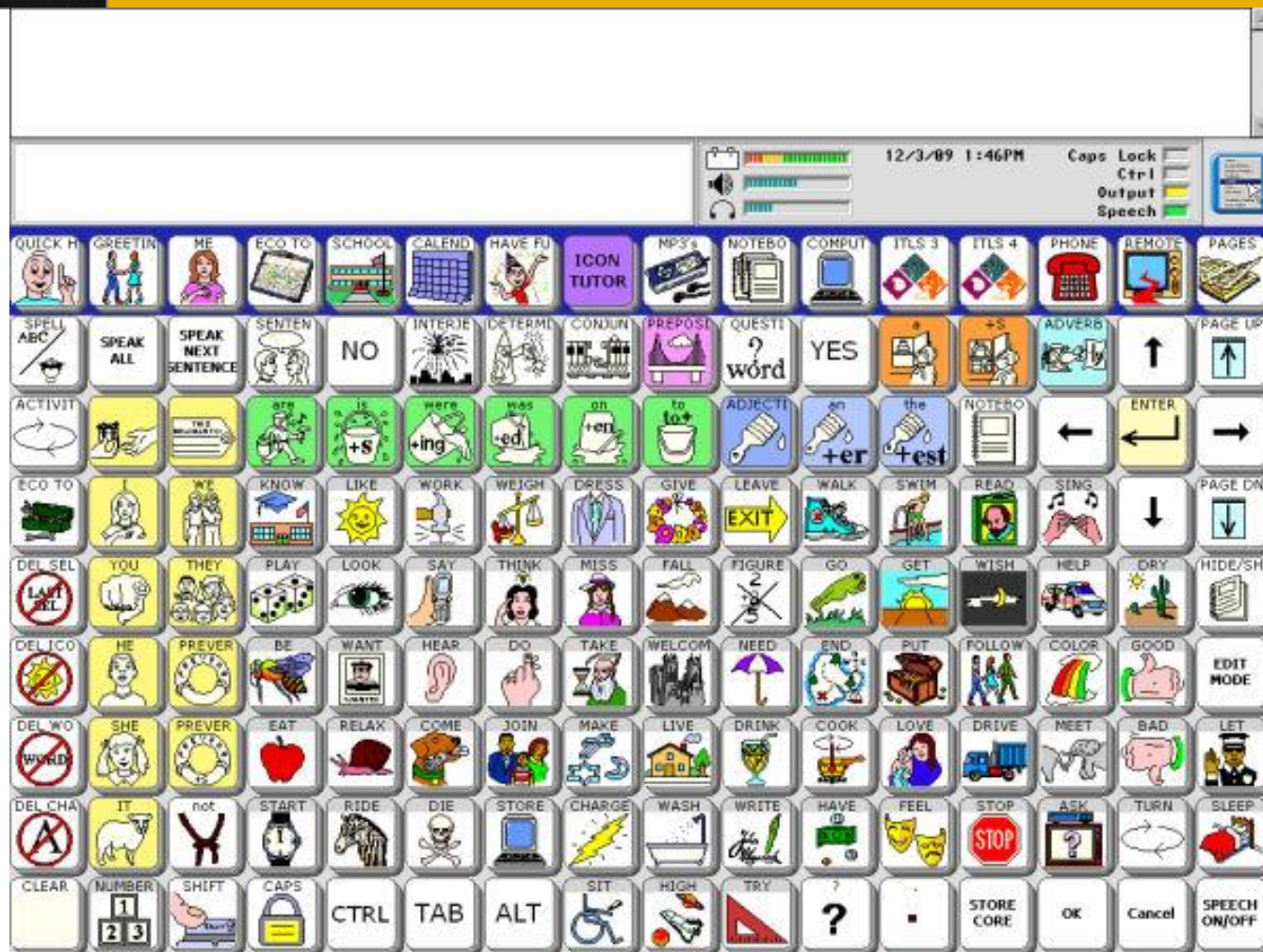
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# AAC treatment- Vocabulary Selection

- Core Vocabulary
  - A small set of simple words, in any language, that are used frequently and across contexts (Cross, Baker, Klotz & Badman, 1997)
  - 80% of language consists of core vocabulary



# AAC treatment- Vocabulary Selection



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# AAC treatment- Vocabulary Selection

- Fringe Vocabulary
  - More situation specific. Their importance changes from context to context and from person to person (The Bridge School, 2013)
  - E.g., evaporation, museum, funny, etc.
  - Topic Boards



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# AAC treatment- Vocabulary Selection

- Key Vocabulary
  - Recommended for children with Autism
  - Individual Vocabulary Selection
  - More motivating
  - Topic specific





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# How can we incorporate the use of AAC supports into the home, community, and education settings?

- Plan ahead
- Use routine-specific vocabulary
- Manipulate the environment to encourage communication
- “Tempt” the individual to communicate





# How can a family obtain AAC supports for their children?

- Pay out-of-pocket
- Complete a request via insurance company
- Access a device through the AT department in the child's school system
- MDTAP
  - [www.mdod.maryland.gov/mtap%20home.aspx](http://www.mdod.maryland.gov/mtap%20home.aspx)
  - phone: 800-832-4827
- Low Intensity Support Services (LISS)
  - [www.dda.dhmh.maryland.gov/SitePages/liss.aspx](http://www.dda.dhmh.maryland.gov/SitePages/liss.aspx)





# References

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[https://www.bridgeschool.org/transition/strategies\\_success/core\\_fringe.php](https://www.bridgeschool.org/transition/strategies_success/core_fringe.php).

