

## Early Intervention to Maximize Communication for Young Children with Autism, Cerebral Palsy, Down Syndrome, and Other Disabilities

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### INTERVENTION STEPS

- Step 1: Identify meaningful contexts for communication with your child
- Step 2: Provide effective means for your child to communicate
- Step 3: Select appropriate vocabulary for your child
- Step 4: Set up the environment to support your child's communication
- Step 5: Use appropriate interaction strategies to support communication



### INTERVENTION STEP 1

#### Identify meaningful contexts for communication

Choose contexts or situations that

- Are motivating for your child
- Provide lots of opportunities for social interaction
- Are appropriate to your child's development
  - For example, *infants* benefit most from social contexts that involve only the child and a partner (peek-a-boo games, tickling games, "raspberries", smiling games, bye bye games).
  - *Toddlers* benefit from social contexts that involve simple shared activities (reading books, singing songs, especially action songs).
  - *Preschoolers* benefit from social contexts that involve imaginative play with a partner (building blocks, playing cars or trucks, playing with dolls, stuffed animals or action figures) and also other activities (reading story books, singing songs, playing simple games like Go Fish and Candy Land).

### INTERVENTION STEP 2

#### Provide effective means for your child to communicate

- Select appropriate means for your child to communicate
  - Speech and speech approximations
  - Signs and gestures
  - Communication boards or books
  - Computers or SGDs
- Design appropriate assistive technologies for your child
  - Ones that are fun
  - Ones that are easy for your child to use

### INTERVENTION STEP 3

#### Select appropriate vocabulary for your child

- Select vocabulary that is
  - Motivating and fun
  - Functional
  - Appropriate to your child's development, culture and personality
- Introduce new vocabulary to your child regularly
  - Learn new signs
  - Add new words to communication books or assistive technologies
  - Use the new vocabulary frequently in meaningful situations as you interact and play with your child each day
    - Say and sign the words
    - Say the words and select them on your child's communication board or SGD

See <http://aackids.psu.edu> for further information.

## INTERVENTION STEP 4

### Set up the environment to support your child's communication

- Position your child to maximize vision, hearing, and motor skills
- Position yourself to maximize interaction
  - Sit directly in front of your child and position yourself at his or her eye level
  - Hold activities and materials in front of you in your child's line of sight
  - Use lots of expression and intonation in your voice
- Incorporate AAC into all of your interactions
  - Use AAC every time you play, read books, sing songs, talk to your child or engage in other daily activities such as mealtime or dressing
    - Use signs and make sure that your child has his or her hands free to sign as well
    - Have your child's communication board or speech generating device (SGD) available when you play or interact and make sure he or she can reach it

## INTERVENTION STEP 5

### Use interaction strategies to support your child's communication

- As you play, read books, sing songs, and complete daily activities with your child, provide meaningful opportunities for your child to communicate
- Use AAC as you talk with your child
  - Sign everything that you say or
  - Point to the appropriate symbols on your child's communication board, book or SGD
- Wait and allow your child the opportunity to communicate
  - Look at your child expectantly
  - Pause and give your child the opportunity to communicate
  - Wait at least 10 seconds
- Respond your child's attempts to communicate
  - If your child is trying to communicate, respond immediately in a positive way (*fulfill your child's intent* by providing the toy or activity that he or she requested or respond to your child's question, and *expand* on your child's message using AAC and speech)
  - If your child does not try to communicate even though you paused and waited, respond immediately and show your child how to communicate
- Have fun!
  - Children are most apt to learn if they are interested in the interaction and if they are having fun

## Research Results

This early AAC intervention was evaluated through a research study funded by the [National Institute on Disability and Rehabilitation Research](#) (NIDRR) as part of the Rehabilitation Research Center on Communication Enhancement ([The AAC-RERC](#)) (grant # H133E030018). <http://www.aac-rerc.com>

Participants included children with a wide range of special needs, including cerebral palsy, Down syndrome, and other developmental disabilities. All of the children made substantial gains in their language and communication skills.

- All of the children demonstrated significant increases in their rates of turn taking
- All of the children learned to participate in different types of interactions
  - To interact socially
  - To exchange information and learn
  - To express their needs and wants
- They all demonstrated significant increases in their vocabularies, learning many new words and concepts
- As the children grew, they learned to combine concepts to communicate more complex messages
- As preschoolers, many of the children developed phonological awareness skills and literacy skills; many of the children entered school as readers!
  - For further information on the literacy intervention for children with autism, cerebral palsy, Down syndrome and other disabilities, visit <http://aacliteracy.psu.edu>

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