You Think Your Child Is Ready For AAC: Where to Begin?

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Rebecca Goldwasser, M.A., CCC-SLP
Allison Woods, M.A., CCC-SLP
ASHA Definition of Augmentative and Alternative Communication (AAC)

What is AAC?

- Augmentative and alternative communication (AAC) includes all forms of communication (other than oral speech) that are used to express thoughts, needs, wants, and ideas. We all use AAC when we make facial expressions or gestures, use symbols or pictures, or write.
- People with severe speech or language problems rely on AAC to supplement existing speech or replace speech that is NOT functional. Special augmentative aids, such as picture and symbol communication boards and electronic devices, are available to help people express themselves. This may increase social interaction, school performance, and feelings of self-worth.
- AAC users should not stop using speech if they are able to do so. The AAC aids and devices are used to enhance their communication.

https://www.asha.org/public/speech/disorders/AAC/

ASHA Definition of Augmentative and Alternative Communication (AAC)

What are the types of AAC systems?

- Unaided communication systems – rely on the user’s body to convey messages. Examples include gestures, body language, and/or sign language.
- Aided communication systems – require the use of tools or equipment in addition to the user’s body. Aided communication methods can range from paper and pencil to communication books or boards to devices that produce voice output (speech generating devices or SGD’s) and/or written output. Electronic communication aids allow the user to use picture symbols, letters, and/or words and phrases to create messages. Some devices can be programmed to produce different spoken languages.

http://www.asha.org/public/speech/disorders/AAC/
Most Common Diagnoses with the use of AAC

Autism
- Sign Language
- PECS
- Higher Tech Speech Generating Devices

Verbal Apraxia
- Child often has some form of verbalizations-question of intelligibility
- Sign Language
- Higher Tech Speech Generating Devices

Most Common Diagnoses – Cont.

Down Syndrome
- Sign Language
- Lower Tech. Devices
- High Tech Speech Generating Devices
- PECS

Cognitive Deficits
- Caused by other syndromes
- Lower IQ
- Sign Language
- Pictures/PECS
- Lower Tech. Speech Generating Devices

Most Common Diagnoses - Cont.

Cerebral Palsy-CP
- Access Issues
  - Direct Selection
  - Scanning
  - Eye Gaze

Cognitive Deficits
- Sign Language
- Low Tech.-Boards and Speech Generating Devices
- High Tech.-Speech Generating Devices
When to Introduce AAC?

- Any age!
  - Functional Communication is primary goal: AC should be introduced as early as necessary to support receptive and expressive language growth.
  - Expressive language growth should not have to wait on improved speech skills.
  - Children with diagnoses such as Down Syndrome, that we know will have delayed speech skills, have made great progress when introduced to AC early (as early as 6 months!).

Speaking to a Family about AAC

- CCHMC Handout: AC Benefits located on handouts
- Research has shown that children who are not able to communicate effectively by some means are at great risk for cognitive, social, emotional and behavioral problems.
- The purpose of AAC is to supplement your child’s existing method of communication.
  *Emphasize that it will NOT replace their speech!
- Research has shown that AC has been highly effective in increasing speech development and production in children with a variety of diagnoses.

Continuum of Communication Independence

(From Patricia Dowden from the University of Washington)

Communication is not ‘independent’ if:
1. Utterances can only be understood by some people, or...
2. Other people have to program all vocabulary in a device, or...
3. He cannot spell well enough to compose novel utterances, or...
4. She is given no opportunity to communicate what she wants to say, or...
5. His communication system doesn’t match his motor skills making it difficult to control, or...
6. Her communication system doesn’t match her communication needs, or...
7. There are partners who influence communication through cuing, or...
8. He has hidden vision impairments making it hard to see the symbols, or...
9. She has a hidden hearing impairment making it difficult to hear what is said, or...
10. He has been given insufficient training and time to learn to use his AAC system, or...
11. She has no access to a communication system at times, or...
12. He cannot see the display on his system in some light conditions, or...
13. No one believes she has anything worth listening to… etc.”

http://depts.washington.edu/augcomm/03_cimodel/commind1_intro.htm
Types of Communication
[Dr. Patricia Dowden from the University of Washington]

<table>
<thead>
<tr>
<th>Definition</th>
<th>Context-Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-symbolic communication, strategies, body language, facial expression</td>
<td>Variety of messages and expressions, ability to communicate anything in any context</td>
<td>Can talk with input, output and context changes</td>
</tr>
</tbody>
</table>
| Vocab chosen by others: 
- Non-symbolic meaning 
- Repeated use and meaning by others | Communicates novel messages independently | Can spell |

<table>
<thead>
<tr>
<th>Constraints and Partners</th>
<th>Context-Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlimited contexts, unlimited partners</td>
<td>Multiple contexts and multiple partners</td>
<td>Limited contexts and partners may not always choose to be independent</td>
</tr>
</tbody>
</table>

Vocabulary Selection

- Core Vocabulary – refers to the words and messages that are commonly used by a variety of individuals and they occur very frequently
  - Word lists have been developed indicating common vocabulary
  - Examples of existing core vocabulary systems are MinSpeak, WordPower, Gateway
- Fringe Vocabulary - refers to vocabulary words and messages that are specific or unique to the individual
  - Ex. Specific names of people, locations, and activities

Vocabulary Selection

- Social Scripts
  - Involves breaking an activity into steps and recording all the words and expressions during that activity
- Environment or Ecological Inventories
  - The person and their peers are observed and the communication messages are recorded
  - Involves observing in their environment, determining needs, interviewing individuals, and choosing vocabulary.

http://depts.washington.edu/augcomm/
### Vocabulary Selection

- **Communication Diaries**
  - Records needed vocabulary throughout the day on a piece of paper/notebook

- **Checklists**
  - Checklists have been published that provide ideas about what vocabulary can be expected

### Vocabulary Selection Strategies

**Strategies**

- **Emergent**
  - Vocabulary: The first, reliable method of symbol systems
  - Vocabulary: Communicate with more people
  - Vocabulary: Improve efficiency

- **Context Dependent**
  - Vocabulary: Expected for the individual
  - Vocabulary: Ideas about what vocabulary can be expected
  - Vocabulary: Customized vocabulary

- **Independent**
  - Vocabulary: Core vocabulary
  - Vocabulary: Non-core vocabulary

### Other Low-Tech Trial Options

- **PECS**
- **Schedules and Positive Behavioral Supports**
- **Switches**
- **Static Screen Devices**
- **iPad2 with Low-Tech Apps (e.g., GoTalk, TapSpeak Choice, Sounding Board, etc.)**
Switches

- Button Switch
- Switch Interface Pro
- BigMack switch
- Step by Step w/Levels
- SAM – Trackball (Switch Adapted)
  - This trackball has been adapted to accommodate up to 3 switches to control mouse buttons and/or keystrokes.

Static Screen Devices

- CheapTalk
- GoTalk

- 32 Icon Multi-level Devices
  - SmartSpeak
  - 32 Message Communicator
  - Tech Talk/Speak 32

- Communication Skill Builder
  - 7 levels (7 overlays)
  - 5 overlays (1, 2, 4, 8, 16)

How to make a Communication Board
(for Low-Tech Trials)

- Refer to handout How to Make a Communication Board
- Examples of several sample communication boards included in handouts
- Boardmaker and Matrix Maker software can be used to create communication boards
- Decide what activity this board will be for
- Decide if this board will be phrase based or word based
- Decide how many cells will be on the board
- Choose Vocabulary
- Decide what symbols you want to use
How to make a Communication Board - Cont.

- Choosing proper placement of Vocabulary
  - One may color code the categories: may follow modified Fitzgerald Key
  - there are visual difficulties it is best to make all the icons red or yellow to help the person see the pictures better.
  - Remember one does not have to fill every cell on a template.
  - If you are making several boards and have some of the same words on all the boards (i.e. all done) it is best to place it in the same place on each board.

Creating Visual Scenes on Static Screen Displays

- A visual scene is a picture, photograph, or virtual environment that depicts and represents a situation or experience
  - For example, digital photos presenting visual scenes of the child's experiences
- Language concepts are embedded under "hot spots" in visual scenes
- VSIs can be implemented
  - On dynamic display speech generating devices (DSSDs)
  - As low tech systems
  - Patient Profiles for Visual Scenes
    - Functional or Emerging Communicator
    - Birth-3; Autism
    - For phrase-based language to share experiences and stories
    - As an introduction to AC for some children who are still learning to understand icons/symbols.
- Example of Visual Scene on Communication Builder
- Expanding visual scenes to include single icons

Low-Tech Goals for Trial Therapy

- To demonstrate progression from object boards, to picture boards, to complex individualized computerized communication system.
- To demonstrate progression for scanning pictures from 2 locations to 32 locations, via automatic scan or direct scanning.
- To trial use 2 icons to produce different word combinations (e.g., noun + verb, verb + noun, noun + noun, possessive + noun).
- To use one icon to answer simple "what" and "where" questions.
- To use one icon to use early modifiers (e.g., big/little, hot/cold, etc.).
- To use one icon to comment, call, or interpret.
- To use 2 icons to combine noun + verb, verb + noun, noun + adjectives.
- To use 2 icons to request object or action (e.g., "want + X").
- To use 2 icons to reject, protest, or for cessation of an activity (e.g., "no + X").
- To use 3 icons to request (e.g., I + want + X).

- Other resource: www.prentrom.com "Language Lab"
Examples of High-Tech Options

- Maestro
- Vantage Lite or Springboard/PASS
- iPad or iPod: Proloquo2go, TouchChat, SonoFlex Lite (free) app
- NovaChat 7 by Saltillo
- WordPower with a variety of devices
- ChatPC (or other handheld dedicated devices)
- Boardmaker with Speaking Dynamically Pro
- Keytec “Magic Touch” Screen

High-Tech Goals for Trial Therapy

- To demonstrate categorization skills required to navigate # of pages to locate needed vocabulary.
- To independently use function keys (e.g., clear button, scrolling window, delete button, etc.) when constructing communication messages.
- To use augmentative system to communicate more often than gestures.
- To use one icon to label, comment on, or request objects, actions, and descriptors.
- To use one icon to reject, protest, or for cessation of an activity.
- To use one icon to answer/ask simple “what” and “where” questions.
- To use one icon to request an object, action, or assistance.
- To use one icon for calling, greeting, and salutations.
- To use one icon to answer “what’s that?”
- To use 2 icons to produce different word combinations (e.g., noun + verb, verb + noun, noun + noun, possessive + noun).
- To use 2 icons to use early modifiers (e.g., big/little, hot/cold, big s, wet y, etc.).
- To use 2 icons to label during picture description tasks (e.g., “girl runs”).
- To use 2 icons to request or comment on object or action (e.g., “want = X”, “see = X”, “hear = X”).
- To use 2 icons to reject, protest, or for cessation of an activity (e.g., “no X”).
- To use 3 icons to request (e.g., “I want = X”).

Activity Ideas

- Greetings and Salutations
- Snack time or lunch
- Motor room/gym/co-therapy
- Group or circle time
- Singing
- Schedule time/transitions
- Games
- Play-based activities
More Activity Ideas

- Repetitive Books
  - My Class Took a Trip to the Zoo
  - Brown Bear
  - Where is Spot?
  - I Went Walking
- Low-tech and High-Tech Adaptations
  - PASS pages (Brown Bear Pages)
  - Using the language program as is to work on navigating, categorization.

Resource List on Accessing Different Devices

- [www.atohio.org](http://www.atohio.org)
- CCHMC Rubinstein Library:
  - Must be organized by CCHMC SLP, call to reserve: 513-636-4626
- [www.ocali.org](http://www.ocali.org)
- Miami Valley Regional Center:
  - [http://www.mcesregionalcenter.com/lending_library.html](http://www.mcesregionalcenter.com/lending_library.html)
- County school systems should have a loaning library for SLPs in the school (e.g., Southwestern Ohio Assistive Technology Consortium)

Challenges with Implementing AAC? Try a Participation Plan

- A participation plan is the team’s map of daily activities for successful implementation of AAC.
- See PowerPoint by Julie Hibner, M.A., CCC-SLP, CCHMC DDBP SLP (originated by Sandra Grether, CCC-SLP), and example participation plan in the handouts for this course.

(Participation Plan adapted from work Sarah Blackstone did in Augmentative Communication News, September, 1995)
AAC Evaluation

- Includes both high-tech (e.g., dynamic screen speech generating) and low-tech devices (e.g., picture systems, static screen speech generating, switches, etc.).
- Typically lasts one to two hours.
- It is important that the patient be seen for trial AAC therapy (either privately or at school) before being referred for an AAC evaluation.
  - The referring SLP should try pictures, low-tech devices, or (when appropriate) high-tech language programs or devices prior to the evaluation.
- It is necessary for the evaluator to receive questionnaires from the parent, private SLP, and school SLP before the evaluation is scheduled to ensure it is as productive as possible. (See example CCHMC questionnaires in handouts).
- iPads: Please remember that every child should be seen for a complete AAC evaluation before recommending and iPad or app for a child’s use as a SGD.

When to Refer?

Questions to ask yourself:

1. Do you have any questions about how the patient will access a device, positioning, and/or visual scanning issues?
2. Has your patient/child been exposed to picture symbols?
3. Have you tried either a low-tech (e.g., communication builder, etc.) or a high-tech (e.g., DynaVox V or PRC Vantage Lite) device (or language software from a high-tech device)?
4. Have you talked with the family about Augmentative Communication? Does the family understand what AC is and are they ready to begin using AC with their child?
5. Before referring, ask yourself again: do you have any questions or concerns about how the patient will access the device, positioning, and/or visual scanning issues? *See CCHMC Referral Chart in handouts for additional help in Greater Cincinnati area

School Funding vs. Private Funding

(taken from “Referral, Funding, and Resources: School Funding vs. Private Funding for SGDs” by Sherry Lanyi, M.A., CCC-SLP and Kristi Murphy, M.A., CCC-SLP, presented at “Collaborating for Children with AC Needs” at CCHMC on 09/23/2011)

- The basic difference between getting a device funded through the school vs. getting it funded privately is the focus on the need.
- School funding is based on educational need and is determined by the IEP goals.
- Private funding is typically done through an insurance provider and is based on “medical necessity”.
The Benefits of Augmentative Communication (AC)

Augmentative communication (AC) refers to sending messages by some means other than speech or writing. If your child has recently received a recommendation to use augmentative communication, he/she is not alone. In our country, approximately 2 million people are unable to effectively use only speech and/or handwriting to communicate.

Communication is the essence of life. Research has shown that children who are not able to communicate effectively by some means are at great risk for cognitive, social, emotional and behavioral problems.

The purpose of AC is to supplement your child’s existing method of communication. AC can temporarily supplement communication strategies or may be used on a permanent basis and designed to expand as your child develops.

Many parents worry that AC discourages speech development. To the contrary, research has shown that AC has been highly effective in increasing speech development and production in children with a variety of diagnoses. In one study, AC strategies promoted the development of expressive and receptive language, increased ability to transition from one activity to another and assisted with the learning of spatial concepts. Other benefits include a significant decrease in negative behaviors such as tantrum, crying and whining, which occur when a child is unable to express wants or needs effectively.

Parents were asked to describe the benefits experienced by their children using AC. The most reported benefit was independence, which was defined as their child’s ability to plan the activities of their daily lives and follow through with those plans. The second most reported benefit was successful communication in a larger variety of settings including community, school and home with significantly more communication partners.

Overall, AC can impact your child’s quality of life by potentially increasing language development, communication, social interaction, school performance, self-esteem and independence.

We are very excited to assist you and your child in the process of assessment and implementation of an AC system. If you have any further questions concerning the benefits of AC, please feel free to direct those questions to your evaluating and/or treating Speech/Language Pathologist.
References


Websites

“Introduction to augmentative and alternative communication”

http://www.asha.org/public/speech/disorders/acc_primer.htm
“Augmentative communication: A glossary”
Communication Observation Questionnaire

Cincinnati Children’s Hospital Medical Center (CCHMC) is requesting your assistance as we gather information to better improve the communication skills of a child in your school. Please observe the communication interactions of children with TYPICAL communication development to complete the questions below. It will be most beneficial if you can provide examples of specific words and phrases the children used during the communication opportunities. Reviewing the questions beforehand will help guide your observation as our intention is not to interrupt any teaching or learning experiences. Thank you for your time.

Observer Name: _________________________________________________________

Observation Date: _______________________________________________________

Observation Time Frame: _________________________________________________

Observer Job Description/Responsibility (please circle one):

- Cafeteria Worker
- General Education Teacher
- Principal
- Nurse
- Playground Monitor
- Secretary
- Special Education Teacher
- Speech Therapist
- Janitor/Custodian
- Occupational Therapist
- Instructional Assistant
- Physical Therapist
- Specials Teacher:
- Physical Education
- Music
- Art

Brief Activity Description:
1. How did the children gain your attention and the attention of their peers prior to communicating greetings, questions, comments, information? What did they SAY to gain the attention of others?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

2. How did the children greet one another throughout the time frame whether it be at the beginning of an activity or to a novel communication partner in the middle of an activity?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

3. What did the children SAY to tell each other and adults goodbye during the time frame?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

4. What did the children SAY to introduce a new topic such as sharing a personal experience or suggesting a different game?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

5. What things did the children SAY or DO to one another to playfully tease each other?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

6. What things did the children SAY to indicate that they may need help? Consider that they may say things like “I don’t get it” or “I can’t do this!” to request it indirectly.
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
7. What did the children SAY to indicate approval and/or acceptance of an activity, assignment, game, comment, request, or daily routine such as going to recess?
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

8. What did the children SAY to indicate rejection or protest of an activity, assignment, game, comment, request, or daily routine such as recess ending?
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

9. What things did the children SAY to gain social closeness to their peers when building friendships (e.g., offer to help them with work, ask to play a game with them, tell them they like their shoes/backpack, etc.)?
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

10. What jokes did the children tell today?
    _____________________________________________________
        ___________________________________________________
        ___________________________________________________

Please feel free to use the back sides of these pages to provide any additional observations. Please return this form to the caregiver you received it from. Thank you again for your time in completing this questionnaire. Your observations are very much appreciated!
How to Make a Communication Board

1. Decide what activity this board will be for
   (i.e. snack, bed time, field trip to the zoo)

2. Decide if this board will be phrase based or word based
   (word based is better for making novel sentences)

3. Decide how many cells will be on the board
   You can use 2, 4, 8, 16, and 32. The number of cells is dependent on the language development of a particular individual, vision, and the ability to scan a certain amount of pictures. If using Boardmaker there are already pre-made templates that one can use or one can make a template from scratch. If one does not have a computer program to make boards one can draw a template and then copy it before filling it in with pictures.

4. Choose Vocabulary
   To come up with the vocabulary for the communication board it can be done in one of two ways script the activity or observe the person in certain situations. To script the activity one has to think in ones head how it would play out. For example, to play with play dough one might script it this way:
   - I want red play dough
• I want blue play dough
• Let’s roll the play dough
• It feels soft
• I don’t like how it feels
• I want the horse cookie cutter
• I want the car cookie cutter.
• This is fun.
• All done.

If you are to observe a person in a certain situation you would document what a person may want to say and can’t.

5. Decide what symbols you want to use
You can use black and white drawings or color line drawings (i.e. Board maker), digital pictures, or Google images from the internet.

6. Choosing proper placement of Vocabulary
It is best to group like words together. For example, put all social statements together, pronouns together, action words together, descriptive words together, and nouns together. It is also helpful to put social statements all the way over to the left with than pronouns, than actions, than descriptors, and then nouns. This helps to build sentences and promote literacy.
One may color code the categories to help see where all the category words are such as the Modified Fitzgerald Key (this is located on Blackboard)

If there are visual difficulties it is best to make all the icons red or yellow to help the person see the pictures better.

Remember one does not have to fill every cell on a template.

If you are making several boards and have some of the same words on all the boards (i.e. all done) it is best to place it in the same place on each board. This helps with memory and motor planning.

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Fitzgerald Key

The design for the original Fitzgerald Key is shown below. It was originally designed to teach deaf children to sequence sentences according to traditional spoken English word order. It can be helpful as a consistent framework for communication displays since it follows a predominantly English word order. The symbols are ordered in linear columns as follows:

```
<table>
<thead>
<tr>
<th>PEOPLE</th>
<th>VERBS</th>
<th>PREPOSITIONS</th>
<th>ADJECTIVES</th>
<th>THINGS</th>
<th>PLACES</th>
<th>TIMES</th>
<th>SOCIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>* QUESTION WORDS</td>
<td></td>
<td>CONJUNCTIONS</td>
<td>ADVERBS</td>
<td>OBJECTS</td>
<td></td>
<td></td>
<td>AMENITIES</td>
</tr>
</tbody>
</table>

* Question words were not in the original Key but since they introduce a sentence, it is appropriate to place them here.

In the far left column of the display as it faces the user, appear question words and people (color coded with yellow shading). Next to people are verbs (green), followed by prepositions, conjunctions, articles (blue) then adjectives and adverbs (also blue), then all nouns and times (orange). The last column in the far right has social phrases (pink).

These columns can be adjusted based on whether there are words in each category or not. You will see this coding used by most manufacturers of speech generating devices to help with establishing a consistent system across users to assist them with finding vocabulary as easily as possible.
<table>
<thead>
<tr>
<th>orange</th>
<th>eyes</th>
<th>nose</th>
<th>mouth</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="orange.png" alt="Orange" /></td>
<td><img src="eyes.png" alt="Eyes" /></td>
<td><img src="nose.png" alt="Nose" /></td>
<td><img src="mouth.png" alt="Mouth" /></td>
</tr>
<tr>
<td>stem</td>
<td>pumpkin</td>
<td>fun</td>
<td>yucky</td>
</tr>
<tr>
<td><img src="stem.png" alt="Stem" /></td>
<td><img src="pumpkin.png" alt="Pumpkin" /></td>
<td><img src="fun.png" alt="Fun" /></td>
<td><img src="yucky.png" alt="Yucky" /></td>
</tr>
<tr>
<td>cut</td>
<td>witch hat</td>
<td>face</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td><img src="scissors.png" alt="" /></td>
<td><img src="black_hat.png" alt="witch hat" /></td>
<td><img src="face.png" alt="face" /></td>
<td></td>
</tr>
<tr>
<td>dress</td>
<td>shoes</td>
<td>broomstick</td>
<td></td>
</tr>
<tr>
<td><img src="green_dress.png" alt="dress" /></td>
<td><img src="gray_shoes.png" alt="shoes" /></td>
<td><img src="broomstick.png" alt="broomstick" /></td>
<td></td>
</tr>
<tr>
<td>glue stick</td>
<td>color</td>
<td>look</td>
<td></td>
</tr>
<tr>
<td><img src="glue.png" alt="glue stick" /></td>
<td><img src="color.png" alt="color" /></td>
<td><img src="look.png" alt="look" /></td>
<td></td>
</tr>
<tr>
<td>green</td>
<td>black</td>
<td>orange</td>
<td>brown</td>
</tr>
<tr>
<td><img src="green.png" alt="green" /></td>
<td><img src="black.png" alt="black" /></td>
<td><img src="orange.png" alt="orange" /></td>
<td><img src="brown.png" alt="brown" /></td>
</tr>
</tbody>
</table>
hello
How are you?
What's your name?
What did you do today?

I'm fine
My name is ____.
Today, I...

What will you do tomorrow?
Have a nice day
see you later
goodbye

Tomorrow, I will...
<table>
<thead>
<tr>
<th>I</th>
<th>want</th>
<th>sprinkle</th>
<th>cookies</th>
</tr>
</thead>
<tbody>
<tr>
<td>big</td>
<td>out</td>
<td>icing</td>
<td>crackers</td>
</tr>
<tr>
<td>little</td>
<td>on</td>
<td>M &amp; M's</td>
<td>napkin</td>
</tr>
<tr>
<td>off</td>
<td>knife</td>
<td></td>
<td>plate</td>
</tr>
</tbody>
</table>
sandwich
blocks
basketball
backpack
book
mouse
sink
soccer
school
Resource List on Accessing Different Devices
What is AT Ohio?

- Assistive Technology of Ohio (AT Ohio) is a federally funded nonprofit organization housed at The Ohio State University. AT Ohio's fiscal agent is The Ohio State University Research Foundation. AT Ohio is the officially designated tech act program for Ohio.

- The Office of Special Education and Rehabilitation (OSERS), a division of the U.S. Department of Education, provides funding for all tech act programs. Each state and U.S. territory provide appropriate services under the guidelines of the Assistive Technology Act of 2004.

How can they help?

- Adaptive Toys
- Lending Library
- Low Interest Loans to Purchase Assistive Technology
Rubinstein Library at CCHMC

• Located at 3430 Burnet Avenue (MOB Building), 2\textsuperscript{nd} Floor
• Loans \textbf{MUST} be coordinated by a CCHMC SLP and be followed (for therapy) by a CCHMC SLP regularly.
• Must bring $50 check (deposit) and copy of driver’s license.
• See Rubinstein Library AT list in handouts
• Call to reserve: 513-636-4626
OCALI
Ohio Center for Autism & Low Incidence

- [www.ocali.org](http://www.ocali.org)
- Serves families, educators, and professionals working with students with autism and low-incidence disabilities, including autism spectrum disorders, multiple disabilities, orthopedic impairments, other health impairments, and traumatic brain injuries.
- Services include resources on disabilities, annual conference, autism and AT internet modules, services and supports database, and OCALI lending library
Miami Valley Regional Center

- [http://www.mcescregionalcenter.com/lending_library.html](http://www.mcescregionalcenter.com/lending_library.html)

To reserve equipment, please contact Carol Dittoe at (937) 236-9965 or [Carol.Dittoe@mcesc.org](mailto:Carol.Dittoe@mcesc.org)

Visit website to inquire about:

- Static Display Communication Devices
- Dynamic Display Communication Devices
- Access Equipment
- Portable Word Processors
- Software for PC or Mac
Southwestern Ohio Assistive Technology Consortium

• Contact Information:

Southwest Ohio Assistive Technology Consortium
www.hcesc.org – click on “what we do”, click on “CRES”
11083 Hamilton Ave., Cincinnati, OH 45231

Terri Densford (equipment)
p. 513-674-4278
Terri.Densford@hcesc.org

Peggy O’Dell (scheduling)
p. 513-674-4296
Peggy.Odell@hcesc.org

Consultants:

Deborah McGraw
p. 513-674-4230
Debbie.McGraw@hcesc.org

Teresa Clevenden
Teresa.Clevenden@hcesc.org

Penny Cesco (Butler, Warren)
Penny.Cesco@hcesc.org

Jill Jump (Clermont)
Jill.Jump@hcesc.org
Current Consortium Districts

- Hamilton County
  - Deer Park
  - Finneytown
  - Forest Hills
  - Indian Hill
  - Loveland (3 counties)
  - Maderia
  - Mariemont
  - Mason (Warren Co.)
  - Mt Healthy
  - North College Hill

- Northwest
  - Oakhills
  - Princeton
  - Reading
  - Southwest
  - St. Bernard
  - Sycamore
  - Three Rivers
  - Winton Woods
  - Wyoming
Current Consortium Districts

- Butler County
  - Lakota
  - Middletown

- Clermont County
  - Clermont County ESC classes
  - Milford

- Warren County
  - Carlisle
  - Kings Local
  - Lebanon City
  - Little Miami
Augmentative Communication Participation Plan

Adapted from Augmentative Communication News, September, 1995

Julie Hibner, M.A., CCC-SLP
### PARTICIPATION PLAN FOR

#### SCHOOL YEAR 20__ TO 20__

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>IEP GOALS</th>
<th>EXPECTATIONS OF PEERS</th>
<th>EXPECTATION OF _____</th>
<th>ASSISTIVE TECH</th>
<th>PEER</th>
<th>STRATEGIES/SUPPORTS</th>
<th>FAMILY</th>
<th>RESOURCE/TEACHER</th>
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<tr>
<td>THIS IS A WORKING DOCUMENT. CHANGES WILL BE MADE THROUGHOUT THE YEAR ADDRESSING EXPECTATIONS OF THIS CHILD, TECHNOLOGY SUPPORT, AND ASSISTANCE BY FAMILY, PEERS, INSTRUCTIONAL AIDE, TEACHER, RESOURCE TEACHER, AND THERAPISTS.</td>
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PAGE
The Participation Plan is the team’s map of daily activities. Unlike an action plan, the participation plan focuses on what everybody must do to allow the client to participate in daily activities.
Participation plans specify:

- Team’s expectations – the level of an individual’s participation
- Tools – what equipment and strategies are required
- Support strategies – who is responsible for what.
Developing the Plan

• The first step is to identify the individual’s daily and weekly schedule of activities. One person (i.e. special educator/inclusion specialist) generally drafts this part of the participation plan. The team may modify the plan if other activities are identified. Activities should not only include scheduled classes, but scheduled breaks as well such as lunch, and home room or after school activities.
Developing the Plan

• The second step is to develop a plan for each activity – each team member should come prepared for the activity they are responsible for:

• Identify routines or activities that occur throughout each day – include both academic and social (e.g. circle time/morning routine, snack/lunch, recess, Science class, reading, writing, Math class)

• Identify IEP goals that can be addressed (and documented) during this activity.
Developing the Plan

• Identify expectations for student
  – Identify expectations for other students in the classroom for this activity.
  – Match the expectations of your student as closely as possible to what the other students will be doing during this activity.
  – Accommodations (number, low tech, high tech) should level the playing field.
Developing the Plan

• Low tech vs. high tech
  – Match the expectations of your student as closely as possible to what the other students will be doing during this activity.
  – Accommodations (number, low tech, high tech) should level the playing field.
  – Balance speech vs. flexibility of the message
  – Identify which strategy to use for the student to be the most successful
Developing the Plan

• Identify support persons
  – Peers are powerful mentor and partners – how can they assist?
  – Train team members to program and use the speech generating device – determine primary person to assist and troubleshoot
  – One team member should be the primary contact with manufacturer or go-to person when SGD not working properly
  – One person should be assigned to collect data on goals – recommend revision when needed
Developing the Plan

• Each activity may require a different communication strategy. This means that multiple modes of communication will be needed throughout the day.
Developing the Plan

• Meeting as a team will allow everyone to be consistent in their strategies for supports, level of cueing, and presentation of materials. It also promotes brainstorming and identifying increased opportunities for communication interactions.
Participation Plan

- **Questions to Keep in Mind**

- How can we utilize available technology in ways that truly give students equal access to the classroom curriculum?
- How can teachers use technology as an instructional tool that can provide an environment where children with different learning styles and capabilities work cooperatively to accomplish the curriculum goals?
- What can we do to help support the process whereby peers of included students become familiar with their technology and become natural classroom technology aides, thus enabling the adults to recede further in the background during the student’s interaction with peers?
## Participation Plan for School Year 20__ to 20__

<table>
<thead>
<tr>
<th>Activity</th>
<th>IEP Goals</th>
<th>Expectation of Peers</th>
<th>Expectation of ____</th>
<th>Assistive Tech Low</th>
<th>High</th>
<th>Peer</th>
<th>Strategies/Supports</th>
<th>Instructional Aide/Teacher</th>
<th>Family</th>
<th>Resource/Teacher SLP/OT/PT</th>
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</thead>
</table>

This is a working document. Changes will be made throughout the year addressing expectations of this child, technology support, and assistance by family, peers, instructional aide, teacher, resource teacher, and therapists.
Date: ______

Person Completing Form: __________________________________________

Home Phone: ____________________ Work Phone: ____________________

Mobile Phone: ____________________ E-mail: _________________________

Parent(s) Name(s): ________________________________________________

Other Family Members and Ages:

_______________________________________________________________

Primary Language Spoken in the Home: _______________________________________________________________________

Please indicate any diagnosis your child has received: ________________________________________________________________

COMMUNICATION SKILLS
How does your child currently communicate in the home? Please tell how the child uses the following ways to communicate and please list as many examples as possible, rather than simply stating “yes” or “no.”

Vocalizations/Verbalizations: (Ex. sounds; grunts; limited words/word approximations; phrases; complete sentences) ________________________________________________________________

Gestures: _________________________________________________________

Sign Language: ___________________________________________________

Pictures/Communication Boards: ____________________________________

Has your child used the Picture Exchange Communication System (PECS)? □ Yes □ No
If yes:
- Approximately how many symbols does your child independently use? (e.g. 10, 50, 100) _________________________________
- Where are the pictures kept? ____________________________________________
- Does your child independently go and get his/her pictures in order to communicate with you? □ Yes □ No

Has your child been introduced to speech generating devices? □ Yes □ No
If yes:
What voice output systems has your child tried and with what success? (i.e. Communications Skill Builder; Tech Talk; Go Talk; DynaVox®; PRC Vantage Lite®, etc.): ____________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

K1268
HIC 05/10

*DTK1268*
What activities or rewards can be used during this evaluation that will be motivating to your child? (Snacks or otherwise)

Describe your child’s preferred system(s) of communication/interaction:

Is your child frequently misunderstood?  □ Most of the time  □ Some of the time  □ Never

How does your child interact with people whom he/she isn’t familiar?

Does the ability to be understood cause your child frustration?  □ Yes □ No
If your child is non-verbal, does he/she point or gesture to indicate wants and needs?  □ Yes □ No
Does your child attempt to imitate sounds or words?  □ Yes □ No

Who are your child’s communication partners? (ex. Mom, Dad, Siblings, Neighbors, Teachers, Friends, Medical Staff, etc.)

Are there any hearing concerns for your child?  Yes  No
Does your child wear hearing aids or have a hearing loss?
Does your child have vision concerns?
Does your child wear glasses?
Does your child receive OT or PT?
Is your child ambulatory?
Does your child have any limitations to the use of either hand?
Does your child have any fine motor or gross motor concerns?

Please list all previous speech, language, occupational therapy, physical therapy, psychological, or educational evaluations.

<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Facility</th>
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</table>
SCHOOL HISTORY
Please list daycares, preschools, and schools your child has attended or is attending:

<table>
<thead>
<tr>
<th>School</th>
<th>Dates</th>
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Current Grade: __________________________
Are there any special needs being addressed in the classroom?  □ Yes □ No
If yes, please describe: ____________________________________________________________

Teacher: ___________________________ Phone: ___________________________
Speech Language Pathologist: ___________________________ Phone: ___________________________

Does your child currently have an Individualized Education Plan (IEP)?  □ Yes □ No
Does your child receive the assistance of an aide in the classroom?  □ Yes □ No

How does your child communicate in the classroom setting? ___________________________

If your child is in school, does he/she have any difficulties learning to read or write?  □ Yes □ No

Note: Please bring an adult to supervise any siblings that accompany you to the Augmentative Communication evaluation.

Parent/Patient/Guardian Signature:_________________________________________ Date: ____________

If you have any questions regarding the completion of this questionnaire, please contact our department at (513) 636-1126. Fax (513) 636-2905

Please bring the following to your next appointment:
• Current Individualized Education Plan (IEP)
• Most recent Multifactored Evaluation (MFE)
• Any PECS symbols, books, communication boards, or other devices
• Any activities or rewards that may motivate your child

K_1268
HIC 05/10
Name of Speech Pathologist filling out form: __________________________

Contact information for Speech Pathologist:
Address: ____________________________________________________________
City: __________________________ State: _______ Zip Code: _____________
Phone: __________________________ E-mail: ____________________________

School and Grade, if applicable: ______________________________________

Facility where child is seen: _________________________________________

How long has this child been in speech therapy? _______________________

How long have you seen this child for speech therapy? __________________

Frequency of present treatment? (e.g., once or twice a week) ______________

General goals of present treatment: ________________________________

Describe impressions of receptive and expressive language levels based on observations and informal assessment procedures: ________________________________

Language scores from any recent assessments:

<table>
<thead>
<tr>
<th>Date</th>
<th>Test</th>
<th>Score</th>
<th>Age Equivalent</th>
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COMMUNICATION SKILLS
How does the child currently communicate? (For example, requesting, commenting, asking/answering questions, clarifying, and social exchange) Please tell how the child uses the following ways to communicate:

Vocalizations/Verbalizations: _____________________________________________

_________________________________________
Gestures: ____________________________

______________________________

______________________________

Sign Language: ____________________________

______________________________

______________________________

Pictures/Communication Boards: ____________________________

______________________________

______________________________

What symbolic images are being used- please check:

☐ Photographs/Digital Images  ☐ Mayer-Johnson Picture Communication Symbols (Boardmaker®)

☐ Written text  ☐ Other (please indicate): ____________________________

How many pictures per page? ____________________________

How many boards? ____________________________

What topics? ____________________________

Has the child used the Picture Exchange Communication System (PECS)?  ☐ Yes  ☐ No

If yes:

- What phases has the child been exposed to? ____________________________

- What phases have been mastered? ____________________________

- How many symbols does the child independently use? ____________________________

SPEECH GENERATING DEVICES

What voice output systems has the child tried and with what success? (i.e. Communications Skill Builder; Tech Talk; Go Talk; DynaVox®; PRC Vantage Lite®, etc.): ____________________________

______________________________

______________________________

______________________________

What activities or rewards can be used during the evaluation that will be motivating to your child? (Snacks or otherwise) ____________________________

______________________________

______________________________

Describe individual’s preferred system(s) of communication/interaction: ____________________________

______________________________

______________________________

K1269

HIC 05/10
Who are the communication partners for this child and do they generally understand the child’s communication messages?

____________________________________________________________________________________

What do you feel are the major requirements a communication system must fulfill for this individual?

____________________________________________________________________________________

What questions concerning the individual’s communication do you expect answered by the augmentative communication assessment?

____________________________________________________________________________________

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>What is the child’s hearing ability?</td>
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<td>Does the child wear hearing aids?</td>
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<tr>
<td>Does the child have visual acuity concerns?</td>
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<td>Does the child wear glasses?</td>
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<td>Does the child receive OT or PT?</td>
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<td>Is your child ambulatory?</td>
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<tr>
<td>Does the child have any fine motor or gross motor concerns?</td>
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If yes; please describe: ______________________________________________________________

____________________________________________________________________________________

Please use the following space for any additional information you feel is pertinent to this individual’s history and/or speech and language needs: ______________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Clinician Signature/Credentials: ________________________________________________ Date: __________

Contact Information: Phone: (513) 636-1126 Fax: (513) 636-2905

**Please include copies of recent Multifactored Evaluation (MFE), Individualized Education Plan (IEP) and speech or language evaluations.
### AC Referral Chart

**AC Evaluation:** An augmentative communication evaluation can include both high-tech (e.g., dynamic screen speech generating) and low-tech devices (e.g., picture systems, static screen speech generating, switches, etc.). An AC evaluation typically lasts one to two hours. It is important that the patient be seen for trial AC therapy before being referred for an AC evaluation. The referring SLP should try pictures, low-tech devices, or (when appropriate) high-tech language programs or devices prior to the evaluation. It is necessary for the evaluator to receive questionnaires from the parent, private SLP, and school SLP before the evaluation is scheduled to ensure it is as productive as possible.

Use this chart below to help determine whether your patient is ready for an AC evaluation and where to refer your patient for the AC evaluation.

1. Do you have any questions about how the patient will access a device, positioning, and/or visual scanning issues?

| YES – Contact one of the following SLP’s from the Aaron W. Perlman Center to consult about your patient: |
| Sherry Lanyi, M.A., CCC-SLP: 513-636-8838 |
| Jennifer Tincher, M.S., CCC-SLP: 513-636-0015 |
| Libby Willig-Kroner, M.A., CCC-SLP: 513-803-5241 |

| NO – Go to Question 2. |

2. Has your patient been exposed to picture symbols?

| YES – Go to Question 3. |

| NO – Do not refer. Not ready for an AC evaluation. Introduce picture symbols with focus on progressing the patient from object recognition to abstract picture or line drawing. Work on matching, categorization, and improved scanning. Consult with an SLP specialized in AC if needed. |

3. Have you tried either a low-tech (e.g., communication builder, etc.) or a high-tech (e.g., DynaVox V or PRC Vantage Lite) device (or language software from a high-tech device)?

| YES – Go to Question 4. |

| NO – Do not refer. Not ready for an AC evaluation. Try a low-tech device such as a communication builder (most satellites have them). If the child has higher receptive language or cognitive skills, consider trying a high-tech device or program. If you have concerns regarding access or any other issues, contact someone from the AC Team for help on what to try with the child. |
4. Have you talked with the family about Augmentative Communication? Does the family understand what AC is and are they ready to begin using AC with their child?

YES – If you are successful in using symbols and/or low-tech/high-tech speech generating devices for communication and feel the family is ready to look at more sophisticated equipment options, then a referral for an AC evaluation should be made. Funding options will be discussed with the family during the evaluation. Go to question 5.

NO or NOT SURE – Talk with the family about AC. Use the “Benefits of AC” and “What to Expect from an AC Evaluation” handouts on Blackboard to help guide your discussions. Consider having the family borrow a low-tech device (even if you think the child may be more appropriate for a high-tech device) from the Rubinstein library so the family can experience what it is like to program a device and carry it with them to various environments. If they become ready, move onto question 5.

5. Before referring, ask yourself again: do you have any questions or concerns about how the patient will access the device, positioning, and/or visual scanning issues?

YES – Refer patient to the Aaron W. Perlman Center for the AC Evaluation by calling 513-636-4601. A referral from the child’s pediatrician will be needed. The Perlman Center will send out a packet of information to the family. Included in it will be a questionnaire for you as the speech-language pathologist to complete. Once they receive all the forms, an appointment will be made.

NO – Refer the patient to DDBP/Speech Pathology Department by having the family call 513-636-4628. A referral from the child’s pediatrician will be needed. An information packet will be sent to the family. Included in it will be a questionnaire for you as the speech-language pathologist to complete. Once the forms are received, an appointment will be made at DDBP, Mason, or Drake, depending on the availability or location preference.

Please be sure to stress to the family how important it is for them to make this scheduled evaluation, not only for their child but also because these evaluations are scheduled months out because of our long waiting lists.

Please provide as much information as possible when completing the questionnaires. Updated speech and language testing will also be of help prior to the evaluation. If you have an updated IEP or ETR for the child, please indicate this on the questionnaire and request that the family bring a copy of it with them to their evaluation.

If you have any questions or concerns about whether or not to refer your patient, contact someone from the AC Team (members are listed in Blackboard) for assistance before making your referral.