What is language? How do children who use AAC learn it?

Language is so innately human and inherent to what we do and who we are, it would be difficult to imagine life without it. While intrinsically related to intelligence, speech, communication, culture and socialization, language is not the same. For example, you can communicate, socialize, see, hear, feel, smell, taste, move, and think (at least up to a point) without language. But, you cannot talk, understand what is said, read, use manual signs, write, or learn very much about the world without language.

Language is acquired in a social context. Children learn language from interaction with their parents after minimal exposure. Language is a vehicle for interaction and learning. But, what is it?

Languages are symbol systems. Symbols stand for ideas, objects, actions, locations, attributes, and so on. Languages allow us to combine symbols and capture our most complex perceptions, thoughts and experiences using phrases and sentences. Language accomplishes multiple purposes. Language can be spoken or written, listened to or read. All languages are comprised of parts that are intertwined, developing quite naturally in young children. These are:

- Phonemes - sounds of language as spoken and understood
- Syntax - rules for combining words (grammar)
- Semantics - meaningful elements of language (words/morphemes)
- Pragmatics - rules for using language in context, social uses.

(continued on page 2)
For Consumers (cont. from page 1)

Languages have rules governing their content, form, and use. The content of a language refers to its dictionary (i.e., meaningful elements). Content can be expressed in different forms, e.g., speech, writing, signs, pictographs. Form also refers to rules for coding elements of language, e.g., combining words to make sentences. Finally, languages are tools and as such have rules for use in social contexts, e.g., conversation, talking with authority figures.

For Consumers

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AAC language learning process

Before considering what's involved in the AAC language acquisition process, we need to identify who we are talking about. Children have delayed speech for many different reasons (motor speech disorders, autism, multiple handicaps). Von Tetchner suggests these groups have different language learning situations:

1. Expressive language group - These children have receptive language skills and often some speech. However, expressive language is significantly delayed, especially when compared with receptive capabilities. Problems are due to severe phonological disorders and/or impairments affecting the speech mechanism.

2. Language support group - These children require support in developing language and speech. AAC interventions are used as a scaffold to language and to speech and may prevent secondary communication or behavioral problems from occurring.

3. Alternative language group - These children have difficulty both understanding and using language. Language develops atypically.

Other aspects of development also affect the process of language learning. For example, children with severe motor impairments do not have the same quantitative or qualitative experience with toys, objects, people and activities as children who are ambulatory. Likewise, children from enriched environments bring more world knowledge and an excitement about language acquisition than children who are socially disadvantaged.

The language acquisition process is of great interest to psycholinguists, psychologists, speech-language pathologists, educators, anthropologists, and others. Language is so complex and learned so quickly by children all over the world, it is still unclear just how it is accomplished. Many questions remain unanswered:

- What is the relationship between language and cognition?
- What role do nonverbal behaviors play in the language development process?
- What roles do adults play in the language development of children?
- How do children develop speech and learn to express their thoughts using language?
- What is the relationship between the development of reading, writing, speaking and listening skills?
- Why do some children develop language more slowly? Why do others develop atypical language patterns? What is the neuropsychology of these behaviors?
- What effects do sensory impairments, motor impairments, mental retardation, and environmental variables have on the development of language? Which aspects of language are most affected? Why?
- When and how should children who are at risk receive help in the language learning process?

Learning language if you are unable to speak, particularly if you have severe motor impairments, is a very difficult task. Stop and consider it. You must learn the meaning of spoken words and word combinations, just like everyone else. But, unlike everyone else, you can't...
select words you wish to practice (unless someone puts them on a display or teaches you the sign); and you don't get the kind of supportive feedback others do when they "overextend" or "underextend" a word (e.g., call the moon a "ball" or every man "daddy.")

Yes honey, it kinda looks like a ball but that's the moon...see it's up in the sky.

Yes honey, it kinda looks like daddy, but that's Uncle Joe. He's Lisa's daddy. Here comes your Daddy.

Have you ever listened to speakers conversing in a foreign language? You can't separate out the sounds they are making, words they are saying, or what they mean. The slippery stream of speech is segmentable. That's the task before young children. It's not an easy one.

Nickola Nelson, July, 1992

Children with severe speech impairments often have cognitive disabilities, making language learning even more difficult. Many have motor impairments so they can not explore their environment, limiting their knowledge base. Despite these facts, we expect these children to learn a range of augmentative techniques, symbols and devices (e.g., synthetic speech, graphics, manual signs, scanning and coding schemes) in addition to everything else, often without models and with only minimal training. The amazing thing is, many do.

The AAC language learning processes is certainly not intuitive. To date, we know very little about how children learn to use AAC symbols, aids, techniques, and strategies. How do these tools affect a child's acquisition of language and speech? What happens when...?:

- the language input a child receives is either beyond her level of comprehension or below it?
- someone else decides what words a child has access to? and when?
- a child uses a device with speech output?
- phrases/sentences are stored in a device? Single words are stored in a device?
- no one else in the child's world uses same communication system?
- only adults talk to a child?
- people pretend to understand a child when they don't?
- people don't expect a child to communicate?
- the child can not explore or play with other children?
- the child has difficulty understanding language as well expressing it?
- the child can not move when and where he/she wants to?
- no one really knows what a child understands?
- no one reads to a child?
- a child never has had an opportunity to scribble, color, write?

AAC specialist's role in language learning process

McNaughton suggests we need to consider what "talking" does for the speaking child (i.e., allows the child to explore their vocal system, participate in activities, engage in purposeful interaction, attach meaning to symbolic forms, and learn metalinguistic characteristics) before we approach the non-speaking child. All concur we must learn to STOP, WATCH, and LISTEN for the child and to the child. If a child is motor impaired, fleeting attention may be all he or she can do to indicate participation, a desire to interact, or understanding of a word. Ten additional suggestions for helping children who use AAC learn language are to:

- 1. Interpret their behaviors as meaningful
- 2. Provide a richness of world experiences.
- 3. Talk to them; immerse them in language and experiences.
- 4. Be an observer yourself. Be interested in the world! Do things with the child as a co-observer/co-learner.
- 5. Give lots of input, without requiring output. When children are ready, they begin expressing themselves.
- 6. Be patient. Give the child time. Don't expect children to sign or point to symbols right away.
- 7. If you want a child to learn to use an AAC techniques or device, you must use it with them.
- 8. Never ask a question unless you expect an answer.
- 9. Don't let vocabulary on displays limit a child or determine what you talk about with a child.

Give away knowledge. Find ways to give relevant knowledge to parents and teachers. Let them talk back and learn more.

Shirley McNaughton, July, 1992

- 10. Give a range of experiences with equipment.

Those interviewed agree AAC specialists should consider language learning often and very carefully. Most importantly, we must give away knowledge. They suggest we:

- 1. Make parents/teachers aware of ways to stimulate language. Table I provides strategies to use in sharing knowledge about language with caregivers.

<table>
<thead>
<tr>
<th>Table I. Discussing language with families/caregivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Talk about language/speech as tools we all use to communicate.</td>
</tr>
<tr>
<td>2. Explain that language is a code that we use to express thoughts, feelings, basic needs, and learn what is going on in the world and what others think and feel.</td>
</tr>
<tr>
<td>3. Point out language can be expressed in lots of different ways—speech, signs, symbols.</td>
</tr>
<tr>
<td>4. Try to help parents imagine what it might be like to learn language, by giving examples of learning a second language. See box in adjacent column.</td>
</tr>
<tr>
<td>5. If and when caregivers and teachers are interested, discuss the components of language: form, content, and use.</td>
</tr>
<tr>
<td>6. With parents who are focused on a child's speech and fearful of AAC options, talk about how children need a good strong language basis to learn to read and write. 'If you put language on hold, while we wait for the speech mechanism to develop, children lose valuable language learning time. '</td>
</tr>
<tr>
<td>7. Ask how many studied a language in school? Then ask how many are fluent? Then ask &quot;Why?&quot; I'll bet it all comes down to exposure and practice. You can rest your case!</td>
</tr>
<tr>
<td>8. If someone else decides what words a child has access to? and when?</td>
</tr>
<tr>
<td>9. When someone else decides what words a child has access to? and when?</td>
</tr>
<tr>
<td>10. Give a range of experiences with equipment.</td>
</tr>
</tbody>
</table>

- 2. Do ongoing, dynamic assessment of language comprehension and expression.
- 3. Understand language development. It's part of your role with children and most adults.
- 4. Find some way for children to participate in activities (e.g., display, signals). Modify and constantly refine response options.
- 5. Make time to develop and modify vocabulary and design well-thought-out language displays.
Clinical News

This section explores current language assessment practices, as well as opinions about selected intervention issues. It summarizes discussions with speech-language pathologists, educators, a psychologist, and a linguist, all AAC specialists with a long-term interest in helping children who use AAC techniques to learn language.

Language Assessment

Language assessment of young children who use AAC techniques is dynamic, i.e., it begins, but never ends. There are 3 major reasons for language assessment:

- 1) Making decisions re: qualifications/assigning levels.
- 2) Making decisions about levels of language input to use in facilitating language development.
- 3) Monitoring the effectiveness of intervention.

Assessment of language comprehension in young children who are unable to speak (particularly those who also have limited movement) is a means of helping them develop and of monitoring their progress. When we underestimate or overestimate what a child understands, we greatly disadvantage that child in that we aren’t likely to provide the child with what he needs, when he needs it. Table II lists questions we should ask about a child’s understanding. To summarize, we should assess:

Understanding of the communication process; single words; language as it increases in length and complexity; a child’s knowledge about language (metalinguistic aspects); comprehension of language in and out of context; literal and inferential skills, and the use of language to solve problems.

Table II also lists methodologies to use in a language assessment (both receptive and expressive). Parental/caregiver report and naturalistic observations, as well as a variety of formal probes, including tests, are available. Nelson reminds us that two ways to assess comprehension directly are:

- 1. I say/you do (e.g., Show me, go get mommy the keys).
- 2. Ask/you answer (e.g., yes/no questions; more complex questions). Responses can show literal or inferential understanding.

"Doing" and "answering" often are not possible for children who use AAC techniques. It often means we must intervene before we can assess. Alternative assessment techniques are being explored. See article by Castles, Golinkoff, Hirsh-Pasek, & Gordon (1989).

Assessment of expressive language is a means of finding out if and how children use symbols/language forms, covering many areas:

- Vocabulary
- Semantic relations
- Morphology
- Syntax
- Discourse

Also, the child's knowledge of language (metalinguistics and metapragmatics). Note: Speech motor and articulation skills also require careful and ongoing evaluation although they are not the focus of this issue.

Table II on page 5 lists questions to consider. Keep in mind, however, that it’s impossible to make judgements about expressive language skills without first looking at the symbols and signs children have available to them. AAC techniques influence the vocabulary, modes and language patterns of children who use them.

Assessment of expressive language requires us to determine optimal vs. typical performance. Another important guideline is to begin with communication acts the child already uses. Children can learn other ways of saying the same things, but assessments should carefully define the "home" signs, gestures and signals a child has now. Don't take away that which exists.

Looking at the quality of a child's idiosyncratic communication acts also tells us if they are used as words, i.e., it always means thirsty, or differently in different contexts, like pointing. Methodologies for assessing expressive language are similar to those listed in Table II for comprehension. However, those interviewed had some additional comments:

- Observe child in normal situations. Do a "Day clock." Go through 24 hour day and note activities, communication opportunities, and expectations/goals.
- Interview parents and make a list of signals a child uses and what they mean. Find out what the child can make people do.

<table>
<thead>
<tr>
<th>Table II. Assessment of Language Comprehension</th>
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<tbody>
<tr>
<td>Does child have...?</td>
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<tr>
<td>Any concept of reference?</td>
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<tr>
<td>Any concept of social routines?</td>
</tr>
<tr>
<td>An understanding of symbols?</td>
</tr>
<tr>
<td>An understanding of single words?</td>
</tr>
<tr>
<td>An understanding of grammatical morphemes?</td>
</tr>
<tr>
<td>An ability to understand increasingly longer utterances?</td>
</tr>
<tr>
<td>An understanding of pragmatics?</td>
</tr>
<tr>
<td>An ability to use language to reason?</td>
</tr>
<tr>
<td>An ability to comprehend literal and inferential language?</td>
</tr>
<tr>
<td>A concept of metalinguistics/meta-communication?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Methodologies</th>
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<tbody>
<tr>
<td>Observations in natural context. Look at partners, type of responses, kinds of vocabulary facilitator uses, sentence level and discourse level of facilitator (is information presented over head?), Level/quality of play.</td>
</tr>
<tr>
<td>Formal probes to determine what is being understood, a. Informal sliding context to assess comprehension of larger language chunks b. Standardized tools to look at types of structures, morphemes c. Formal, not standardized types of discourse, modes, range of acts, efficiency</td>
</tr>
<tr>
<td>Teach something and measure how child learns it. Introduce a new language task. Use augmented input, provide scaffolding, facilitate, then pull back and see what happens. Barrier games are useful also.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Instruments*</th>
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<tbody>
<tr>
<td>MacArthur Communicative Development Inventory: Infants and Toddlers</td>
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<tr>
<td>Peabody Picture Vocabulary Test; Boehm</td>
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<tr>
<td>Test for auditory comprehension of language; Preschool language scale;</td>
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<tr>
<td>Miller Yoder; Assessment of children's language comprehension</td>
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<tr>
<td>Paragraph listening Metropolitan subtests</td>
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<tr>
<td>Early social communication scales</td>
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<tr>
<td>Visual language tasks on Detroit or Binet</td>
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</tbody>
</table>

*Note: These tests are being used by some of those interviewed.
Although it remains unclear how modeling affects nor-
mal language acquisition, all agree we must demonstrate
modeling language forms for the purpose of teach-
ing language comprehension and encouraging language
expression using a child's personal communication sys-
tem. On the other hand, others interviewed felt AI and
ALS were different. Generally, AI was felt to emphasize
comprehension of symbols and speech while ALS tar-
geted the use of graphic symbols, with comprehension of
the symbols assumed. AI was felt by some to be a more
ecompassing term (modeling aided and unaided tech-
niques), while ALS was restricted to modeling with "aided"
techniques. Other areas of confusion noted were what
to model (e.g., the child's intent, the adult's turn).

Table III. Assessment of Expressive Language

| 1. Is child intentional? |
| 2. How does child get messages across? |
| 3. What are vocal skills? What phonemes does child produce? What are articulation skills? What is the intelligibility of the child's speech? |
| 4. Who are child's communication partners and what are their expectations? |
| 5. What kind of vocabulary does child have? use? (e.g., function words, verbs, morphemes, etc.) |
| 7. Can child take turns, maintain a conversation, repair breakdowns? |
| 8. Does child participate in different types of discourse: conversation: classroom; narratives; event description? |
| 9. Does child express a range of acts/intents? |
| 10. What form of expression/modes does child use? Are they appropriate (socially acceptable)? Effective (do get message across)? Efficient (reasonable time)? Does child combine modalities? |
| 11. How does child interact with familiar/unfamiliar partners: child/adult? Are adults scaffolding? What is affect on child? |
| 12. What does child know about language (e.g., repairs, contextual sensitivity, self-monitoring). |

Modeling

Augmented input (AI) and aided language stimula-
tion (ALS) are strategies in which facilitators model the
use of AAC symbols, techniques, and devices. I asked
those interviewed their opinions about what AI and ALS
meant (are they the same?) and whether these strategies
help children who use AAC to learn language. Of those
interviewed, Goossens' (aided language stimulation) and
Romski (augmented input) have written most extensively
about these terms. Interestingly, they both felt AI and
ALS could be used interchangeably. To them, both
meant modeling language forms for the purpose of teach-
ing language comprehension and encouraging language
expression using a child's personal communication sys-
tem. On the other hand, others interviewed felt AI and
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ecompassing term (modeling aided and unaided tech-
niques), while ALS was restricted to modeling with "aided"
techniques. Other areas of confusion noted were what
to model (e.g., the child's intent, the adult's turn).

Everyone concurred that AAC specialists, families,
teachers, etc. should use a child's symbols frequently
during interaction with the child in ways that are natural.
Although it remains unclear how modeling affects nor-
mal language acquisition, all agree we must demonstrate
how to use AAC communication system components:

1. If we can't use a display to communicate, how can we expect a child to?

2. Using AAC systems can facilitate language development and pro-
vide assistance to those who have language disorders because it provides
an additional channel of information to the child.

3. We can begin to model metalinguistic and metacommunication in-
formation (as well as linguistic information) because children who
use AAC gradually must learn to think about language and com-
munication from their listener's perspective. Say things like: "what
shall we put on your board?...do you think Jane understood you?"
First, you tried to say it, then you used your board...how
smart!...see all the words on the page. Those look and sound alike.

Style

Normal children demonstrate different kinds of lan-
guage learning styles. See Iacono's thoughtful discussion of"referential and expressive" styles in the March issue of
AAC. She, and others interviewed, expressed a con-
cern that AAC displays and devices may actually force
children into a certain "style." For example, language
boards may impose a referential style while speech out-
put devices that are programmed with phrases, may limit
children to an "expressive" style. In response to the ques-
tion "are styles of language learning relevant to AAC in-
terventions," there was no consensus. Most said they had
not paid much attention to the issue. However, they of-
fered the following:

- Style is a continuum, not discrete behaviors. The range of normal is
  so wide that variations are dangerous to attribute to a specific
  "style." Normal children are never solely referential or expressive.

- What do we mean by "styles?" Mode preferences, vocabulary/content
  preferences, structural preferences, technical preferences? or do we
  mean language learning style or interaction style? or what?

- To some extent, style is determined by which modes, vocabulary and
  structures are available, and what technical equipment is being used.

- Partner's behaviors also affect style. In fact, low tech devices are
  often channeled through an adult's style as partner's co-construct
  messages.

- The literature shows style preferences occur early in the normal lan-
guage learning. Are they even relevant to children whose language
  understanding may be several years beyond their expressive
  capabilities?

- The field of AAC is not ready for an analysis of "styles." It's too fine-
tuned an analysis. We have much more to learn first about the
  process of AAC language learning.

Finally, all agree we need to:

1. Be listening and watching to determine what a child's mode, vocabulary, and syntactic preferences are.

2. Let individual styles emerge.

3. Ask ourselves: What kind of restrictions are we imposing? How
  can we make the system more flexible? Is the expressive language
  behavior I am observing due to our teaching, techniques being used or
  actually coming from the child?

Size of displays

Recently I have seen fewer large vocabulary boards
and more miniboards. I am concerned this trend may
have a negative effect on language development. I found
a strong consensus that children should have both.

- Large vocabulary displays provide access to more language and
  allow children to use words to form phrases and sentences. A core
  display is always with a child. Disadvantages are difficulty finding
  words/symbols and modeling the use of large displays.

- Miniboards are more pragmatic (context/activity bound), small, and
closer to use. They are particularly helpful in early stages and are
  good for modeling. Goossens feels a preschool classroom should be
  engineered so children have at least 250 language boards. Disad-
  vantages are displays stay near activities. Also, light points out that
  a breakfast overlay should contain "what one says and does at break-
  fast...yet we put symbols for food, eating, drinking, etc. Think about
  it...no one talks very much about food at mealtime. We talk about
  other things..."mommy dropped the butter...it's raining outside.

Final thoughts (for now): A "word on a communication
aid is NOT just a word. It is a STRATEGY to make
another person guess a word" (von Tetzchner). Also,
phonology and syntax should be components of our inter-
ventions. If children have access to sounds and single
words, they may explore combining them in ways that are
meaningful. Finally, all feel quite strongly that we tend to
overemphasize "correctness" at the expense of a child's
concept and language development.
Organizations can and do affect what happens to people with disabilities. Some set entry level standards for clinicians, establish standards of practice, determine what happens to people with disabilities. Some set entry level standards of practice, determine a code of ethics, lobby government agencies, encourage research, disseminate information, act as liaisons to other organizations, and in other ways, support their membership. While they don't govern us, professional and consumer organizations can go a long way toward getting things done.

Facilitating language using toys.
- **Object games** - Select interesting, interactive objects (e.g., ball, slinky, bubbles). Develop 6 and 12 location displays for each. Include words for actions, questions, attributes, as well as objects.
- **Language rich toys** - Develop a display for each toy. Favorites are: Fisher Price Farm; Sesame Street Clubhouse; Pop Up pets/pals; Potato Head.
- **Fun box** - Place a variety of objects (brush, spoon, mirror, bottle, diaper) in the "fun box" for imaginative play. Make displays and keep them in/near the box.
- **Dress up box** - For somewhat older children, include wonderful clothes and imaginative objects. Best place to find these items? A yard sale or flea market. Don't forget to develop a variety of displays.

Facilitating language using computer software.
Note: A good source for generic software is Access Unlimited, 3335 Bransford Drive, Suite 102, Houston, TX 77042. (800) 698-0311

- **Sticky Bear Opposites** - The purpose of this software is to teach opposites. However, when used in an interactive way, children can tell Sticky Bear what to do or make comments.

Note: If you set the program up for a joy stick or paddle, the Touch Window will not work with it.

- **UCLA Switch It-See It** - This software encourages visual tracking and switch use. You can encourage children to become involved by setting the program on level 2. The action starts, but then stops. "It's a living Folks Sentence Builder, teaching agent-action-object," says Caroline. She uses Mayer-Johnson Picture Communication Symbols (PCS) symbol set up and mounts them on the computer screen.

Facilitating language using books.
- **Book Cooks** - Uses favorite children's books and ties them into classroom activities. For example, after reading *Busy Spider*, students can make Marshmallow Spiders. Yummy! Picture recipes may be copied to displays or a child's switch.

Software - $35 US. Available from UCLA Intervention Program for Handicapped Children, 1000 Veterans Ave., R. 23-10, Los Angeles, CA 90024 (310) 823-4821.

PCS Symbols - P.O. Box 1579, Solana Beach, CA 92075

Note: If you have a Apple IIgs, then the switch jack #2 = option key = mouse click. Therefore, you can have a child who uses a single switch turn pages, pick stuff up and put it down.

- **Big Book Maker** - Favorite Fairy Tales and Nursery Rhymes; The Whole Neighborhood. Two programs that allow children to set up scenes and explore environments. Talking word processor (Whole Neighborhood only), pictures, and print provide multimodal exposure to language.

Both $49.94. Available from Queue, Inc. 338 Commerce Drive, Fairfield, CT 06430. (800) 232-2224.

Facilitating language using software.
- **Storytime** - Patti King-DeBaun has developed a wonderful series. The book has 10 stories for young children. Symbols are included on each page. Each book has a 36 location symbol page; extension activities with ideas for art, cooking, and music, and adaptations for children with disabilities. She also has software, books on slides and a curriculum activity guide for the WOLF.

Available through Creative Communicating, 2875 Cedar Mill Crossing, Acworth, GA 30101. (404) 975-8256.
University & Research
ISAAC Research Symposium:
Fostering international cooperation

The Second Research Symposium sponsored by the International Society for Augmentative and Alternative Communication (ISAAC) is being held in Philadelphia on August 13 and 14, directly following the ISAAC 1992 Biennial Conference. Organized by the ISAAC Research Committee's Co-Chairs, Drs. Janice Light and Alan Newell, this conference is an important step toward an expanding research base within the field.

A rare opportunity for researchers, academicians, clinicians, consumers, developers, manufacturers and their representatives, the Symposium furnishes an open forum for discussion and contemplation of key research topics in the AAC area. Participants include those giving invited papers and 110 others who register for the symposium. A concerted effort has been made to maintain an international perspective, remain open to a range of ideas, and consider a variety of viewpoints. Dr. David Beukelman is delivering the keynote presentation AAC Research: A Multidimensional Learning Community. Ten sessions are held during the Symposium with 2 papers given in each session. Topics and authors are listed in Table IV. Each session is led by a skilled facilitator as participants listen and share their ideas and perceptions.

Recently, I reread the Proceedings from the 1990 Research Symposium Methodological Issues in Research and Augmentative and Alternative Communication, edited by Jan Brodin and Eva Bjorck-Akesson. Topics included:
- Challenges in conducting observational research to address interaction issues
- Issues in research and development of Technical aids
- Methodological challenges in applying single case designs to problems
- Methodological issues in research with individuals with cognitive disabilities

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- Methodological challenges in applying single case designs to problems
- Methodological issues in research with individuals with cognitive disabilities

(Equipment continued from page 6)
- Springboards, Emergent Levels 1 and 2. These lap books are large, early anthologies for the teacher to read to the class. $29.95 each. Ginn Publishing Company. Call 800-359-5980. 3771 Victoria Park Avenue, Scarborough, Ontario, Canada M1W 2P9.
- Sunshine series. Series has 11 levels (C, E, F, Science are favorites). Have rhyme, rhythm, repetition and predictability. $18.80 - 26.60 US. Available from Wright group, 19201 128th Avenue NE, Bothell, WA 98011 (800) 523-2371.

Using barrier games for language

In a barrier game, the child using AAC techniques describes something or gives instructions to another child/adult who is unable to see what is being described or does not understand how to do something. Software programs/activities can be contexts for barrier game.

- Software programs (e.g., Paint with words, Electric Crayon, Explore a Story): Help child create something and print it out. Then have child explain how to create the same scene/picture.
- Construction activities. Try cooking or making paper dolls (try using Uniset Pictures). Available from Imaginarit, PO Box 1808, Lilyhild, CA 92349
- Message Sending Games: a booklet by Dixon (1977) is full of ideas for barrier games.

Table IV. 1992 ISAAC RESEARCH SYMPOSIUM

<table>
<thead>
<tr>
<th>Session Topics</th>
<th>Author(s) of 2 Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary research in AAC:</td>
<td>Melanie Fried-Oken - USA</td>
</tr>
<tr>
<td>Methodological issues &amp; research priorities</td>
<td>Sheela Stuart - USA</td>
</tr>
<tr>
<td>Conversation analysis in AAC</td>
<td>Pamela Mathy-Liikko &amp; Carol West - USA</td>
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<td>Small &quot;n&quot; Designs: Problems and Solutions.</td>
<td>Teresa Iacono - Australia</td>
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<tr>
<td>Qualitative research in AAC</td>
<td>Jane Brodin - Sweden</td>
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<tr>
<td>Literacy and AAC: Methodological issues and research priorities</td>
<td>David Koppenhaver, Paty Coleman, Jane Steelman, &amp; David Yoder - USA</td>
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<td>Evaluating the efficacy of AAC interventions</td>
<td>Ralf Schlosser &amp; Ursula Braun - Germany</td>
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<td>Use of nondisabled subjects in AAC research: Pros and cons</td>
<td>Jan Bedrosian - Canada</td>
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<td>Longitudinal research in AAC</td>
<td>Eva Bjorck-Akesson - Sweden</td>
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<tr>
<td>Human factors issues in system design and evaluation</td>
<td>Martine Smith - Ireland</td>
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<td>Evaluating AAC service delivery programs.</td>
<td>Fraser Shein - Canada</td>
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- Methodological issues in the study of language development for children using AAC systems
- Speech technology: Cross fertilization between research for disabled and nondisabled persons

I have found the ISAAC Research Proceedings very valuable and highly recommend them. The 1992 ISAAC Research Symposium Proceedings, edited by Daryle Gardner-Bonneau, are now available. Each paper is about 5 pages in length so you can learn in some detail what others are thinking in 1992!

Available from the ISAAC Secretariat, P.O. Box 1762, Station R, Toronto, Ontario, Canada M4G 4A3.

Other materials


$2.50 US Available from Madison Metropolitan School District, 545 West Dayton Street, Madison, WI (608) 266-6260.

Sunshine series. Series has 11 levels (C, E, F, Science are favorites). Have rhyme, rhythm, repetition and predictability. $18.80 - 26.60 US. Available from Wright group, 19201 128th Avenue NE, Bothell, WA 98011 (800) 523-2371.

Using barrier games for language

In a barrier game, the child using AAC techniques describes something or gives instructions to another child/adult who is unable to see what is being described or does not understand how to do something. Software programs/activities can be contexts for barrier game.

- Software programs (e.g., Paint with words, Electric Crayon, Explore a Story): Help child create something and print it out. Then have child explain how to create the same scene/picture.
- Construction activities. Try cooking or making paper dolls (try using Uniset Pictures). Available from Imaginarit, PO Box 1808, Lilyhild, CA 92349
- Message Sending Games: a booklet by Dixon (1977) is full of ideas for barrier games.

$2.50 US Available from Madison Metropolitan School District, 545 West Dayton Street, Madison, WI (608) 266-6260.

Other materials


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Other materials

Selected readings and references


Your Resources

Thanks again for your time and stimulating perspectives!
Cindy Cassatt-James, 604 E. 34th Street, Baltimore, MD 21218 USA (301) 338-0959.

Carole Gioossens, 20 West 22nd Street, New York, NY 10010 USA (212) 229-1862.

Arlene Kraat, Queen's College CUNY, Speech & Hearing Center, 63-30 Kissena Blvd., Flushing, NY 11367 USA (718) 520-7558.

Teresa Iacono, School of English and Linguistics, Macquarie University, Sydney, N.S.W. 2109 Australia (2) 805-8728.

Janice Light, Dept. of Communication Disorders, Penn State University, 217 Moore Building, University Park, PA 16802 USA (814) 864-2101.

Shirley McNaughton, Suite 802, 120 Promenade Circle, Thornhill, Ontario L4J 7W9 Canada (416) 771-1471.

Caroline Musselwhite, Special Communications, 916 West Castillo Drive, Litchfield Park, AZ 85340 USA (602) 935-4656.

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Ann Sutton, McGill University, 2266 Pine Avenue West, School of Human Communication Disorders, Montreal, Quebec H3G 1A5 Canada (314) 398-8496.

Stephen von Tetzchner, Dept. of Psychology, University of Oslo, P.O. Box 1094, Blindern, Oslo, N-0327 Norway.

PLEASE FORWARD