

Augmentative Communication News

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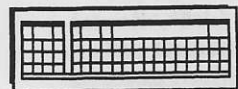
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UPFRONT

The field of AAC seems to go through "trends" or "stages," certain issues capturing our attention at different times. Early in AAC history, a major concern of professionals was giving people who could not speak access to alternative language forms so they could express themselves (e.g., signs, Blissymbols). Language was a major emphasis. Communication devices expanded our focus, and we began concentrating on access, storage, retrieval, rate and device prescriptions. Clinicians, families, and researchers soon observed that many people, who knew signs or had symbol displays and devices, were not using them outside of therapy settings. We also noted our most com-

petent AAC communicators were using multi-modal approaches to accomplish communication tasks and had partners who facilitated their interactive styles. As a result, our focus converged on the functional use of AAC techniques in real environments and on training communication partners as facilitators.

While we have remained enamored with technology throughout, certain populations, disciplines, and research questions have received more (or less) attention over the years. For example, those with severe mental challenges were ignored until recently as we focused on people with motor impairments and normal/near normal cognition. Some disciplines have been missing from our literature reviews, particularly (cont. on pg. 2)

For Consumers



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 can not talk, understand what is said, read, use manual signs, write, or learn very much about the world without language.

What is 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)



(Upfront from page 1)

cognitive and developmental psychology, and human factors engineering. However, each year has brought new knowledge and challenges, encouraging us to seek innovative solutions and ask better questions, e.g., How do the cognitive and learning styles of individuals affect the use of AAC symbols and devices; What are the costs/benefits to users, families, professionals of learning techniques? How do people with severe speech impairments learn to read/write? In our small, rapidly growing field,

the time or resources to focus on everything at once is simply not an option. From time to time, therefore, it becomes necessary to revisit old, familiar places and take a fresh look.

This issue of *ACN* highlights a place at the very heart of AAC...language. Although language learning issues were not ignored, they have not been receiving a lot of attention. This is surprising in light of the centrality of language to our discussions of literacy, vocabulary, and intervention with pre-school children...three of our "hottest AAC topics." I wish to acknowledge and recommend the March, 1992 issue of *Augmentative and Alternative Communication (AAC)*. Edited by Janice Light, five excellent papers, contemplating a range of theoretical language issues, serve as a backdrop to this issue of *ACN*. Against this backdrop, *ACN* casts the more practical thoughts of master clinicians/researchers. For *Consumers* considers ways to discuss language with families and the impact of AAC techniques on the language learning process of young children. *Clinical News* considers what master clinicians are thinking/doing about language assessment, language learning "styles," augmented input, minibboards, and voice output. The *Equipment* section lists materials found helpful in teaching language to young AAC users. Finally, the *University and Research* and *Governmental* sections focus on recent activities of the International Society for Augmentative and Alternative Communication (ISAAC). Thanks to all interviewed for their thoughtful and challenging responses to my questions and willingness to share their talents. See Resources and References for a list, as well as for readings used in preparing this issue. Finally, I admit to feeling overwhelmed...there is so much to learn about the AAC language learning process. I just hope we become ever more thoughtful and more attentive. Till September!

Sarah W. Blackstone, Ph.D., Author

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.

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 Tetzner 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?
- How do children develop an understanding of the communication process? single words? sentences? narratives? print?
- 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 neuropsychopathology 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

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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...?:

- pictographs are the representational system a child uses to express language?
- 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 nonspeaking 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 I. Discussing language with families/caregivers

<p>1. Talk about language/speech as tools we all use to communicate.</p> <p>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.</p> <p>3. Point out language can be expressed in lots of different ways..speech, signs, symbols.</p> <p>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</p> <p>5. If and when caregivers and teachers are interested, discuss</p>	<p>the components of language: form, content, and use.</p> <p>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."</p> <p>7. Ask how many studied a language in school? Then ask how many are fluent? Then ask "Why?" I'll bet it all comes down to exposure and practice. You can rest your case!"</p>
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- 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 assessments (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. I ask/you answer (e.g., yes/no questions; more complex questions). Responses can show literal or inferential understanding.

Does child have...?	Methodologies	Instruments*
Any concept of reference? What is level of world knowledge?	Facilitator report. Get a sense of child's experiences and parent's perceptions. Ask where child functions. Resolve any discrepancies. Self report for older children	MacArthur Communicative Development Inventory: Infants and Toddlers
Any concept of social routines? the communication process? taking turns? of being a listener?		Peabody Picture Vocabulary Test; Boehm
An understanding of symbols? speech? sign? written words? What modes are stronger?	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	Test for auditory comprehension of language; Preschool language scale;
An understanding of single words? (in context and out of context) What kind (nouns, verbs, interrogatives)?		Miller Yoder; Assessment of children's language comprehension
An understanding of grammatical morphemes? syntactic structures?	Formal probes to determine what is being understood, a. Informal eliciting contexts 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	Paragraph listening Metropolitan subtests
An ability to understand increasingly longer utterances? 2,3,4 words? sentences, paragraphs, narratives?		Early social communication scales
An understanding of pragmatics? Discourse - turntaking, initiation, Functions - requesting, commenting	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.	Visual language tasks on Detroit or Binet
An ability to use language to reason?		*Note: These tests are being used by some of those interviewed
An ability to comprehend literal and inferential language?		
A concept of metalinguistics/ meta-communication? What does child know about language.		
How does child learn language?		

"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 Cauley, 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, and 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 III 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 we 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 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.)
6. Does child combine words? Use grammatical structures? under what circumstances?
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)

- Consider using SALT to analyze language. You can document a MLU, turn taking, function, mode, and partner responses.
- Observe interaction in dyadic and group situations, with familiar and unfamiliar partners. See how much child depends on his/her partner and how he/she functions within a dialogue.
- Assess ability to use symbols with varying degrees of abstractness.
- Assess ability to handle different types of coding schemes.

Modeling

Augmented input (AI) and aided language stimulation (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 teaching language comprehension and encouraging language expression using a child's personal communication system. 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 targeted the use of graphic symbols, with comprehension of the symbols assumed. AI was felt by some to be a more encompassing term (modeling aided and unaided techniques), 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 normal 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 provide 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 information (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 words shall we put on your board?" "do you think Janie 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 language learning styles. See Iacono's thoughtful discussion of "referential and expressive" styles in the March issue of AAC. She, and others interviewed, expressed a concern that AAC displays and devices may actually force children into a certain "style." For example, language boards may impose a referential style while speech output devices that are programmed with phrases, may limit children to an "expressive" style. In response to the question "are styles of language learning relevant to AAC interventions," there was no consensus. Most said they had not paid much attention to the issue. However, they offered 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 "style"? Mode preferences, vocabulary/content preferences, structural preferences, technical preferences? or do you 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 language 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 "style." 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 minibboards. 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.
- **Minibboards** are more pragmatic (context/activity bound), small, and easier 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. Disadvantages are displays stay near activities. Also, Light points out that a breakfast overlay should contain "what one says and does at breakfast"...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 interventions. 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.



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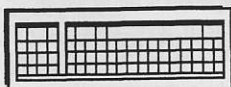
ISAAC is an international organization, established in 1983 by a group of individuals from 8 countries. Almost ten years later, ISAAC has members from 42 countries and national chapters in Sweden, United Kingdom, Canada, the United States, The Netherlands, Denmark, Norway, Finland, Germany, and Israel. Every two years ISAAC holds an international conference, bringing together delegates from its member countries. Just think about it... people who share an interest in AAC, from all over the world, in the same place, at the same time. I have attended these conferences in Boston, Cardiff, Anaheim, Stockholm and this August, we're off to Philadelphia. With so much to learn

and things changing so quickly, there is nothing quite like the spirit of an ISAAC Biennial Conference.

ISAAC Chapters are in a position to address many of the issues we face on a day-to-day basis trying to get our respective jobs done in our respective countries. The advantage of an international umbrella organization is to extend the vision and knowledge of the membership beyond their respective borders. ISAAC helps us communicate with each other so the exciting progress being made around the world is shared. ISAAC strives to enhance the human right of communication.

Memberships are available through ISAAC Chapters and the ISAAC Secretariat, P.O. Box 1762, Station R, Toronto, Ontario, Canada M4G 4A3.

Organizations can and do affect what happens to people with disabilities. Some set entry level standards for clinicians, establish 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.



Equipment
Language learning materials

Caroline Musselwhite, a creative clinician and well-known author, assists young children who use AAC techniques to learn language. During our recent conversation, she shared these wonderful suggestions about materials rich in language experiences.

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? at 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, 3535 Briarpark Drive, Suite #102, Houston, TX 77042. (800) 848-0311

- **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 work with it. \$39US. Available from Optimum Resource Inc. 10 Station Pl., Norfolk, CT 06058 (800) 327-1473.

- **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 Folkes Sentence Builder, teaching agent-action-object," says Caroline. She uses Mayer-Johnson Picture Communication Symbols (PCS) symbol set ups and mounts them on the computer screen.

Software - \$35 US. Available from UCLA Intervention Program for Handicapped Children, 1000 Veteran Ave., R. 23-10, Los Angeles, CA 90024 (301) 825-4821.

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

- **Explore a Classics Series** (3 little pigs, Princess and the pea, Stone soup). Animated graphics, write, create text and new scenes. Very flexible.

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

\$75 each. Available from Wm. K. Bradford Publishing Co, 310 School Street, Acton, MA 01720. (800) 421-2009.

- **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 multi-modal exposure to language.

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

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.

Available from Creative Teaching Press: P.O. Box 6017, Cypress, CA, 90630. (714) 995-7888.

- **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.

(continued on page 7)



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 Jane 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

(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 120th 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 Imaginart, PO Box 1868, Idyllwild, CA 92349.

- **Message Sending Games:** a booklet by Dixon (1977) is full of ideas for barrier games.

Table IV. 1992 ISAAC RESEARCH SYMPOSIUM

Session Topics	Author(s) of 2 Papers
Vocabulary research in AAC: Methodological issues & research priorities.	Melanie Fried-Oken - USA Sheela Stuart - USA
Conversation analysis in AAC	Pamela Mathy-Laikko & Carol West - USA Andrew McKinlay & Alan Newell - UK
Small "n" Designs: Problems and Solutions.	Teresa Iacono - Australia Charity Rowland - USA
Qualitative research in AAC	Jane Brodin - Sweden Marsha Smith-Lewis - USA
Literacy and AAC: Methodological issues and research priorities.	David Koppenhaver, Patsy Coleman, Jane Steelman, & David Yoder - USA Martine Smith - Ireland.
Evaluating the efficacy of AAC interventions	Ralf Schlosser & Ursula Braun - Germany Joe Reichle & Susan Johnston - US
Use of nondisabled subjects in AAC research: Pros and cons	Jan Bedrosian - Canada D. Jeffrey Higginbotham - USA
Longitudinal research in AAC	Eva Bjorck-Akesson - Sweden Mary Ann Rowski & Rose Sevcik - USA
Human factors issues in system design and evaluation	Fraser Shein - Canada Walt Woltoz - USA
Evaluating AAC service delivery programs.	Frank DeRuyter - USA Sarah Blackstone - USA

- 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.

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

Other materials

Goossens', C. & Crain, S. (1992). *Engineering the preschool classroom for interactive symbol communication: 18 months and above*. S.E. AC Conference Publications 2430 11th Avenue North, Birmingham, AL 35234 \$40

Musselwhite, C. (in press). *Emergent literacy fun*. Available soon from the S. E. AC Conference Publications. 2430 11th Avenue North, Birmingham, 35234.

Musselwhite, C. (1992). *Songbook: Signs and symbols for children (Revised)*. Special Communications, 916 W. Castillo Drive, Litchfield Park, AZ 85340. \$12 + Postage and handling. (602) 935-4656

Rowland, C. & Schweigert, P. (in press). *The early communication process using microswitch technology*. Tucson, AZ: Communication Skill Builders.

Selected readings and references

Adamson, L. Romski, M.A. Deffebach, K. & Sevcik, R. (in press). Symbol vocabulary and the focus of conversations: Augmenting language development for youth with mental retardation. *Journal of Speech and Hearing Research*.

Bjorck-Akesson, E. (1990). Communicative interaction of young physically disabled non-speaking children and their parents. Paper presented at the Fifth International Conference on Alternative and Augmentative Communication, Stockholm, August 12-16.

Cauley, K., Golinkoff, R., Hirsh-Pasek, K., & Gordon, L. (1989). Revealing hidden competencies: A new method for studying language comprehension in children with motor impairments. *American Journal on Mental Retardation*, 94:1, 53-63.

Fried-Oken, M. & More, L. (1992). An initial vocabulary for nonspeaking preschool children based on developmental and environmental language sources. *Augmentative and Alternative Communication (AAC)* 8(1), 41-56.

Gerber, S. & Kraat, A. (1992). Use of a developmental model of language acquisition: Applications to children using AAC systems. *AAC*, 8(1), 19-32.

James, S. (1989). Assessing children with language disorders. In D. Bernstein & E. Tiegerman (Eds.), *Language and communication disorders in children* (2nd ed.). Columbus, OH: Merrill/Macmillan.

Iacono, T. (1992). Individual language learning styles and augmentative and alternative communication. *AAC*, 8(1), 33-40.

Martinsen, H. & von Tetzchner, S. (June, 1988). The development of intended communication. Paper presented at Third European Conference on Developmental Psychology, Budapest.

McNaughton, S. (1992). Parents and symbols: Charting the language pathway together. *Communicating Together*, 10(2), 20-21.

Methodological issues in the study of language development for children using AAC systems. *Issue paper*: Stephen von Tetzchner (Norway); *Reactant papers*: Arlene Kraat (USA) and Erland Hjelmquist

(Sweden). **Summary**: Eva Bjorck-Akesson (Sweden). *Methodological issues in research in augmentative and alternative communication*. Proceedings of the First ISAAC Research Symposium, August 16-17, 1990 Stockholm: Sweden.

Nelson, N. (1992). Performance is the prize: Language competence and performance among AAC users. *AAC*, 8(1), 3-18.

Romski, M.A. & Sevcik R. (in press) Language learning through augmented means: The process and its products. In A. Kaiser & D. Gray (Eds.), *Enhancing children's communication: Research foundations for intervention*. Baltimore: Paul Brookes.

Romski, M.A., Sevcik R., & Wilkinson, K. (submitted for publication) Peer-directed communicative interactions of augmented language learners with mental retardation.

Romski, MA & Sevcik, R. (1991). Developing augmented language in children with severe mental retardation. In S. Warren & J. Reichle. *Causes and effects in communication and language intervention*. Baltimore: Paul Brookes Publishing Co., p. 113-130.

Romski, M.A. & Sevcik, R. (1991). Patterns of language learning by instruction: Evidence from nonspeaking persons with mental retardation. In N. Krasnegor, D.M. Rumbaugh (Eds.), *Biological and behavioral determinants of language development*. Hillsdale, NJ: Lawrence Erlbaum

Roth, F. & Cassatt-James, E. (1989). The language assessment process: Clinical implications for individuals with severe speech impairments. *AAC*, 5, i65-72.

Smith, M. (1992). Reading abilities of non-speaking students: Two case studies. *AAC*, 8(1), 57-66.

Snow, C. (1991). Diverse conversational contexts for the acquisition of language skills. In J. Miller (ed.), *Research on child language disorders: A decade of progress*. Austin, TX: Pro-Ed.

von Tetzchner, S. (1985) Words and chips. *Child language, teaching and therapy*, 1:295-305.

von Tetzchner, S. (1988). Aided communication for handicapped children. In A. Mital & W. Karwowski (Eds.), *Ergonomics in rehabilitation*. New York: Taylor & Francis, pp. 233-252.

von Tetzchner, S. (October, 1988). Becoming an aided speaker. Paper presented at the ISAAC Conference, Anaheim, CA.

Your Resources

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

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Arlene Kraat, Queen's College CUNY, Speech & Hearing Center, 65-30 Kissena Blvd., Flushing, NY 11367 USA (718) 520-7358.

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) 864-2010.

Shirley McNaughton, Suite 802, 120 Promenade Circle, Thornhill, Ontario L4J 7W9 Canada (416) 771-1491.

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

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Mary Ann Romski, Department of Communication, Georgia State University, University Plaza, Atlanta, GA 30303 USA (404) 244-5828.

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Ann Sutton, McGill University, 1266 Pine Avenue West, School of Human Communication Disorders, Montreal, Quebec H3G 1A8 Canada (514) 398-8496.

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