Augmentative Communication News
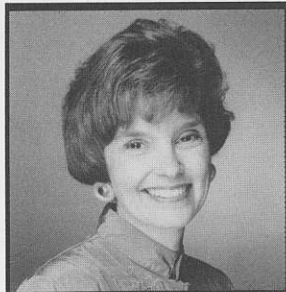
INSIDE THIS ISSUE . . .

UPFRONT

Almost every day I go for a walk along the beaches of Monterey Bay. There are the cardiovascular benefits, of course. Mostly, however, I cherish the visual magnificence of blue-green water, close and distant hills and the connecting sky. The sounds of waves against the sand are sometimes gentle, but more often articulate raw power.

Beach walking is a constant reminder that nothing stays the same. On some days, streams appear, only to disappear the very next day. Each day there are different children, joggers and dogs chasing who knows what. Sea lions, birds, otters and dolphins come and go. Collectibles (glass, driftwood, shells) are delivered and removed. Frisbees, kites and barbecues reflect market trends and their user's habits.

Beach walks create opportunities for reflection. Has AAC changed over the past few years? How? What lurks ahead? Are we prepared? Does where we've been tell us about where we are going?

This issue reflects a synthesis of opinions from colleagues, and provides a context upon which we can look back as we move forward. I am dedicating this issue to Michael Palin, a man who *(cont. on page 2)*

For Consumers
Then, now, and next steps

Has the role of primary AAC consumers changed in society? In the AAC intervention process? Why?

Respondents replied with a resounding "yes." Today, people who use AAC are more evident in public settings than they were five years ago. "We have a growing group of AAC superstars whose presence helps enlarge our vision of what can be." However, while more AAC users are taking leadership roles in government, industry and other enterprises, most still are not.

Many said improved technology is the major reason AAC consumers can now assume active roles in society. AAC devices and other assistive technology are more socially acceptable, portable, more intelligible and smarter. Technology is becoming easier for consumers and professionals to maintain and use. Also, many AAC consumers now use e-mail and the Internet.[1] This is very important because it increases:

1. **Access to information.** Mick Joyce, ISAAC's 1990 Words+ Consumer Award recipient, said, "We now have more information at our finger tips—networking, computer bulletin boards, World Wide Web sites, LISTSERVs. We also understand how to use available information and have an ability to self-advocate through various channels."

2. **Connectivity.** Consumers can now interact with and learn from each other. Al Cook, from the University of Alberta-Edmonton said, "Connectivity of consumers is the one force which will move things faster."

(cont. on pg. 2)

remained committed to delivering the highest quality AAC devices and services to people with communication impairments. Michael's sudden and premature death last fall created a void. His life, however, left the AAC beaches forever better.

What does AAC mean?
I asked a few of our colleagues (listed on page 8) a series of questions. Their opinions do not represent a consensus, but they do generate an opportunity for our reflection and thought. My questions and their responses are summarized in **For Consumers, Clinical News, Governmental, Equipment** and **University Research**. To begin, some offered a definition of augmentative and alternative communication (AAC). For example:

– Providing all forms of communication that enhance or supplement speech and writing.

– Using high tech and low tech strategies to make it possible for individuals whose speech or writing is not sufficient to participate in activities which require communication.

– Those services and devices which enhance the conversational activities (normally accomplished through speech) and graphic activities (normally accomplished through writing, drawing, plotting, mathematical manipulations, typing, *etc.*) of persons who have limitations in these areas.

– A clinical grabbag of strategies, techniques, tools, materials and devices to assist communication by and with individuals who have difficulty speaking.

– Alternative, assistive strategies, devices, technology, equipment and adaptations that enable individuals who can not communicate intelligibly and independently without an interpreter (*e.g.*, parents, siblings, peers, teachers) to express their ideas, requests, comments and observations in a manner which facilitates their participation in life activities.

As defined above, AAC focuses on expressive communication impairments, *i.e.*, speaking and writing. Should the field be called AASW—augmentative and alternative speaking and writing? Communication, after all, involves listening, understanding and reading as well as vocalizing, typing, writing, facial expressions, gesturing, signing and touching. In practice, AAC clinicians and manufacturers provide assistance to people across a full range of communication problems because many individuals who have difficulty speaking also have disabilities that affect hearing, seeing, learning or understanding. The focus of AAC is forever broadening. At the 1995 ECART (European Conference on the Advancement of Rehabilitation Technology) in Lisbon, for example, the AAC track included sessions about strategies, techniques and technologies designed to help people with sensory, motor, language and cognitive disabilities solve their communication problems. AAC exhibits included: communication aids, symbol sets, switches, software (broadly defined), access technologies, assistive listening devices, close captioning, screen readers, TTDs, Braillers and more. Perhaps we need to reconsider how we define AAC and whom we prepare ourselves to serve, as we move toward the Year 2000. What do you think?

Sarah W. Blackstone, Ph.D.

For Consumers

3. **Advocacy.** Consumers are launching advocacy campaigns. In the U.S., some regularly e-mail elected officials about proposed cutbacks; others spearhead state-wide campaigns (*e.g.*, Bob Segalman in California is lobbying to provide speech-to-speech phone service for speaking-impaired individuals.)

Nearly everyone agreed that consumers and their families today are more directly involved in the AAC intervention process. "Fewer are waiting for professionals to tell them what to do." Also, professionals seem to be "more respectful of what consumers say they want and need." "Clinicians and manufacturer representatives are more willing to step aside so consumers can make their own decisions." Finally, consumers are "better informed (*e.g.*, reading and talking to manufacturers and professionals to seek knowledge) and are networking with each other more." One respondent said:

I find more and more adult consumers with acquired disabilities doing consumer evaluations. This, of course, is dependent on consumers having a place that will allow them to do it. If there is a place, and in Alaska there is, many consumers can make their own choices, given a little technical support.

AAC consumers: Then
Nearly six years ago, in the July, 1990 issue of ACN, I reported the results of a survey asking professionals which AAC populations they felt were well served and which were not.[2] A summary of those results follows:

■ **Well served.** Professionals (N=125) from the U.S., Canada, Australia, New Zealand, Israel, Sweden, the Netherlands, England and Scotland said children with cerebral palsy and good cognitive abilities were better served than any other AAC group. Other populations said to be well served were: (a) children with developmental disabilities in the U.S. and Canada and (b) adults with motor neuron disease

in the United Kingdom. Some AAC professionals said adults in rehabilitation hospitals and people with advocates, insurance and money were well served.

- **Not well served.** In 1990, respondents felt that most adults, no matter what the disability type (*i.e.*, acquired disabilities, degenerative conditions and congenital disabilities) were not well served. Many also said that children with severe mental retardation, those who were very young, those with dual sensory impairments and those who *walk but don't talk* had limited access to AAC services and devices.

AAC consumers: Now

Six years later, I asked the following question: *What has the field of AAC done to improve the outcomes of specific consumer groups?* According to respon- dents, we've made progress:

- **Children with cerebral palsy.** Children with cerebral palsy have a "new lease on life with regard to education and independence." AAC professionals have a "much better sense about the complexity of issues surrounding this group's successful use of technology." "We know how to integrate increasingly powerful and user friendly assistive technologies into the AAC assessment/intervention process and more importantly into a person's daily life." Respondents said professionals now stress the importance of literacy and functional communication skills rather than device training.
- **Children with severe cognitive impairments.** Most feel the advocacy work of AAC professionals and family members has helped highlight the importance of communication and education for this group. As a result, more children (and adults) with significant cognitive impairments use AAC devices and strategies to communicate effectively and to participate in activities. Today, professionals use AAC strategies and devices to teach cause/effect and beginning symbol recognition, as well as expressive language, to this group.

- **Children with speech-motor impairments and language problems.** AAC devices and strategies are making communication interventions for this group more effective. AAC provides a way to assess and teach language and communication to children (and adults) with Down syndrome, autism, verbal apraxia and other conditions. Many seem to benefit instructionally from the use of symbols and voice output.
- **Adults with congenital disabilities.** Respondents noted "big gains" for some individuals who receive AAC services and devices in the areas of independent living, education and employment.
- **Adults with acquired disabilities.** AAC services and devices continue to remain out of reach for many individuals with head injury and aphasia. This is true despite studies showing that AAC approaches are effective (a) during the recovery process and (b) in helping people readjust in their communities.
- **Adults with degenerative disabilities.** People with amyotrophic lateral sclerosis (ALS) and other degenerative conditions can benefit from AAC devices and services, but too few have access to what they need. Without assistive technology, many become dependent, unemployed and disconnected from family and friends.
- **Elderly individuals with communication impairments.** No respondent felt this group was being served very effectively.

AAC consumers: Next Steps

Respondents said, AAC programs and professionals are likely to focus on the following groups as we approach the Year 2000:

- **Adults/children with limited cognitive function,** because they represent a substantial number of people with severe communication impairments. Also, "We are developing more effective ways (some high tech) to support these individuals and have only begun to scratch the surface in our use of digitized speech devices, cognitive prompts

and communication supports for these individuals."
- **Children/adults with language problems,** because of the immense challenges these individuals bring to us. Also what is possible through technology will change over the next few years and provide them with more useful tools.

A few speculated that AAC clinicians, researchers and manufacturers will focus on unserved or underserved indivi- duals, *i.e.*, those with low incomes, inner city minorities, second language speakers and those living in remote areas. Others predicted AAC profes- sionals would continue to serve those groups that society prefers, *i.e.*, "cute children . . . not drooling old men." Some thought groups with funding, *e.g.*, young children and those with dual sensory impairments, will be served because *they* have funding. Finally, respondents said AAC professionals will work with the elderly, because most people develop sensory, motor and/or cognitive difficulties that interfere with communication as they grow older.

To sum up

Compared to 1990, AAC consumers in 1996 have more equipment choices, resources and confidence to find what they need. This reflects gains made in technology, shifts in societal and consumer attitudes, increased respect for the abilities of individuals with disabilities and a move toward family-focused interventions. In the Year 2000, respondents predict technology will be even better. However, many fear that the technical assistance and support that is required to make AAC devices and strategies work may become even less available.

Clinical News
AAC strategies & approaches

In the 1990 ACN survey respondents listed a total of 239 intervention practices that "work" and 259 that "don't work."[3] Frequently cited as "working" were: (1) a team approach, (2) intervention that occurs in natural contexts and (3) approaches that support and involve families. Items listed as "not working" were, not surprisingly:

- lack of team approach
- pull out therapy and center-based evaluations
- lack of follow up
- lack of funding

Respondents in 1996 discussed effective ways to approach AAC intervention. One person suggested that our most effective intervention approaches are the same instructional strategies first introduced in the 1980's. "It's taken a long time," she said, "for these approaches to filter down to the teams working with AAC users, but it is finally happening." Table I lists the nine approaches discussed below:

1. Use multiple modalities. Reportedly, more AAC users today use multi-modal systems of communication. Respondents made several interesting comments:

- "I ask people to be open to all types of communication modes."
- "I think the consumer (not the family or professional) should select the modes they want to use."
- "Professionals should help the individual and family learn when, and how, to use which mode."

They also mentioned signs/gestures, vocalizations, picture boards and an array of voice output devices (from simple Language Masters and loop tapes to sophisticated AAC devices.) Several of those surveyed said that more AAC users today incorporate speech with AAC strategies and devices.

2. Use voice output. Respondents said, "Voice output is critical to the consumer. It has power, gains attention, facilitates independent communicative exchanges and more equal participation in life activities." "Voice output is a disability equalizer when the consumer uses it effectively."

Table I. Nine effective ways to approach AAC intervention		
Use multiple modalities.	Use voice output.	Provide literacy instruction.
Teach the consumer, the family and their supporters.	Use training time wisely.	Approach AAC intervention as an ongoing process.
Select vocabulary that is meaningful to consumers and supports their activities.	Emphasize participation and communication in daily activities.	Recognize technology as a tool.

3. Recognize technology as a tool. Sometimes others perceive the field of AAC as synonymous with AAC devices. Respondents were adamant that AAC devices are just tools (more powerful and increasingly flexible, to be sure), but only a part of the communication picture. They said:

- "Devices do not solve problems; multimodal systems do."
- "No device, no matter how powerful or appropriately matched to an individual, gets used very effectively if the environment doesn't support, encourage, and reward the learning and use of that device."
- "Training and follow-up is as important as getting the device."
- "Devices are not for everyone. They depend on long term support and commitment. Many consumers seem to do just fine without one."

4. Emphasize participation and communication in daily activities. Many pointed out that instructional strategies supporting participation are different from teaching someone how to operate a device. Today, most intervention takes place during daily activities and in natural contexts. AAC is seen as a "tool for access and participation rather than an intervention that focuses on devices, overlays, symbols or signs."

For example, several respondents noted that the field's earlier focus on graphic symbols has shifted. "Today," they said, "communication and participation are the focus, not symbol sets and systems. We no longer dwell on the type of symbol to use. We've learned transparency/translucency/opacity and symbol hierarchies are less important than teaching someone to *use* symbols in meaningful ways." Ralf Schlosser summarizes the ongoing AAC discussion about symbol sets and systems in the recent *ISAAC Bulletin*.[4]

One respondent said, "In the past, AAC professionals used to send mixed messages concerning prerequisites for communication. We even tied symbol use to qualifying for AAC services and devices." Today we know better. "We know that some individuals learn to use language with flexibility and creativity while others remain basic *cause and effect* communicators for a very long time." Each person can and should participate in his or her own way.

5. Approach AAC intervention as an ongoing process. Several respondents said that: (a) the clinical model is inappropriate for successful AAC intervention and (b) lengthy initial evaluations are rarely advisable. Instead, clinicians implement and evaluate the effects of AAC tools and strategies on an individual's communication and participation as part of an ongoing

process. There are no "only ways" to implement AAC.

6. Educate the consumer, the family and their supporters. All noted that to be successful in AAC, consumers, their families and supporters must be actively involved in the intervention process. Unfortunately, most consumers still do not have sufficient access to information, services or assistive technology. Respondents also said that AAC professionals today have an increased respect for, and understanding of, consumer preferences. "Consumers are no longer seen as the product of the intervention process, but rather as key players in an ongoing process."

7. Provide literacy instruction. It is critical for people who have difficulty speaking to develop literacy skills. Without literacy, individuals who don't speak so others can understand them may be unable to say exactly what they mean. People (even those with severe cognitive impairments) make progress when provided with good instruction. In the case of literacy, this means varied experiences reading and writing about topics of interest and importance to the individual. It also means steady doses of direct instruction in reading and writing skills. "AAC consumers not only have a need for, but a *right* to, print/text access," says David Koppenhaver, Director of the Center for Literacy and Disability Studies. [5]

8. Select vocabulary that is meaningful to consumers and supports their activities. Vocabulary selection depends upon a multitude of factors, *e.g.*, characteristics of the individuals involved, the tasks, the contexts, constraints of the hardware, storage and retrieval strategies and so on. We know that it is important to select vocabulary that "entices the consumer to use AAC techni-

> *"Consumers are no longer seen as the product of the intervention process, but rather as key players in an ongoing process."*

ques and strategies and encourages communication partners to interact with and support the user."

Today we have valuable clinical tools. Examples include: (a) computer programs like BoardMaker and Compic that make it easy to access symbols and construct overlays, (b) a range of materials that manufacturers can build into AAC devices and software, like photo and sound libraries and (c) published lists of vocabulary compiled by AAC researchers for use with certain ages and in specified contexts.

9. Use training time wisely. Not everyone is going to learn how to support, coach or facilitate the progress of a specific AAC user. Not everyone is good at communicating with AAC users. In fact, not everyone is a good communicator.

Respondents pointed out that "AAC consumers don't have time to waste. Therefore, AAC professionals should not waste time or money training support people who resist learning." One respondent said, "The people to train are those who can (a) quickly look at a situation, read a child or adult's signal and understand the message; (b) realize what is necessary for the person to communicate and participate in an activity and (c) know when to go to the next step because the individual is ready to progress."

Service delivery
Responses to questions about service delivery in 1996 confirmed the 1990 ACN survey results. The most important components of AAC service delivery are (1) a team approach; (2) consumer and family

involvement and (3) intervention in natural contexts. Making these things happen continues to be very difficult:

- "I always feel like I am caught between a rock and a hard place. The service delivery models which seem feasible are difficult to make work. They require me to educate administrators and third-party payers, as well as members of the teams and families I work with."
- "It is hard to make collaboration work. I am always hoping that someone out there has solved the problem effortlessly, but I suspect that is not the case."
- "It is a mess in the schools and artificial in private clinics the majority of the time."
- "I see a general decline in the skills of practitioners in major city school districts due to lack of administrative support, diminishing equipment resources and no time to stay abreast of developments in the field."
- "I am torn as a professional in a public school setting. Should I suggest trials with high tech devices when I see professionals and other staff are not making lower tech options available to the student?"
- "Programming, message selection, device use is foreign to the majority of public school and health-care staff. Some soak up training. Others seem uninterested or unwilling to learn."

To summarize
Despite the difficulties, progress is being made. Respondents are happy that AAC approaches are increasingly consumer-oriented and focused on real life applications. More people with communication impairments are aware of AAC services and devices; however, there is lots of work to be done, and we must be vigilant so that what's already been accomplished doesn't get undone.

Equipment
Wish lists:
1990 and 1996

In 1990, I asked subscribers to develop a "wish list" for equipment developers.[6] Table II is a partial summary of that list. Reviewing it, I was pleasantly surprised. Most 1990 wishes have been granted, thanks to AAC manufacturers who incorporate mainstream technology into AAC devices. As one 1996 survey respondent noted, "We've come a long way in five years—AAC devices have more memory. Many are smaller and all give us more power for less money."

Optical scanners, dynamic displays with color, touch screens, environmental controls and photo and sound libraries are among the wishes granted. Some might question, however, if other wishes listed in Table II have been realized. For example, whether AAC devices are portable, have tailor-made voices and enable users to participate in conversations is debatable. Portable depends on a user's size, weight and motor skills. Tailor-made speech synthesis isn't *really* available although AAC manufacturers do provide synthesizers with multiple voices and offer a plethora of digitized speech devices. Finally, while communication software certainly supports conversation better than ever, rates are still slow and large vocabularies a challenge. Far too few AAC users have mastered the technology sufficiently well enough to be considered effective conversationalists.

What about the future?

When I asked respondents to make future requests for equipment, they said:

- "Get prices down."
- "Stop making AAC devices look like AAC devices. Some adult consumers don't want to use an AAC device because it draws attention to them. Also, not every child/adolescent wants a look-alike device."
- "We need dedicated AAC laptop computer technology that can hold up to constant use. I realize we have the technology, but the durability stinks."
- "Developers: Please spend more time applying what we know about how people organize their thoughts to communicate and less time on physical access. Let's reduce the cognitive load on AAC users of technology."
- "Manufacturers: As devices become easier to learn to use, they will benefit more individuals."
- "We need technology that really helps those with cognitive impairments, those with limited access to professional training and support and those who are technophobic."
- "Some users have three or four reliable movements, not just one. We need devices that build in multi-inputs so people can use several points of control at the same time." For example, people might want to use voice recognition to access macros and environmental controls and use other inputs for conversation.

To sum up

All agreed that the technology available to AAC users in 1996 is easier, better and less expensive than it was in 1990. However, respondents said it gets more and more difficult to keep up—"new devices come out faster than learning permits." Good news everyone! See below.

Table II. 1990 Wish List[6]
All wishes granted (at least in part) by 1996

Technology to optically scan photos into devices.	Thin devices (yes) that fold (not really)
Stored photos that work in ways similar to Mayer-Johnson Board Maker and Compic set.	Photographic quality and movement on computer displays.
On the body communication aids.	Dynamic displays with color.
Tailor-made synthetic voices. [Note: Tailor-made may not be accurate, but more voices are now available to users.]	Portable devices with touch screens. [Note: "Portability" is a relative concept.]
More memory for digitized speech.	Lower cost devices.
Portable, dedicated auditory scanning devices that combine visual and auditory scanning.	Three-sided horseshoe overlay frame with voice output activated by a light pointer.
Scanning aids that work for conversation. Note: This is debatable. See text below.	Easy ways to start and stop video recorders [Note: Some learn to use environmental controls before they produce a message.]

Interactive video that presents a series of visual images (yes) and includes a biofeedback feature (no) (*e.g.*, if child's tone increases, device plays soft music and presents pleasing visual images).

Chart of AAC Devices

The long-awaited *1996 Edition of the Chart of Augmentative and Alternative Communication Devices* will be available for purchase at the beginning of the summer. The new format accommodates almost twice as many devices as the 1991 edition. In addition to "traditional" AAC categories for devices with *primarily spoken output, primarily visual output,* and *both spoken and visual output,* the 1996 edition includes new categories: *artificial larynges* and *speech amplifiers.*

Contact the Applied Science and Engineering Labs for more information and an order form. ASEL University of Delaware, A.I. duPont Institute, 1600 Rockland Road, Wilmington, DE 19803. (302) 651-6830.

University/Research

Questions for researchers

In another 1990 ACN survey respondents generated a list of questions for AAC researchers.[6] Perhaps because of the complexity of the questions asked, the field has far fewer answers to the research questions than they had to the wish list developed for device manufacturers. For example:

Do AAC methods interfere with or facilitate language growth? Anecdotal reports suggest that AAC techniques, symbols, strategies and devices support the growth of language in persons (a) who are just developing language and (b) who have developmental or acquired language impairments. However, we can not yet make these claims authoritatively.

- *Symbols, text and voice output.* Romski and Sevcik demonstrated that voice output helps children with severe cognitive impairments to understand words/spoken language.[7] Also, literacy research suggests that using text with AAC graphic symbol displays results in incidental learning and supports emerging literacy. Thus, at a symbol/word level, there is evidence that AAC facilitates semantic growth. However, we know almost nothing about the effects of symbols, miniboards, conversation books, voice output devices and other AAC techniques on the development of syntax.

- *Coding.* Researchers who are investigating the "learnability" of various coding schemes are finding that individual AAC user's personal preferences and learning styles, as well as cognitive capabilities and training, influence the degree to which coding schemes are useful storage and retrieval techniques. How this might affect language development is unclear.

- *Linguistic prediction.* Research in the area of learning disabilities suggests that linguistic prediction programs can be a scaffold to writing. However, researchers in AAC know little about the impact of using linguistic prediction programs with children who don't speak and are in the process of developing language.

Research questions—1996

Respondents generated additional questions for researchers. Many said it is becoming very important to use methods that "get research out of the university and encourage those on the streets to participate and document what they do, how they do it and what outcomes result." Specific examples include:

- "How can we cut the costs of AAC services and devices and maintain/improve quality?"
- "What impact does AAC have on the functional communication skills and perceived quality of life for persons with severe communication impairments?"
- "Can we use the Internet in ways that provide effective training for professionals? for AAC users?"
- "What kind of rate enhancement techniques will AAC users learn most easily at various ages and stages of life?"
- "What device features benefit children and adults with severe cognitive impairments? Why?"
- "Are high tech AAC systems useful in teaching syntax and pragmatic functions? How?"

Several respondents suggested that ISAAC and its chapters (and other organizations) should facilitate the establishment of clinical working groups that focus on a particular area and share outcomes information. One forum for this to occur will be the ISAAC Research Symposium, scheduled from August 11-12 in Vancouver.[8]

Governmental

Crises pending— action required

In some countries there is minimal support for persons with disabilities. In others, government funding entitles people with various types of disabilities to the communication devices and services they need. One respondent to the 1996 survey said, "It is wonderful that we live in societies that promote and support the development of assistive technology." This does not occur accidently. It occurs because persons with disabilities, and their advocates, ask for and, when necessary, demand consideration. These individuals and groups must remain ever vigilant.

Today, citizens with disabilities face serious threats. In the U.S., for example, many politicians are calling for a roll-back of services for children and adults with disabilities. Funding may be cut back due to evolving health care systems, such as managed care. Also, if IDEA (the law that provides support, services and technology to children with disabilities) is no longer considered viable, the education system will provide fewer services. At the other end, insurance companies in the U.S. keep "tightening the noose." As we approach the year 2000, AAC support in school districts, social agencies and medical facilities could be decimated. Respondent's sounded the following *Calls to Action* for the field:

- "Do a better job selling assistive technology and AAC to policy makers and administrators."
- "Get data. Show how effective AAC devices/ services are."
- "Show people the impact of AAC services and devices on independent living, educational advancements and employability."
- "Provide the outcome data necessary to convince the educational and medical systems that assistive technology and AAC services improve functional communication and quality of life for persons with disabilities and that the benefits justify the costs."

REFERENCES

[1] I highly recommend my colleague's recent newsletter on this topic: Williams, M. (1995). The Internet and AAC. *Alternatively Speaking*. 2:3, 1-8.

[2] Blackstone, S. (1990). Populations and practices in AAC. *Augmentative Communication News*. 3:4, 1-3.

[3] Blackstone, S. (1990). What your colleagues think about AAC intervention. *Augmentative Communication News*. 3:4, 4-5.

4 Schlosser, R. W. (February, 1996). Selecting graphic symbols: Considerations in making an informed choice. *The ISAAC Bulletin*. 1-3.

[5] David Koppenhaver, (January, 1996). Personal commuication.

[6] Blackstone, S. (1990). Forecasts and wish lists for the 90's. *Augmentative Communication News*. 3:1, 6.

[7] Romski, M.A. & Sevcik, R. (1995). Paper presented at the American Speech-Language-Hearing Association Convention in Orlando, Florida. **Note:** Information will be available in their book.
Romski, M.A. & Sevcik, R. (1996). *Breaking the speech barrier*. Baltimore: Paul H. Brookes Publishing Co. (Publication: June, 1996.)

[8] For information, contact ISAAC 96. c/o Venue West, #645, 375 Water Street, Vancouver, B.C., Canada
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YOUR RESOURCES

Note: The individuals listed below responded to a survey sent out over e-mail. Please be aware that their comments do not suggest consensus in the field nor represent the results of a systematic investigation or scientific survey. Rather, they provide a backdrop against which to reflect. Thanks very much for the thoughtful participation of:

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ALLIANCE '96 Portfolio: Outcomes in AAC & AT

Next steps: Outcomes in Augmentative Communication and Assistive Technology was an exciting, hard-working conference sponsored by Augmentative Communication, Inc. The Outcomes Portfolio developed by, and for, participants will be available in late May, 1996. It will include a compilation of articles and other materials, a summary of recommendations to the field from conference participants and more. A limited number of copies will be made available for the costs of reproducing the materials.

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(Note: See also Joyce, M. (February, 1996). Consumer/User Corner. *The ISAAC Bulletin*. 6-7.)

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