Augmentative Communication News

INSIDE THIS ISSUE . . .

UPFRONT

Some adults with developmental disabilities participate in day programs with other adults with disabilities and adults who are paid (staff) to provide a program. A typical program might offer a range of activities: supported work at the center or in the community, skill development (food preparation, communication and money management), shopping, recreational activities, eating and socializing.

Shifting attitudes, changes in public laws and policies, and activism on the part of adults with disabilities and their families continually challenge existing programs and traditional ways of doing things. Today, funding agencies are beginning to ask for proof that consumers, including adults with disabilities, are satisfied with services they receive. Many expect programs they fund to focus on increasing a person's participation in community activities, work opportunities and independence.

The main purpose of this issue is to tell a story that began only one year ago. It's about five adult day programs and their efforts to change. **For Consumers** tells the beginning of the story and how I became involved. **Clinical News** provides specific information about what was *(cont. on page 2)*

For Consumers
Adult day programs: Chapter one

Programs attended by adults with developmental disabilities are changing. Now more adults who have disabilities and are in good health have options that extend beyond staying home or attending custodial day programs. No longer must people spend day after day doing nothing of any significance to anyone. Cottage industries are springing up; adults with disabilities are living, working and participating in their communities. These adults expect to be paid for what they do and appreciated for who they are—just like you and me.

The philosophy and quality of these programs are profoundly affecting the lives of people who attend them. Being a "member of" and having a sense of "belonging to" are important human needs. While some adults may have little desire to move beyond a familiar safe-haven, others feel an intense need to be more independent. Thus, an adult day program can be both a means to an end and an end in itself. Either way, programs should provide individuals with emotional support and opportunities to grow and learn.

Money management, conflict resolution and communication groups often practice components of skills rather than engaging in real life. Unfortunately, some adults have been asked to *show me/point to* pictures *(cont. on page 2)*
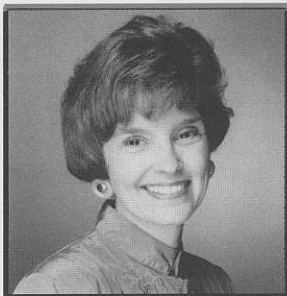
(continued from Upfront, page 1)
done. The **Equipment** section tells how augmentative communication (AAC) tools can support adults in realizing their goals and aspirations. The **Governmental** and **University/Research** sections highlight aspects of a symposium held in The Netherlands commemorating the Institute of Rehabilitation Research's (IRV) new facility and twelfth anniversary.

Accolades are pouring in to ACI's international headquarters for Michael B. Williams and his first issue of *Alternatively Speaking*. *It's wonderful. Clearly written, humorous, personal, informative. Great first issue. I especially like that deal on the back for kids.* Already more than 300 people have subscribed from 15 countries. If you haven't, phone us 408-649-3050; fax us (408) 646-5428 or write to 1 Surf Way, #215, Monterey, CA 93940.

Sarah W. Blackstone, Ph.D.

P.S. The July issue of ACN will focus on issues related to Facilitated Communication and AAC. If you have information to share, please do so before July 1, 1994.

For Consumers *(cont. from page 1)*

since they were children and still don't seem to "get it." Actually, they do "get it." The point is . . . there isn't one!

Life is not a dress rehearsal.

When the focus of a program shifts from

We are here to take care of you, instruct you and make sure you do what we think is best for you . . .

to

We are here to support you so you can take care of yourself or direct your own care, learn more about what you are interested in and take control of your life,

a very important transition occurs. And so, this story begins.

One year ago, the Skills Center, Inc., an agency with several adult day programs located in the Monterey Bay Area changed its Mission Statement to read:

The vision of the Skills Center is to become a leader by following the ambitions and aspirations of the people it serves.

Andy Pereira,[1] the program director, wondered aloud to me, "Does AAC have something to offer us?" He said, "Given our mission statement—to which the Board of Directors and administration are committed—we face a major problem. Many people who attend our programs have never been asked what they want to do— not in school, not by their families and not by us. Few of our clients understand what a personal goal is, and those who do may not be able to tell us because of their communication problems." They have articulation and language problems, limited knowledge of English and social interaction styles others find very difficult.

What does AAC have to offer? I observed each of the programs and then met with Andy and other top administrators. I said, "In my opinion no AAC inservice training, device, communication technique, individual client assessment or treatment plan would begin to address your mission. It is our AAC philosophy that can help you the most." I explained that inherent to the field of AAC is a belief and a knowledge that everyone communicates somehow, everyone can participate somehow and that special communication techniques and strategies can help. "To achieve the outcomes you want," I said, "You must change what you do in your programs."

They didn't kick me out. Instead we really began to talk. What if clients became more responsible for what happened to them each day? What if they designed projects, assigned roles, found materials? What if they were treated like adults and sometimes allowed to fail and learn from their mistakes? What if the role of staff changed? What if staff became coaches and supporters, rather than trainers, instructors or bosses? What if communication opportunities happened <u>all day long</u>?

The rest of the story flows from a shared vision that all individuals at the programs would:

- Change behaviors that reflect "old attitudes and ways of doing things."
- Spend more time learning and practicing skills they find of interest and of value.
- Have communication opportunities and support throughout the day.
- Have access to a variety of augmentative techniques, strategies and voice output communication devices.
- Enhance their expression of ideas and preferences.
- Expand their knowledge-base by having meaningful learning opportunities.
- Plan, carry out and complete projects.

The story unfolds in **Clinical News** and **Equipment.** I met twice with each group from the five programs. What occurred at these meetings is described. In addition, program supervisors share their perceptions of the impact of what we did (and they are doing) on clients, staff and their programs six months later.

One last thing . . . there is no end to this story—not now and hopefully not ever.

Clinical News

The story: Doing meaningful things

You tell me and I forget.
You teach me and I remember.
You involve me and I learn.
(Benjamin Franklin)

This is not just a great quote. It's true. Studies on adult learning support it unequivocally. This quote is the theme of the story. Group processes and AAC techniques described are far from unique. Many other people in many other programs are probably doing similar things.

We sat around a table or in a semi-circle. Between 8 and 22 people attended the two group sessions at each of the five programs. We had flip charts, magic markers, erasable writing boards, communication symbols, digitized speech devices, colored dots, paper, pencils and courage. A feeling of nervous anticipation was easy to discern.

We were all adults associated with the Skills Center programs. Beyond that, we were a motley crew. Our ages spanned nearly five decades. Our capabilities, skills and interests were just as varied. "Clients" outnumbered staff—that was a requirement—and were certifiably *persons with disabilities*. (Mental retardation, traumatic brain injury, communication problems and behavioral disturbances topped the list.) Most were ambulatory although many had motor problems. Staff understood almost everyone; but as an unfamiliar partner, I found the speech of more than half difficult to interpret. Bilingual issues were pervasive. Some people used signs, communication wallets or communication boards, but rarely away from their structured communication groups. Electronic communication devices had not been tried.

Staff attending the sessions understood the administration's commitment to change. Most—not all—were interested in making changes. While some had worked at the Center for years; others were new employees.

Table I. Rules of Brainstorming

NO NEGATIVES
PIGGY-BACK ON OTHERS IDEAS
KEEP TO A TIME LIMIT
ENCOURAGE FAR-OUT IDEAS
INSURE EACH PERSON HAS A WAY TO PARTICIPATE (uses an interpreter, pictures, devices, signs, symbols)

Recorder. Writes down words/draws icons so participants can "read" the list of ideas.
Time keeper. Tells group when to begin and stop.
Facilitator. Keeps things moving and people following the rules.
Reporter. Reviews list of ideas generated.

Brainstorming

Brainstorming was the first activity. Just for the record . . . nearly everyone could point to his/her brain. Of course that was not the point! Brainstorming requires that people communicate and participate. Staff play supportive, never directive roles. After reviewing the rules in Table I, we began. Staff participated by contributing ideas and *supporting* anyone who seemed to need it or requested it. Support could mean:

- Enabling someone to be a recorder (write and/or draw), keep time or give a report.
- Making appropriate symbols available for an activity.
- Translating Spanish to English and English to Spanish.
- Interpreting difficult to understand speech.
- Encouraging participation by modelling, offering choices and coaching.

First, we practiced. I asked, *"What kind of foods can you think of?"* Recorders wrote down words and drew icons next to each word on a flip chart or white board. In some cases, two recorders worked in tandem—a staff member printed and a client drew, or visa versa. Within five minutes at each site, we had a list of more than 15 foods. We

were even having fun. Participants who were not literate could attach meaning to our hand-drawn icons. That was exciting!

I took a deep breath, looked around, and thought, so far . . . so good. Nothing ventured; nothing gained.

Next, people in the group brainstormed *"Reasons I come to the program are____."* People volunteered to be recorder(s), timekeeper, and reporter. Everyone was offered support. Despite the more abstract nature of this task, more than 20 reasons were generated at each site in just 10 minutes. Then, we were ready to prioritize. Table II is an example of one program's list.

Table II. One Group's Reasons for Attending the Program

TOP PRIORITIES: Making money, Learning new things, Going downtown.

HIGH	MEDIUM	LOW
Do jobs	Work on goals	Watch movies
Visit people	Go to the Deli	Look at
Go to beach	Water flowers	magazines
Shop	Do puzzles	Garden
Learn to	Go on buses	Mop floors
communi-	Make calen-	Go to class
cate better	dars	Clean bath-
Read		rooms

Setting Priorities

Prioritizing is a process allowing groups to find out how people feel, reach consensus and/or make decisions. All participants were given three colored dots to cast as votes. During a break, each person placed his/her dots on the list next to three primary reasons for attending the program. Some people did not understand the task and put dots in places they could reach or where they saw other dots. However, for our purposes that didn't matter. There are no "right" answers. People learn the value of their opinions over time and through experience.

Primary reasons people in the five programs attended the Skills Center were to:

- Go places (downtown, library, movies, Taco Bell) (44 votes)

- See their friends (41 votes)
- Make money (39 votes)
- Have fun (38 votes)

Brainstorming and prioritizing can help programs ask and answer a very important question—Does our program's current schedule of activities reflect the preferences of our consumers? According to these group sessions, time should be focused on doing things in the community, building friendships, making money and having fun.

Solving Interaction Problems

Another emphasis was to provide opportunities for clients to solve communication problems and learn from each other. For this activity, clients enacted solutions to communication situations. Role playing, problem solving, modeling and AAC communication strategies gave everyone opportunities to observe multiple ways of communicating. Each group selected one situation that was causing problems at their site:

- Grabbing to get attention.
- Taking too long in the bathroom to wash your hands.
- Refusing to participate during group activities.
- Refusing to respond.
- Acting "mean" for no apparent reason.

Table III. Solutions
PROBLEM: Taking too long washing hands
1. Ask person to move.   2. Tap person on shoulder and gesture for a turn.   3. Use a communication display to request a turn.

Table III illustrates solutions one group generated and role played.

Planning a Project

An adult's life is full of projects (making dinner, cleaning house, balancing the checkbook, shopping). Group projects allow people to plan, work toward a common goal and do something that has a tangible result. Projects have identifiable beginnings and endings.

Table IV. One program's list of projects as prioritized	
6 dots	Find new ways to make money
5 dots	Buy paint for building
5 dots	Plan shopping trip
3 dots	Landscape Skills Center
3 dots	Get more curb cuts in our town
2 dots	Meet our neighbors
2 dots	Hang out in Cannery Row
1 dot	Go out together at night
1 dot	Clean up neighborhood streets
1 dot	Ride bus to new places
1 dot	See the sunrise at the beach
0	Put pictures of women on the walls

The goal of this activity was for each group to select a project using brainstorming and prioritizing and then plan it. See Table IV for one program's list. The five programs selected these projects:

- Solve the mud problem in the front of the center.
- Make cookies.
- Make a video.
- Find new ways to make money.
- Have an art show.

Staff supported, but did not direct, project teams. Teams developed an Action Plan with tasks to accomplish, people responsible for accomplishing each task, and a timeline. Table V is one example.

Projects often don't come out *exactly* the way they are planned. Timelines seemed to be particularly elusive. Coping with reality is

among the many things to be learned during a project.

Solving Communication Problems: Shopping

Next, we set up a mock store. Merchandise depended upon what happened to be available—we had three plant stores, a candy store and an office supply store. Only clients were storekeepers, but everyone took turns being customers. Speech, gestures, facial expressions, written messages, an interpreter, a communication board/wallet, and voice output devices were options for communication.

How exciting! Learning was incremental as each person learned from the last. Clients were sensitive, patient and supportive of each other. They demonstrated skills staff didn't know they had. We all agreed that intelligible voice output was more effective than symbol displays in our stores. And yes, it was lots of fun.

Expanding Horizons

The purpose of the final activity was to develop coursework that would interest adults who attend day programs. Many clients had limited experience and world knowledge. Thus, we were required to find ways to expand their information-base in order to fulfill the mission statement. Also, courses and curricula developed by one group could be useful to others. At each site we broke into

Table V. Project #1: GET RID OF MUD IN THE FRONT			
GROUP LEADER: Mark (with support from Rex)			
TASKS	**Who is responsible?**	**By When?**	**What is the outcome?**
#1: Decide what want instead of mud	Jeff, Mark, David, Dierk	Jan. 5, 1994	Make a presentation to group
#2: Make plan to replace mud	Mike, Rex, Gin	Jan. 19, 1994	Write/draw action plan so all understand
#3: Carry out plan	Dierk, Tim, Leslie, David, Jeff	April 30, 1994	No Mud!!!!!
RESULTS: Additional action plans and lots of hard work made this project a success. The project team designed and installed a <u>very attractive gravel walkway</u>. It goes from the street to their front door and solves their mud problem. Everyone is proud of this accomplishment (as well they should be!)			

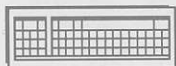| Table VI. Things We Want To Know More About					
LEARNING HOW TO MAKE ICE CREAM			**LEARNING HOW TO DO LANDSCAPING**		
APPROACHES	COSTS	SKILLS NEEDED	APPROACHES	COSTS	SKILLS NEEDED
Ask someone to show us	none	Need to find a volunteer	Plant seeds and watch grow	price of seeds	Buy seeds, plan, observe
Go to library	$1 - 2 each	Use bus, talk, use library card, use copy machine	Invite someone who is a professional landscaper	none	Dial phone, talk, write thank you note
Call a dairy	none	Find out who to call, dial phone, talk, take notes.	Ask someone to help design plan for the garden	hopefully none	Find someone to do this, understand the plan
Visit ice cream shop (Baskin Robbins)	none (except for snack)	Talk to owner, take notes or tape information	Go to the library to get information from books or video	$ for copies	Talk, use library card, use copy machine
Get ice cream maker and make it ourselves	$ for ingredients	Find ice cream maker, recipe, go shopping, do it, eat it!	Develop a Landscaping Pals Hotline for Skills Center	phone bill	Talk on phone (explore modem?)

smaller groups. Each group brainstormed *"I would like to know more about____"* and prioritized their lists. Then we reconvened. Reporters read the ideas generated in their small groups. After discussion, each program selected one course. They talked about how to approach the learning process, costs and skills people would need. Table VI gives two examples (Making ice cream and Landscaping.) Then, groups decided how to pursue the information they needed. After a course is completed, they provide the Center with something others can use to guide their learning.

In Retrospect

Approximately six months following the last session, I asked program supervisors[2-3] to rank the impact of the following processes and techniques. A scale of 1=least important to 5=most important was used:

Brainstorming	4.75
Project teams	4.25
Action plans	5.00
Role playing	5.00
AAC techniques	5.00
Coursework	5.00

All are perceived very positively. In addition, supervisors said the experiences of consumers and staff, as well as characteristics of the program have changed:

Consumers

- Individuals who never came to groups are more involved.
- The interaction among clients has increased.
- Boundaries seem to have been crossed. Spanish speaking clients now interact with symbol communication users because symbol use is being modelled.
- People are more willing to voice opinions and preferences.
- Everyone seems to be having more fun.
- Clients seem to have found a value in each other we didn't see before. Now they have a method of communication—symbols.
- On the negative side, the range of skill levels is wide so projects take more time than one might think.

Staff

- Staff listen to clients more.
- The quality of services has improved.
- Staff now know how limited some client's experiences are.
- Staff see how proud clients are when they accomplish something that was their idea.
- Brainstorming can be frustrating because sometimes clients can think of only a few options.
- Staff need to plan things out and that takes time; however, planning can occur during group meetings.

Program

- It's a lot more client-driven.
- Now when we need to send something home, clients type or write the notes, make copies for everyone, find the paper and so on. Before, notes just magically appeared.
- Scheduling is more difficult. Some aspects of the program remain unchanged. Because this approach requires more flexibility, it's tricky.

Some Hints

1. Living and learning should be fun. We've developed a Fun Index for staff and clients to use to measure the effects of activities.

$$1 \quad 2 \quad 3 \quad 4 \quad 5$$
no fun — lots of fun

We're also thinking about other indices: Learning Index; Interest Index; Accomplishment Index.

2. It's best to start with simple, specific projects like making a salad. Making a video was a bit ambitious!

3. Make a log (pictures or drawings) of completed projects. You'll have an outcome measure and something to help others during brainstorming activities. It can be a menu of ideas.

4. Schedule at least two-hour blocks of time for project work.

Summary

There is no end to this story—just a snapshot of its beginning.

In a Top Down approach, staff know what's best and put clients through their paces. Our approach gives people with few choices a voice. It is not necessarily easier, but it is more fun and more motivating. The Skills Center's mission statement is beginning to be realized and the field of AAC is playing a crucial role.

Equipment
"Quick and Dirty"

Devices, symbols, communication boards, drawings and signs can transform a person from being one type of communicator (without language) into another (with language.) Adults with speech difficulties in day programs often rely on gestures, speech that only familiar partners can understand and less desirable ways of expressing their opinions and preferences. To realize the mission of the Skills Center, we had to offer a wider range of communication options and more communication opportunities on a consistent basis. If adults do not have access to language, they can never express their goals and aspirations.

1. **Voice output communication devices.** We had a Speak Easy, Message Mate, Walker-Talker, and Digivox. Other digitized devices could just as easily have been used. (See the March, 1994 issue of ACN for a list of available digitized voice output communication aids.) Devices were incorporated into each activity.

■ **Introduction.** Before you begin, use a device to introduce yourself. ("Hello, my name is Sarah. What is your name?") Keep interacting with participants in this manner until they begin to perceive you as the "type of communicator" who uses a device. This takes awhile.

■ **Brainstorming.** Program a carrier phrase into a device. ("The reason I come to Skills Center is_____.") Offer the device to anyone who wants a try. Almost everyone is interested in getting their hands on equipment. For those who have difficulty speaking, be sure their supporter can follow up by offering choices, interpreting their speech and/or providing symbols.

■ **Role playing.** Appropriate messages can be recorded on the spot by supporters. "I would like to buy a plant." "How much is this?" "Can you send it to my house?" "Thank you for your help." We found VOCAs were very effective with our storekeepers.

2. **Drawing.** This AAC technique often is overlooked. During the first session, I made a drawing of food items next to each word. I am NO artist—a fact obvious to everyone! However, even poorly drawn representations help people with limited literacy skills. The addition of these "quick and dirty" (not very beautiful) representations had several benefits:

■ Drawings help people understand and express ideas.

■ Fewer people required support during prioritizing activities.

■ More people could be reporters.

■ People needed less assistance to give reports.

■ Staff saw how quickly people were able to attach meaning to symbols when the context was meaningful and they were motivated.

■ Participation increased when people were active and involved in what was going on.

■ Everyone had fun thinking of what to draw. When an "artist" couldn't think of something to represent an idea/word, others helped.

■ It was nice for those who drew to be appreciated for their talents. At least one client in each program could draw quite well.

■ Everyone learned that "quick and dirty" symbols/drawings can be created and used on the spot. This meant they could be used throughout the day.

3. **Use of multiple AAC techniques.** Every activity legitimized that people use multiple modalities to communicate. Some AAC techniques work better than others, depending upon the context. For example, buying something in a store was easier to do with voice output. Solving interaction problems with peers was more efficiently worked out with gestures and speech.

In summary, people who have communication options and have partners who value what they have to say and know how to support them, are on the path to expressing (and thereby realizing) their goals and aspirations.

Governmental
Helping at the international level
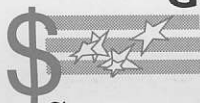
Spreading democracies, human rights movements, an aging population, an increasing number of persons with disabilities and advances in medicine and technology have a profound impact on rehabilitation practices throughout the world. As a result, we see a growing juxtaposition between expanding social-political movements and shrinking economic resources.

Although countries with limited resources are more likely to have a limited social awareness of people with disabilities, their needs and the field of rehabilitation, this is not always the case. In Israel, India and a growing number of other countries, knowledge of augmentative communication among some professionals and families is comparable to any other nation. Conversely, despite Japan's technological sophistication, AAC is just beginning to be considered. Collaborative international efforts to help must be preceded by efforts to learn. To be effective, we must extend our learning beyond AAC, assistive technology and rehabilitation.

This idea was poignantly stated by Dr. Sophie Kalman[4] of Budapest, Hungary at the recent IRV symposium (see the **University & Research** section.) She said, "We are using the same words, but not speaking the same language. For those who wish to assist people in Eastern and Central Europe, former Soviet bloc countries, it is necessary to grasp the devastating consequences of the last forty years of the so-called socialism." Dr. Kalman characterized "socialism" as a paternalistic society:

We know best what's good for you, and we'll do it for you, sometimes even against your own will. We'll take care of you and in exchange you just do what we say you can do. You'll be grateful and quiet, and we'll be generous.

Most people in Hungary and other countries in the former Soviet bloc have no experiences that allow them to grasp concepts such as "personalized services, individual solutions,

special care and family support systems." Under these circumstances, assistive technology isn't even a dream! Thus, Dr. Kalman perceives that a critical task in Eastern and Central Europe is to change the general attitude toward people with disabilities.

When people offer to help their international neighbors, they must first really understand the attitudes and experiences of the people with disabilities, professionals, government officials and families who live there. She writes, "First there must be an understanding between supported and supporter. First we should create a common language."[6] Helping requires listening to what is meant as well as to what is said.

I just received a letter from a friend in Bulgaria. For years, he has sought information about AAC and opportunities to further his studies. His last letter told of a $300,000 project underway in his country. I share his words, which were at once full of hope and disillusionment. He wrote, "The project is meant to strengthen our structure of institutions for mentally handicapped persons and the parents' organization." Later, he said:

Very soon through the journey around the country it became evident that these people came to defend some interest of their Embassy and also their own part of the project. One-third of the available money will go to support their travel costs, insurance and salaries. After a week visiting the local municipalities, institutions and after using all my knowledge, my heart and English language skills, I was awarded $30.

Concepts of social responsibility are spreading, and the world is growing closer. We must guard against paternalistic tendencies—everywhere. ▲

University & Research
The IRV
Hoensbroek, the Netherlands

On April 26 and 27, 1994 the IRV *(Institute for Rehabilitation, Development and Knowledge Transfer in the Fields of Rehabilitation and Handicap)* celebrated its 12th anniversary and the opening of its new building. I was invited to participate in a two-day symposium commemorating these events. The theme "Transitions: Visions On Near Future Developments in the Field Of Rehabilitation" symbolized IRV's moving from one building to another as well as changes in the rehabilitation field. Three main areas were addressed:

Assessment, Treatment and Intervention Programs. Kurt Johnson's[6] keynote speech focused on transition in rehabilitation as an evolving phenomena occurring within cultural contexts (society, family, health-care system.) He described a dynamic relationship among assessment, treatment and outcomes. He encouraged ethnographic approaches and a vertical integration of services. Respondents[7-9] raised several additional points:

- The *Decade of the Brain* is an initiative declared in 1990 in the US and followed by the European Union (EU) and by several European countries, including the Netherlands.
- The brain, as an organ, has much more plasticity than has been recognized up until now. Imaging techniques show right hemisphere brain activity in patients with good recovery from aphasia after a left hemisphere stroke. Thus, notions of restitution, substitution and compensation of function are central to a discussion of the rehabilitation process.

- "Support needed from society to reach an acceptable quality of life differs enormously from one patient group to the other."
- Increasingly, "great demands are placed on the user, which can only be achieved by a few."

Technology. Margita Lundman's[10] inspiring keynote speech visualized a vast Transit Hall of Technology. In this hall she pictured a Competency Development Gate, a Horizon Widener Gate and an Emerging Technologies Hall. She said, "Look upon disability as a normal variation of human existence and assistive technology as a means for people to lead a good life." She enouraged consideration of ethical questions as we "apply" assistive technology to people with disabilities.

Mathijs Soede[11] gave his perspective on assistive technology markets and the manufacturing industry in Europe. He said without certain political decisions at national and EU levels and commitments to research and development efforts, the development of EU products for export can fail.

Respondents[12-13] discussed contributions of mainstream technology and a growing market for assistive technology as the world's population ages. Discussants agreed there was a need for more user involvement in research and development and for more effective and efficient ways of exchanging information.

Service Delivery. Service delivery issues pervaded the conference. In my keynote speech,[14] I used an analogy of a canal system with locks to visualize barriers and transitions confronted by persons with disabilities and stakeholders in the rehabilitation process. Service delivery always occurs within a

(University & Research cont. from pg 7) broad socio-political context with inherent economic constraints. Our challenge is to demonstrate successful outcomes, best practices, benefits and costs, effective use of assistive technology and the dynamic need for information exchange.

Luc de Witte[15] shared results from a comprehensive study of service delivery systems for the provision of technical aids in the European Union. He related his observations to current practices and future directions in Europe. Respondents[16-17] emphasized the unique realities and characteristics of each country in the EU and the difficulty of creating systems that are effective, decentralized, high quality and user influenced.

The final session gave consumer perspectives on topics covered during the symposium.[18-21] Using a computer with a speech synthesizer, Greg Filz[18] emphasized the importance of user input into all aspects of the process. Other speakers talked about the importance of providing a continuum of options for persons with disabilities tailored to meet their needs rather than the needs of institutions, companies or professionals. Also discussed was the role of legislation at national and international levels. For example, Filz pointed out that today in the EU, national legislation "literally stops handicapped people at national borders."

Proceedings from this interesting symposium will be available soon. For information contact:

Hans van Balkom, IRV P.O. Box 192, 6430 AD Hoensbroek, The Netherlands. FAX +31 45 231 550 ⬆

YOUR RESOURCES

Mauna Loa Morris, Skills Center, Inc. 2685 Mattison Lane, Santa Cruz, CA 95062 (408) 476-6501.

Andy Pereira, Skills Center, Inc. 2685 Mattison Lane, Santa Cruz, CA 95062 (408) 476-6501.

Rex Zimmerman, Skills Center, Inc. 2685 Mattison Lane, Santa Cruz, CA 95062 (408) 476-6501.

REFERENCES

1 Andy Pereira (May, 1993). Personal communication.

2 Mauna Loa Morris (May, 1994). Personal communication.

3 Rex Zimmerman (May, 1994). Personal communication.

The following citations are from the IRV Symposium

4 Sophia L. Kalman, (April, 1994) Personal communication.

5 Kalman, S. (April, 1994). Special problems in service delivery in Eastern-Central and Eastern Europe. Paper presented at the Transitions Symposium, Hoensbroek, NL.

6 *Assessment, Treatment and Intervention Session* Keynote: Kurt Johnson, University of Washington, Seattle, WA, USA.

7-9 *Respondents to Assessment, Treatment and Intervention Session:*
Walter Huber, Technical University (RWTH), Aachen, Germany.

J. Jolles, University of Limburg, Maastricht, NL.

Cees Pons, SRL Rehabilitation Clinic, Hoensbroek, NL.

10 *Technology Session* Keynote: Margita Lundman, Handicap Institute, Stockholm, Sweden.

11 Mathijs Soede, Models and information in the rehabilitation technology market in Europe, IRV, Hoensbroek,NL.

12-13 *Respondents to Technology Session:*
Luigi Emiliani, Institute for Electromagnetic Waves, Florence, Italy.

Karl-Friedrich Kraiss, Rheinishch-Westfalische Technische Hochscule, Aachen, Germany.

14 *Service Delivery Session* Keynote: Sarah Blackstone, Augmentative Communication Inc., Monterey, CA, USA.

15 Luc de Witte, Service delivery systems in Europe, IRV, Hoensbroek, NL.

16-17 *Respondents to Service Delivery Session:*
Sophia L. Kalman, Helping Communication Methodological Center, Budapest, Hungary.

Erland Winterberg, Danish Center for Technical Aids for Rehabilitation and Education, Copenhagen, Denmark.

18-21 *Consumer/user session:*
Greg Filz, IRV, Hoensbroek, NL.

Eelco Tasma, Dutch Council of the Disabled, Utrecht, NL.

Dick van der Pijl, IRV, Hoensbroek, NL.

Patrick Waring, the UK. ⬆