COMMUNICATION MATTERS

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REGULAR COLUMNS

COMMUNICATION MATTERS

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Front Cover: Leigh O'Donnell (seated) shopping using a Light
Talker, as part of an AAC school curriculum topic

The Future is Mine

by Scott Barbour

This paper was presented by this year's CM Distinguished AAC User, Scott Barbour, at the CM2000 National Symposium, Lancaster University, September 2000. An audio tape of the presentation is available from Communication Matters.

My name is Scott Barbour. I have Cerebral Palsy and I use a Delta Talker to communicate. I do not see my disability and because of this I am trying to change attitudes. I want everyone to see that people with disabilities make a contribution to society. I would like people to see past our wheelchairs and concentrate on the abilities that most of us have. Hopefully this will help disabled youngsters in the future.

Things have slowly been changing for people with disabilities but we still have a fair bit to go before we have social inclusion. Everyone should have equality regardless of disability. There are a number of changes I would like to see that would help all disabled lead as independent a life as possible in the future.

One important area which affects everyone who requires twenty four hour care is accommodation. In the past this was usually in large institutions but in recent years because of the Community Care Act many small houses now provide the care and support people require to meet their needs. This has been a change for the better, but there are, unfortunately, still too many people living in large institutional settings. I want to see everyone who requires this type of care living in the community in small houses either, shared with others or alone, with the support they require.

Another area which is very important, particularly to children and parents, is education. It is only recently that disabled children have been attending mainstream schools. I am forty years old and have only just begun my education. In the last few years I have been attending college to study literacy numeracy and computer skills.

I have missed out on education in my childhood and do not want to see this happen to others in the future. I would like to see legislation put in place to make sure all children receive mainstream education both at primary and higher levels. This would give them the opportunity to gain qualifications and plan a career.

Employment is another important issue for disabled people. Because of the support some people require they cannot gain employment and have to rely solely on state benefits. If there were more opportunities for people with disabilities many more might be in employment and would have some financial independence.

Having better educational opportunities and the chance to gain qualifications would mean that disabled people would be prepared for the workplace. Employers should always employ staff on merit and ability, not because they are obliged to. Hopefully this will happen in the near future. My own ambition is to get a job doing administration or presentation work.

Disability discrimination is an issue which has hit the headlines in recent years. It applies to all aspects of life, for example, if wheelchair users want to go anywhere, the first thing they need to do is check the accessibility of a building before they can go. This does not only apply to shops or buildings that people go to socialize. It also applies to older schools and colleges.

All buildings especially educational establishments, should be fully accessible and have adequate lifts where necessary. They need to be so that pupils and students can have access to education. Employers should also be prepared to make changes to meet the needs of a disabled employee. I would also like to see all public transport fully accessible so that people with disabilities can go where they want, when they want.

Although all these issues are important I feel that the area of communication is the most important. People with disabilities should be consulted about all aspects of their lives, they are the individuals who know what they require to lead as full and independent a life as possible. Nothing should ever be taken for granted or assumed; there should always be consultation.

Some people may require a communication aid to enable them to communicate their needs effectively. It will require upgrading as the person becomes more proficient in its use. These resources are imperative for the user as, without them, they will be unable to communicate. Therefore their needs might not be met.

At the moment the free availability of electronic communication aids is not consistent. In many cases it is only your luck if your local authority has an assessment centre that can provide you with the aid you require to meet your individual needs, and the resources to ensure you have the training necessary to use it. This is important to all communication aid users as technology is always improving and talkers may frequently need upgrading.

I would like to see this service freely available to anyone who requires it and individuals to receive more sophisticated aids as they progress. Hopefully these resources will be available in the future so users do not have to rely on charity for something everyone takes for granted. The ability to communicate!

Finally I would like to conclude by saying that all disabled people should fight for their rights and speak out for themselves and for others who are unable to do so. We as a large section of society can do this by lobbying local and central government, to make sure legislation is upheld. If promises about discrimination and equality are kept, this will hopefully lead to a better future, where everyone is valued and respected.

I would like to conclude with this short poem:

> *If the attitudes are right*
> *The future is bright*
> *My future will shine*
> **For the future is mine!**

The CM Achievement Awards 2000

The newly established Communication Matters Achievement Awards are made every year to acknowledge the achievements of people who have recently made a major breakthrough in learning to use any communication system other than speech. Here are this year's entries for the five winning awards.

Shaun Garlington

I first met Shaun, who is eight and a half years old, when I started at Radlett Lodge School in April of last year. I observed him in his classroom during a group drink session. He was sitting in front of an A4 board which had two blurry digestive biscuit and two blurry cup photographs velcroed to it. Shaun was expected to hand over a picture in exchange for the represented item. His teacher at the time did not think that Shaun was consistently discriminating between the two different photos as he tended to just hand over photos randomly and push away or throw an item if it was not the one he actually wanted and reached for what he really wanted. Further observation of Shaun in the classroom and discussion with his teacher and learning assistants indicated that he was a 'difficult' child who presented with lots of 'difficult' behaviours, including climbing furniture, trying to help himself to meet his own wants and needs, being generally uncooperative, stripping, running from the room and being reluctant to engage in any positive or constructive interaction with another person to the degree of not letting another person get involved in anything he was doing. This resulted in Shaun missing out on a lot of learning opportunities and general frustration both on classroom staff's as well as Shaun's part. I was asked to provide some 1:1 input to see whether I could develop Shaun's ability to accept adult involvement and co-operate and participate more actively in classroom learning tasks.

When I started one-to-one work with Shaun it became clear fairly quickly that, while Shaun had no understanding of spoken language, he did have strong visual skills and actually had no difficulties recognising and understanding Rebus and PCS symbols representing concrete everyday objects and activities. Shaun responded well to symbolic work schedules which I used during my sessions with him and became increasingly more interactive as sessions went on and he was able to predict the format and content of the sessions. I encouraged classroom staff to think about supporting their (simplified) spoken language with symbols and showed them how I was working with Shaun during our 1:1 sessions by working with Shaun in the classroom. Shaun's response to this was great. He gradually became more co-operative and accepting of adults wanting to work with him enabling him to engage in an increasing range of learning tasks.

Shaun also responded well to being introduced to the Picture Exchange Communication System (PECS) (introduced at the school that year) which initially required him to initiate requests by finding the correct symbol and placing it in an adult's hand and then to combine the symbols for 'I want' and the item that he wanted on a sentence strip. Shaun quickly and spontaneously generalised this skill into the classroom setting and, when I was late for our sixth session, he used the sentence strip in his communication book to combine the 'I want' symbol with the symbol for 'work with Lilo' which was on his timetable and took it to his class teacher!

Since then, Shaun has been developing into a more and more competent as well as confident communicator who actually enjoys interacting and communicating and visibly wants to learn when he understands what a task is about. Using symbols, his teacher found that he was even able to conceptualise 'healthy' and 'unhealthy' foods and had no difficulties sorting pictures of the symbols into the appropriate categories. Not surprisingly, Shaun's behaviour has improved markedly since he has been able to communicate his wants and needs. He will now use a sentence strip to ask to go to the toilet rather than try and run out of the room. He has stopped climbing furniture and is much calmer and happier. He accepts he can not always have what he asks for, possibly because at least he knows that his request has been understood and acknowledged. He is generally much more co-operative and actually enjoys interactive learning. His mum reports similar success at home and is excited about having found a way of communicating successfully with Shaun as this has made it easier to take Shaun to different places in the community.

There are still moments when Shaun can be 'difficult', possibly when he has not got a symbol to tell us what he wants or what is wrong and we are unable to guess what it might be. A good example for this was when Shaun had done some work in a room in the residential part of the school where he stays as a weekly boarder. Aware that it was the end of the school day, Shaun had run from the room to his lounge and put his slippers on. His classroom assistant wanted Shaun to come back to school to get his bag. She used minimal language when trying to explain to Shaun what she wanted him to do, but Shaun kept protesting, dropping to the floor and refusing to return to school. I happened to be around and had a 'bag' symbol on me which I showed to Shaun; he looked at the symbol, got up, ran back to school, got his bag and returned to the residential unit independently.

Using symbols has increased Shaun's understanding of the world around him, has made learning tasks more accessible, has given him more independence and enabled him to make clearer and spontaneous requests and choices without having to rely on adults trying to guess what he wants. It has also made him into a calmer, less frustrated and less frustrating child to be with. We have made a video showing Shaun working in the classroom using a sentence strip to request specific coloured construction toy pieces and, later on, specific colours and

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(Sunrise Medical)
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shapes; Shaun is in control of the task and is being taught his colours and shapes in a context that enables him to communicate and be actively involved. The video also shows Shaun requesting help (using the sentence strip and help symbol from the class 'I want' board) to get some play dough out of the cupboard during a transition time prior to the class' drinks session. During the drinks session, Shaun is calmly using his sentence strip to request biscuits and drinks.

Shaun now also uses symbols when he comes to the weekly tuck shop session. Shaun is very specific about which colour dolly mixture sweet he likes and used to jump on the table on arrival at the tuck shop if he could not see the sweet he wanted. Now he is happy to wait his turn and competently uses symbols to buy his sweets. He is also more accepting when the sweet he had in mind is not available on a particular day and is beginning to choose different food items (including raw carrot!) instead.

Radlett Lodge School, Shaun's mum and I are extremely pleased with Shaun's progress and would be delighted if Shaun was to win the CM Achievement Award this year.

Lilo Seelos, Speech & Language Therapist
Radlett Lodge, Harper Lane, Radlett, Herts WD7 9HW

Siân Lewis

Siân Lewis is seven years old and attends our school. Siân uses a Dynavox and has had it some time. However, her accessing was restricted by her athetoid cerebral palsy. When she joined my class in September we introduced her to double head-switching at which she has worked very hard to achieve fluency. She made such incredible progress that we introduced a structured language approach recommended by Ingfield Manor School. She has flown through Level 1 and is working through Level 2.

Siân has made such incredible progress she is now being introduced to a mainstream school as her communication skills are now so good that she will be able to communicate her needs effectively and also show her academic skills which have not been affected by her cerebral palsy. Her sense of humour is a real joy and she not only works hard but also shows great pleasure in using the Dynavox. She works hard at school and also does regular homework using her Dynavox.

Ros Page, Class Teacher
Woodacre School, Erriff Drive
South Ockendon, Essex RM15 5AY

Leigh O'Donnell

Leigh is a sixteen year old young man with cerebral palsy that affects all limbs. He has very little controlled movement of his arms, and can vocalise "yes". Leigh loves soaps and quiz shows, and has a great sense of humour, as well as enjoying trips to amusement arcades and watching Man United play!

Leigh's turn at the slot machines, at an arcade as part of a Residential Experience

For most of his life, Leigh would only communicate with very close people including his Nan, nursery nurse, support assistant and his teacher - never in public. For years Leigh was only able to express his needs and wishes by responding to closed questions and eye pointing to Yes or No symbols, but was able to understand most adult conversations.

With the support of Liberator Ltd, Leigh started to use a Light Talker just over a year ago. It was hard work learning the locations and icons used in the Stepping Stones programme, as well as developing good head control with out the support of his usual head rest in order to make the infra red light work effectively. It took a lot of private practice, but gradually Leigh would use his Light Talker when the AAC group met to take part in games and activities, but not outside the classroom walls.

Over the last six months, Leigh's confidence and skill has dramatically improved. He now uses his Light Talker spontaneously in lessons, often willing other members of the group to reply, by telling them what they need to look for. Leigh has just started learning to read and is using the Light Talker to express the contents of the books he reads. He used his Light Talker recently to give a short talk about his interest in football, which he gave in front of two classes. He can often be heard singing to our school secretary when he delivers the register. He has welcomed the whole school to our class assembly, a role he would never have undertaken a year ago. Leigh has used his Light Talker to make telephone enquiries about a film he wanted to see at the local cinema, and to book a bus to take him there. It is wonderful to hear him asking the questions, both of adults and his peers. At present he is working on his next big step, and that is to use his Light Talker with another group of people, when he goes to respite care.

We feel Leigh's hard work and dedication in learning a new communication system which is physically demanding, and overcoming his fears about using his Light Talker in front of other people should be celebrated and recognised. His support

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for his peers and the warmth he gives to others when he shares his songs and thoughts, are uplifting.

Paula Kirk, AAC Teacher & Rachel Lanz, SLT
Ridgeway School, Kempston, Beds MK42 7EB

Gabriel Santos

I have known Gabi Santos for the past three years. Gabi received his first voice output communication aid, a Dynamyte, only a year ago at the age of 15, after a long struggle to gain funding. He is a caring and considerate young man who is passionate about football.

Gabi using his Dynamyte to order lunch at College

Prior to this he used modified sign language due to his physical disability and the little natural speech he had, with people who knew him well. Often Gabi became frustrated and upset when people did not understand what he was trying to communicate. As a result Gabi became reluctant to communicate, and to work with other people.

The change in Gabi over the last year has been outstanding and remarkable. He has grown in confidence and now very rarely becomes frustrated or upset. He has learnt how to use the Dynamyte through his own hard work and dedication. Gabi has learnt to use all his pages effectively and efficiently, and where he can't find specific vocabulary he has learnt to use a predictive keyboard. Not only can Gabi now communicate with people he knows, he uses his Dynamyte daily to take messages around school, to order his dinner when he goes to College once a week, and to participate in drama sketches at College where he works with a wide range of young people. Recently Gabi has used his Dynamyte to make telephone calls, organising his own transport to go to the cinema, where he bought his own ticket. He loves to tell jokes, or hold conversations with his peers. He takes responsibility for his own Dynamyte, charging it, and letting us know if there are any problems.

We feel Gabi's amazing achievements and hard work should be recognised and celebrated. To learn a new 'language' or way of communicating is difficult at any age, but Gabi's determination and effort is an example to us all. We feel this achievement should be rewarded.

Paula Kirk, AAC Teacher & Rachel Lanz, SLT
Ridgeway School, Kempston, Beds MK42 7EB

Shauna Sepede

Shauna is a happy seven year old girl whose physical disability affects all her limbs. Shauna has limited movement and no natural speech. She has a lovely sense of humour and loves to be with people, and listen to pop music.

Shauna's earliest use of a VOCA was using Stepping Stones on an Alpha Talker, but within the last year Shauna's eye sight began to deteriorate rapidly so she was unable to see the icons within the 32 grid, and found it difficult to feel too. Increasingly Shauna was relying on direct adult support to access communication. Generally, her participation was in response to closed questions where she was able to respond with facial expression or body language. At times, Shauna has been unwell due to medication, and has found access and communication tiring and more difficult.

Despite these difficulties Shauna has remained positive and cheerful, and quickly transferred to using tactile overlays on an 8 location grid using a Hawk, and with a tactile symbol book approximately eight months ago. Through her own dedication, practice and effort, Shauna began to use communication spontaneously. Currently she joins an older group of pupils who use AAC for communication sessions and support. Shauna always participates enthusiastically and to the very best of her ability even when she is not feeling great in herself. She is able to respond to questions and initiate conversations herself. Without prompting, Shauna can now ask an adult to change her overlays when she knows that the vocabulary she needs is not present. As she has developed in confidence she has participated actively in group story telling sessions, participated in assembly, and has used her Hawk to make phone calls and do shopping for the group's end of term party.

We would like to nominate Shauna for an award in recognition of her amazing achievement despite the difficulties she has faced. Her dedication, hard work and progress are inspirational.

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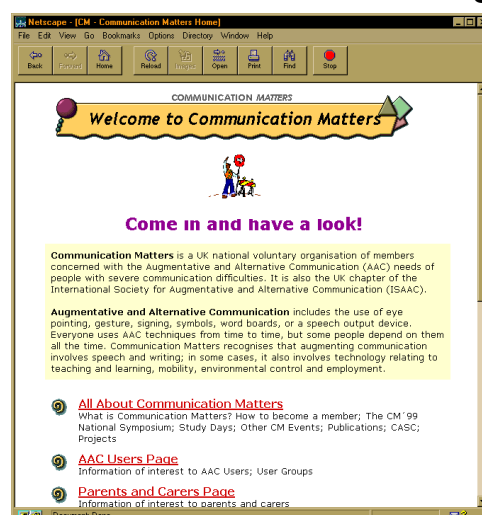
Macaw / Spokesman
(Toby Churchill)
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A Language Independent Bliss to Sentence Translation System

by Annalu Waller, Erwin Oosterhoorn & Peter Andreasen

This paper was presented at the CM'99 National Symposium, Lancaster University, September 1999

This paper describes software which translates simple Blissymbol sentences into grammatically correct English sentences. In contrast with systems which use natural language processing techniques to translate Bliss into natural language, *Bliss2Sentence* uses word prediction. This novel approach is language independent and has the potential to be used with all languages.

Background

Blissymbolics is a semantic graphic system which is used by non-speaking people for communication (McNaughton, 1985). Blissymbolics is a grammatical written language without being a phonetic representation of a spoken language. This is an advantage for individuals who may be pre-literate (or who have difficulty learning to read and write), but require a language with full expressive capacity.

A recent research project at Dundee developed a prototype text processor for Blissymbolics (Andreasen et al, 1998). Each Blissymbol contained in the *Blissymbol Reference Guide* (the Blissymbol dictionary) is stored in bitmap form in a database together with additional meaning-based and shape-based information. Users of *BlissWord* are able to select any symbol from over 2,500 symbols using this meaning and shape information. The gloss (text) associated with the symbols is spoken as they are selected and added to a message buffer. The contents of this message buffer can be copied directly into a MS-Word™ document in bitmap format.

Although the symbols copied into MS-Word cannot be manipulated at this stage, research is currently underway to develop this facility. One aspect of this manipulation is to translate the Blissymbol glosses into grammatically correct sentences.

The Translation Problem

Bliss sentences can have a number of valid translations. This may be due to the number of synonyms associated with any Blissymbol. For example, the symbol,

can be translated as "to see" or "to look". The grammatical form of the gloss also complicates the translation process. For example, consider the following Bliss sentence:

A system which speaks the Bliss glosses would result in "Boy to feel happy.". In practice, Bliss sentences are usually translated by the listening partner in consultation with the

non-speaking person. The listener manipulates the sentence in some way, e.g. by adding words and changing the grammatical form of words. The listener then offers a number of grammatically correct sentences to the Bliss user, asking the Bliss user for affirmation of the intended message. For example, the sentence above might be translated as: "The boy is feeling happy." or "The boy feels happy." or "A boy is feeling happy." or "The lad is feeling happy.".

Some research projects have developed language algorithms which translate Blissymbolic sentences into syntactically correct Swedish (Hunnicutt, 1986) and English (Reich, 1990). These systems have used natural language processing techniques to translate Bliss into natural language. One of the drawbacks of such systems is the complexity of the grammar rule base which generates the translations. The grammar is also language dependent, necessitating a different rule base for each natural language.

Word Prediction

The use of word prediction to improve the speed of typing for people with disabilities is well documented (Higginbotham, 1992; Newell et al, 1992). A more recent system, called *Predictability* (Ricketts, 1997), is language independent. Word frequency information is calculated on any text passage made is made available to the system. For example, the system is capable of predicting German words if an essay in German is used as a base for the frequency lists.

Research was undertaken to see whether or not a word prediction approach could be used as an alternative to a grammar rule based translation mechanism.

Bliss2Sentence

A prototype system, called *Bliss2Sentence*, was developed which takes as input a simple Subject-Present Verb-Object Blissymbol sentence and outputs a list of suggested translations in order of probability. The system processes the Blissymbol sentence in stages. First, the gloss and synonyms for each symbol are compiled into a list of words. The system then looks at each symbol in sequence. For the first symbol, each word is assigned a value according to how likely it is to begin a sentence. The system rejects values which are much lower than the highest value. The likelihood that each word, in the second symbol word list, would follow each word in the first predicted list is then calculated. The most probable pairs are matched with the words related to the third symbol. Finally, a list of sentences relating to the most likely combination of words is displayed in order of probability. The prototype carries out two linguistic manipulations. It adds a set of words, "a", "an" and "the", before the first symbol. It also strips verbs of the word "to". No further knowledge of the language is used.

Using the Bliss sentence:

BOY   TO GO   HOME
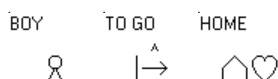
the translation process results in the following possible translations: "The boy goes home" and "The boy leaves home". Sentences such as "The boy leave home" result in a zero probability.

Discussion and Future Work

The Bliss2Sentence project has shown that a translation process which uses word prediction instead of grammatical rules can result in grammatically correct translations of simple Blissymbol sentences. The possibility of using word prediction as a means for translation has a number of advantages:

- The system could be language independent by providing the prediction system with different language text files;
- The adaptability of such a system would allow it to 'learn' which combinations were more acceptable;
- Blissymbol users would be able to access written or spoken language.

More research is needed to expand the capabilities of the system before a viable translation mechanism can be offered within a Blissymbol processor. Further research will address several issues including the full automation of the translation process and the processing of more complex sentences.

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Do Communication Aids Pose a Risk of Cross-infection?

by Simon Churchill

The recent news item about the high incidence of cross-infection in hospitals, in particular from MRSA, reminded me of concerns I've had over people with some of these highly-infectious conditions use communication aids, and how the risks have been evaluated and addressed.

Over the years our company has had the occasion to demonstrate communication aids to people with AIDS (experiencing temporary loss of speech through acute throat infection) and more recently people infected with MRSA (methicillin-resistant *Staphylococcus aureus).*

I was concerned about the possible risk of cross-infection to our sales staff and the therapists involved in the assessment and, more widely, whether our service personnel were at risk of cross infection through equipment returned for repair. My concerns were heightened by the wide range of attitudes adopted by different hospitals, at one end of the spectrum adopting a policy of placing people with MRSA in full isolation, and at the other the mere suggestion that wearing rubber gloves and a plastic apron will be enough to prevent one catching MRSA from them.

To find out the risks I spoke to a Microbiologist at our local Pathology Laboratory who was very helpful but who advised that MRSA is generally only spread through contact with body fluids, and that these micro-organisms cannot survive very long in the wrong environment, such as on a communication aid. He suggested I contact the *Central Laboratory for Public Health* (a division of the Department of Health in the UK) for a more definitive reply. The CLPH stated that there are clinically three levels for the treatment of contaminated material, namely:

1. **Sterilisation** Defined as a complete absence of microbial activity. This is required for equipment that is placed inside the body, such as surgical instruments and implants, and is normally achieved through a high temperature autoclave. This is *not* applicable for communication aids and the process would, in any case, destroy such a device.
2. **Disinfection** This achieves a reduction in microbial activity to a very low level and is normally carried out with disinfecting fluids (such as surgical spirit, Hibitane (*chlorhexidene*) or Cidex (*2% alkaline-buffered glutaraldehyde*). It is *not* appropriate for communication aids and should *not* be used since the fluids are too aggressive, attack plastics and may make display filters become opaque.
3. **Decontamination** This is a more general method for the treatment of low risk equipment e.g. communication aids.

Decontamination Procedure

Their specific advice for decontaminating communication aids is as follows:

a) clean the external surfaces with a disposable paper wipe moistened with warm detergent solution
b) allow the surfaces to dry
c) wipe the surfaces with a commercially-available alcohol-impregnated disposable wipe

Note: Fabric Carry Bags cannot be decontaminated, and should be disposed if cross-infection is a possibility.

Caution:
- do not immerse a communication aid in water.
- do not autoclave or expose them to elevated temperatures.
- do not use disinfecting fluids.

General Cleaning Procedure

At a more general level, communication aids may become dirty after a period of time through a variety of means such as saliva, mucus, spilt food and drinks, and from contact with dirty hands.

A recommended cleaning procedure is to wipe affected external surfaces with a cloth soaked in hot water with some washing-up liquid, and use a nail brush for more stubborn dirt. Communication aids are not waterproof but may be splashproof, depending on the model. Check with the manufacturer if in doubt. Do not allow water to enter inside the unit. It is recommended that you hold the communication aid upright and clean it in this position, reducing the risk of any water entering inside.

One option to avoid the aid coming in contact with body fluids, etc. is to consider covering the aid with a disposable transparent membrane, such as clingfilm, to reduce the risk of body fluid contamination.

I searched the internet for information on MRSA and enclose below a synopsis of the more pertinent material. I do not know who the authors are, nor can I vouch for its accuracy.

What is MRSA?

Staphylococcus aureus is a bacterium often found in 20 to 30% of the noses of normal healthy people and is also commonly found on people's skin. Most strains of this bacterium are sensitive to many antibiotics and infections can be effectively treated with antibiotics. *Staphylococcus aureus* which are resistant to the antibiotic methicillin are referred to as methicillin-resistant *Staphylococcus aureus* or MRSA. Many commonly prescribed antibiotics are not effective against MRSA.

MRSA can affect people in two different ways—colonization or infection. When a person carries the flora on the skin or in the nose without showing signs or symptoms of infection, the person is said to be *colonized.* If a person has signs of infection that are caused by MRSA (such as abscesses, wound infections, pneumonia, respiratory infections, blood, stool or urinary tract infections), the person is said to be *infected.*

What does MRSA cause?

Most patients from whom MRSA is isolated are colonised with this organism rather than infected. Colonisation means the presence of the organism on the skin, or in the nose, or in the back of the throat but without any illness. However, if the patient also has a fever and inflammation associated with the presence of MRSA then they are considered to be infected. A proportion of patients become infected particularly if they have been put at greater risk such as following an operation, or have a malignancy, or the presence of a bladder catheter, intravenous infusion or surgical drain. These patients may then develop illnesses similar to those

caused by methicillin-sensitive *Staphylococcus aureus* such as wound and skin infections, urinary tract infections, pneumonia and bacteraemia or "blood poisoning".

Is MRSA dangerous?

MRSA rarely, if ever, presents a danger to the general public. It is no more dangerous or virulent than methicillin-sensitive *Staphylococcus aureus* but it is more difficult to treat. This bacterium is usually confined to hospitals and in particular to vulnerable or debilitated patients. These include patients in intensive care units, burns units, surgical and orthopaedic wards. Some nursing homes have experienced problems with this bacterium. MRSA does not pose a risk to the health of hospital staff, unless they are suffering from a debilitating disease, or family members of an affected patient or their close social or work contacts. Therefore the friends or family of such a patient need not take any special precautions and should not be discouraged from normal social contact.

How does MRSA spread from person to person?

MRSA most often spreads from person to person by *direct* contact. For example, in medical settings MRSA is most commonly spread by health care workers' hands.

How is spread of MRSA prevented?

Scrupulous handwashing by hospital staff before and after contact with patients and before any procedure is the single most important infection control measure. Hands should be washed both before and after contact with a patient. It is most likely to prevent spread of MRSA from one patient to another, or from a patient to a member of staff who may subsequently pass the bacterium on to other patients. Other measures include following Body Substance Precautions by using protective equipment to avoid contact with another person's body fluids. Additionally, protective equipment should be disposed of after use, and hands must be washed after removing the protective equipment.

Patients with MRSA should be physically isolated in a single room with the door remaining closed and the room regularly damp dusted, or they should be nursed in a special ward away from other non-infected patients.

It would seem that the risk of cross-infection from MRSA is much lower than one might have led to believe from the 'Killer Superbug' stories in the tabloids, provided recommended precautions are observed.

This article primarily considers MRSA. If you are faced with working with clients with other infectious or contagious conditions it might be an idea to seek expert professional advice from your local microbiologist to assess the risks.

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Survey and Analysis of the Provision of Electronic Assistive Technology (EAT) in Two Regional Health Authorities

by Donna Cowan & Alan Turner-Smith

Abstract This paper reports the results of a study investigating the provision of EAT within a given geographical area (Cowan, Turner-Smith, 1999 a&b). Provision is viewed from the agencies' and from the users' viewpoint. Schools where EAT is used were also included in the study. Questionnaires were sent to funding agencies (social services, education authorities and charities) requesting information on the equipment provided and factors such as eligibility criteria and the level of funding provided. Users were questioned on the range of equipment they have, funding sources, usage and any problems obtaining the aid. Schools were questioned on the equipment they use, funding sources and problems with provision.

Results showed that provision across the geographical area of interest was inconsistent. Differences in the range of equipment provided were dramatic and eligibility criteria, funding limits and level of funding available varied from district to district. Users use a wide range of items, all of which are well used. Problems reported included funding issues, information availability, delays, maintenance/training and access. Schools indicated that funding was a major issue for all types of equipment. The paper highlights the effects this inconsistency can have on the user and emphasises the importance of interagency co-operation.

Introduction

In England, the provision of assistive technology is highly fragmented (Beardshaw 1988).

Electronic assistive technology (EAT) is provided by several statutory agencies, charities and it can also be privately purchased. For users who need more than one device this can mean several referrals are required followed by an equal number of assessments and possible waits for the equipment to arrive. Reports such as the HEART report (Line C) and information booklets (Department of Health 1996, Mandelstam 1990) give overviews of the system but do not provide a complete picture as only general indicators of what *may* be available and where to obtain further information is given.

Social and education services in England are controlled at local government level, therefore decisions on budget allocation, eligibility criteria and range of equipment to offer can be determined locally. Anecdotal evidence indicated that because of this, the level of provision was not uniform within the geographical area covered by North Thames (West) and South Thames (East) regional health authorities; however the level of inequity was unknown.

With the increasing catalogue of equipment available, the growing awareness of the population and the willing to use electronic equipment, users' expectations are growing. In particular, young people in schools use EAT. For example, powered wheelchairs for mobility, communication aids and computers for class interaction and writing are all pieces of equipment commonly used. Few agencies provide holistic assessment of the user i.e. look at all the user's EAT needs, and therefore the project included examining the extent to which people used EAT and their experiences of accessing agencies for equipment.

This project was initiated to investigate the above problems connected with the provision of EAT. The aim of this paper is to present data on provision inequities and the users perspective of provision.

Method

The area to be covered in the survey was that contained within what was North Thames (West) and South Thames (East) Regional Health Authorities.

Questionnaires were sent out to statutory agencies. These included social services (62 offices representing local authorities), education authorities(25), charities(33) and special schools (57)

As the project was aimed particularly at investigating the provision of EAT and multi-agency issues , it was decided that the user survey should target those who are likeliest to use more than one piece of EAT, i.e. those with multiple physical disabilities. For this reason environmental control services, special schools and a resource centre were asked to distribute questionnaires to users.

Results

The range of equipment provided by the agencies in the study and the overlap is indicated in Figure 1 below.
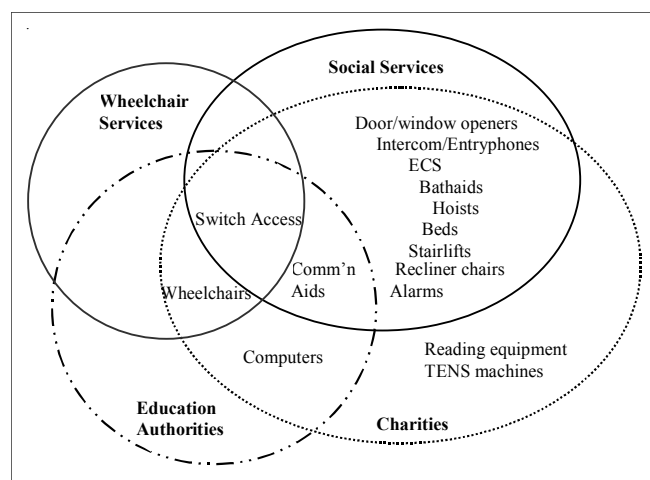
Figure 1 Range of equipment quoted as being provided and the overlap between agencies

Social Services

The response rate to the questionnaire was 82%. A summary of the findings is given below:

- Equipment provided varied widely between different local authorities. From a standard list one service (9%) offered 2 items and 3 (27%) offered seven. The mean number of items available was four.
- Most commonly provided (either partial, or fully funded) items were intercoms/entryphones (100%), bathaids (73%), environmental control systems, switches, door/window openers (64%), hoists (55%), communication aids (36%).

Icon Speak
(RSL Steeper Ltd)
Advertisement

- Most common referrers for the equipment were users and carers rather than other professionals
- The level of funding offered varied considerably. Of the 27% who offered communication aids in their range of equipment, two would only partly fund and the other would sometimes partly and sometimes fully fund.

Charities

The response rate to this questionnaire was 63%. The results are summarised below:

- Sixteen (80%) of the charities that responded only partially fund equipment.
- The funding level is between £200-£500.
- The numbers applying for this funding reported as increasing annually.
- Eighteen (90%) of the charities required referral from a professional.
- A wide range of equipment was reported as being funded with 80% of respondents funding communication aids.

Education Authorities

The response rate from this group was 60%. The results are summarised below:

- Most commonly funded items were computers (100%), communication aids (80%) powered wheelchairs (20%), and switch access (66%).
- Budget management varied; twelve respondents (80%) manage the budget centrally, two (13%) have devolved the budget down to schools, the remaining reported a mixture of the two takes place.
- Referrals for equipment was accepted from a variety of places and at different times depending on the authority
- The majority of respondents (60%) did not use joint funding as an option and had no mechanism in place to facilitate such an undertaking.

Schools

The response rate from this group was low at only 37%. A summary of the results is given below:

- Numbers attending respondents schools totalled approximately 1400 of whom it was estimated 17% used more than one piece of EAT.
- Most commonly used items were computer, power wheelchairs, communication aids & environmental control systems.
- Most common funding sources quoted for equipment was Education (hoists and computers), Health (environmental control system and powered wheelchair), charity (communication aids).

Users

The response rate from this group was 53%. A summary of the results is given below:

- Each respondent used on average three pieces of EAT. (35% used more than 3 and 1% had more than 6).
- Most commonly used items were, powered wheelchairs, environmental control systems, powered hoists, computers, powered beds, communication equipment.
- More than 90% of the devices cited were reported as being used regularly.
- Sixty per cent of respondents reported problems with the

provision process.
- Problems existed in one or more of the following areas: funding, information availability, delay (for assessments, obtaining aids), maintenance and training & switches/access.

Discussion

Figure one shows that a wide range of equipment is provided by the agencies contacted. There are also several areas of overlap between these agencies and therefore the user requirement dictates which agency would be approached to provide funding for a piece of EAT. Because of the overlap, confusion occurs when a need does not fall neatly into one remit or another as each agency may dispute responsibility for the provision of the item. In some areas agencies have reported the setting up of joint funding committees to address this problem. The advent of integrated PC based systems presents further problems of remit as it likely that a single device will fulfil a number of requirements. Multi-agency funding will therefore become more of a necessity if the number of agencies remain involved in the provision of this equipment.

Despite the wide range of equipment available the data indicates that this may provide a false picture as there is a wide variation in the provision of EAT within the geographical area considered. This means that users living within one mile of each other could have very different experiences in obtaining the same pieces of equipment.

Social services reported a wide range of equipment however provision varied with some providing as many as seven or as few as two items from a standard list. All reported the use of eligibility criteria however this again varied. A limit on funding and the level of funding (full or partial) variation highlights another area of inequity for users.

Similarly, the range of equipment available through education authorities varied as did the referral and methods. Despite the obvious areas of overlap that exists in the use of the equipment cited being available from this source (i.e. for social as well as educational use), joint funding was uncommon with this group.

Charities are widely used as a major funding source for this type of equipment however the data indicates that few will fully fund a piece of EAT. The majority quoted a maximum of £500 towards equipment. This means the process of applying for funding can be very time consuming and is often taken on by professionals working in the services.

Schools using this equipment reported particular problems with funding equipment. Despite the number of education authorities reporting the funding of communication aids, this is clearly and area where funding is problematic for schools.

Sixty percent of respondents reported a problem obtaining or using their equipment

Users reported problems with the funding of items due to non-availability of funds or non-provision of the item by a service in their area. Users also reported lack of clarity over which agency was responsible for the provision of an item and in particular over the funding of communication aids. Seventy eight per cent of respondents with communication aids quoted a problem with obtaining their equipment.

Information availability was a problem at many levels: what was available, how to access services, where to find out about equipment independently.

The majority of equipment was reported as being used on a daily basis. Although this does not specify whether it is being used to its full capacity (i.e. all options on an environmental control system is in use) or whether all the needs of the users are being served by the equipment.

Conclusion

The agencies and charities approached in this survey provide a wide range of equipment but there is significant variation in provision to users within the geographical area.

Inflexibility is demonstrated by the agencies in that the provision of an item of equipment is generally viewed in isolation and rarely are the user's needs seen as a whole. Differing eligibility criteria and level of provision can adversely affects a person's ability to gain independence by preventing access to assistive equipment

The responses to the users questionnaire show how the differences in the provision of equipment and the fact that so many agencies acting, in the majority of cases, independently affect the user. Agencies in some areas have reported the establishment of joint funding committees to overcome some of the problems associated with the variations in provision and where the user's need does not fall into one agency's remit. Closer co-operation between services and sharing of information can help to overcome many of the problems

reported by users and close some of the gaps that currently exist in provision of EAT.

In acknowledging the problems that users experience and seeing the inequities that exist in the current provision of this equipment it is hoped that professionals will look to their own practices. That they may make themselves more aware of the other agencies at work in this field and endeavour to share information more effectively between themselves and with users.

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Trustees News

from Janet Scott, Chair of Communication Matters / ISAAC-UK

CM2000 National Symposium

First of all I would like to thank all of you who helped to make this year's CM2000 National Symposium such a success. Without the hard work of all the Trustees, our adminstrator's organisational skills and efficiency and the adaptability and co-operation of the staff at Lancaster University, the conference would not have run as smoothly – but without all of the participants there would have been no conference! If you were able to attend the Symposium in September, I hope you enjoyed it and felt it was useful and informative. If it was your first time at the Symposium, I hope you'll think about coming again next year. For next year, in addition to the Symposium in September 2001, we will hosting three Study Days: two on the effects of growing older (something affecting us all!) on communication and AAC, and one on communication options for people with a learning disability. See Diary Dates for more information.

New Trustees

At the AGM in September at Lancaster University we sadly said "goodbye" to some of the Trustees who have worked hard on behalf of Communication Matters for quite a number of years, and we welcomed several newly elected Trustees (who perhaps are only now realising what they have let themselves in for!). So to our outgoing Trustees – Katie Clarke, Alison Futerman, Janet Larcher (as a co-opted Trustee), Colin Clayton, Barnaby Perks and Anthony Robertson – thank you very much for your enthusiasm and hard work over the years. And to our new Trustees – Joy Butcher, Tina Detheridge, Pat Thomas, Jane Wink, James Devlin (as a co-opted Trustee) and Barnaby Perks (back again but this time co-opted) – a very warm welcome. I hope they will find being a Trustee as rewarding as it is hard work!

So the Trustees for 2000-2001 are: John Angel, James Devlin, Gerald Masterson and Jane Wink (who are AAC users), Joy Butcher is the parent of an augmented communicator, Simon Churchill and Tina Detheridge work in the commercial sector and are involved in developing and supplying AAC products, Debbie Jans, Katie Price, Helen Whittle and I are speech and language therapists, Sally Townend is an occupational therapist, Pat Thomas is a teacher and Barnaby Perks is a rehabilitation engineer. The non-Trustee officers are Patrick Poon who is the administrator, and Sally Millar who is the Journal Editor.

CM's Strategic Plan

You will find Communication Matters' Three-year Strategic Development Plan in the next section. Communication Matters has developed into a viable and vibrant organisation – we need to take stock regularly to review our goals and achievements. Over the past year this has been one of the activities undertaken by the Trustees, and the Three Year Strategy Report is the result of a lot of hard work, co-ordinated by Debbie Jans. This document outlines what we would like Communication Matters to achieve over the next three years. Please read it – if you have any comments or suggestions

please let us know – developing a strategy plan is an ongoing process, it is not finished once the document has been published! Organisations, like people, change over the years – what was appropriate at one stage may not necessarily still be appropriate. To this end the Trustees are undertaking a review of the Constitution to see whether it still meets the needs of the organisation or whether we need to make amendments.

SCOPE Campaign - Speak for Yourself

Funding of communication aids as well as the provision of adequate support to their users remains a problem for many people. Some of you may be aware of the survey carried out earlier this year by SCOPE, who launched the report of their findings *Speak for Yourself* at the Labour Party Conference in Brighton in September. This report is available from SCOPE (see articles by James Ford and Jane Wink on page 20). This is a very readable and useful report – containing (amongst other things) a *Campaigner's Guide* – to try to raise the profile and needs of people who require a communication aid. Kate Ellis, an AAC user living in Scotland, took part in the SCOPE survey, followed SCOPE's advice about campaigning and wrote to her MP. She has been successful in raising her MSP's awareness of the need to look at how communication aids are funded and has featured in both her local paper and in two Scottish broadsheets. If this is an issue for you, you have little to lose by writing letters, making yourself known to people in power. Nothing is going to happen overnight, but if we can all use whatever opportunities arise to raise the issue of funding and support then maybe, in time, things will begin to change! A dripping tap will eventually fill a bath!

CM Three-year Strategic Development Plan

Communication Matters is a UK voluntary organisation which focuses upon the needs of people with severe communication difficulties who may benefit from Augmentative and Alternative Communication (AAC) systems to maximise their opportunities and enhance their life. A board of 12 Trustees oversees Communication Matters.

Communication Matters has three stated aims. They are:

- to increase awareness, understanding and knowledge of good practice in the field of augmentative and alternative communication
- to provide a forum for the exchange of information and ideas between professional workers, AAC users, and their families
- to promote the positive role of AAC in the empowerment of people with severe communication difficulties in society

With these aims in mind, the Trustees have embarked on a strategy development exercise with the goal of writing a three-year strategic development plan for Communication Matters. This exercise has been in progress over the last 12 months and has identified what Communication Matters presently provides to its members and the larger community within society with regard to a number of areas. The Trustees, through a

strategy working party, have identified the priority strategic areas to concentrate on in the next three years and have also identified strategic aims and operational methods to achieve these aims. A provisional timetable has also been drawn up. As part of an ongoing strategic development programme, Communication Matters will review the strategic plan once each year.

The three-year strategic development plan is published below; a summary of the proposed plan was presented to the membership at the AGM in September 2000. Members are invited to send any comments, to reach the following address by 31 January 2001: Deborah Jans, CM Strategy Coordinator, St. Giles Centre, 40 Broomhouse Crescent, Edinburgh EH11 3UB (Fax: 0131 443 5121 Email: djans@keycomm.demon.co.uk).

We look forward to hearing from all members on this most important topic.

The Strategic Development Plan 2001-2004

Membership

Objectives:

1. To retain existing members of Communication Matters throughout the UK.
2. To identify and target specific groups of professionals to join CM.
3. To identify and target specific areas of the country that are under represented in CM membership.

Methods to achieve objectives and proposed time scale:

1. Contact previous members to identify why they have not renewed subscription. *To be completed in Year 1*
2. Request that supplier members of CM include information about CM with all new communication aids and to distribute CM leaflets at CASC road shows. *To be completed in Year 1*
3. Promote CM the organisation in relevant journals through articles, announcments etc. *To be completed in Year 2*
4. Identify target groups to receive mailing from CM and identify named people to send mailing out to. *To be completed in Year 2*
5. Create a poster display to promote CM at conferences staged by other organisations; this could be loaned out to other voluntary groups, SIGs, etc. *To be completed in Year 1*
6. Hold regional events in areas underrepresented in membership. *To be completed in Year 3*

Information

Objectives:

1. To improve distribution of information on CM to a variety of people.
2. To link with other agencies and organisations to raise awareness of AAC and CM.
3. To provide a forum for members to raise issues and concerns on all aspects of AAC.

Methods to achieve objectives and proposed time scale:

1. Distribution of information leaflets. *Completion in Year 1*
2. Identify and develop links with other groups and agencies. *To be completed in Year 2*
3. Develop and publicise website as a forum for giving information and maintaining a dialogue on AAC issues. *To be completed in Year 2*
4. Identify and distribute other in house and/or commissioned

publications on general areas of interest and issues. *To be completed in Year 3*

User Support

Objectives:

1. To continue and to increase CM's support of users including:
   a. to continue to promote users' involvment at all levels of CM and ISAAC International
   b. to promote empowerment of users in different areas, e.g. employment, research
   c. to support users in promoting good practice in AAC throughout the UK

Note: the term 'users' includes the primary user of a communication system and/or families, facilitators and enablers.

Method to achieve objectives and proposed time scale:

1. Continue user achievement award, user award on an annual basis. *Year 1*
2. Promote idea of user mentoring throughout the UK which may include:
   a. compiling a book of ideas, encouragements and warnings from users to be   made available to new users
   b. sponsoring competent users to meet and train other users *To be completed in Year 3*
3. Organise or sponsor Regional Study Days for families, users and facilitators. *To be completed in Year 3*

Sales and Marketing

Objectives:

1. To increase distribution and sales of existing CM publications.
2. To consider other publications to market.

Methods to achieve objectives and proposed time scale:

1. Identify a Trustee with special responsibility for sales and marketing. *To be completed in Year 1*
2. Advertise resources and materials on web site. *To be completed in Year 1*
3. Send copies for reviews to other bodies, etc. *To be completed in Year 1*
4. Design and send fliers for each resource/material to identified individuals. *To be completed in Year 2*
5. Produce materials and training pack that people can use for awareness raising in their local area. *To be completed Year 3*

International Links

Objective:

1. To engage in exchange of information and experience with AAC users and professionals from other countries.

Methods to achieve objective and proposed time scale:

1. Set up a forum for exchange of information from other countries through CM journal. *Year 1*
2. Set up small working party to investigate other ways to achieve objective. *Year 2*

Innovations and Development

Objective:

1. To support new innovations and developments within the field of AAC.

Method to achieve objective and proposed time scale:

1. Continue small grant awards scheme to members/users and other professionals. *Years 1, 2, and 3*

Summary by Year of Methods to Achieve Objectives

To be completed by the end of Year 1

a. Contact previous members to identify why they have not renewed subscription.

b. Request that supplier members of CM include information about CM with all new communication aids and to distribute CM leaflets at CASC road shows.

c. Distribution of information leaflets.

d. Continue user achievement award and distinguished user award on an annual basis.   .

e. Identify a Trustee with special responsibility for sales and marketing.

f. Advertise resources and materials on web site.

g. Send copies of publications for reviews to other bodies etc.

h. Set up a forum for exchange of information from other countries through CM journal.

i. To continue small grant awards scheme to members/users and other professionals.

To be completed by the end of Year 2

a. Promote CM - the organisation in relevant journals through articles, announcements etc.

b. Identify target groups to receive mailing from CM and identify named people to send mailing.

c. Create a poster display to promote CM at conferences staged by other organisations; this could be loaned out to other voluntary groups, SIGs, etc.

d. Identify and develop links with other groups and agencies.

e. Develop and publicise website as a forum for giving information and maintaining a dialogue on AAC issues.

f. Design and send fliers for each resource/material to identified individuals.

g. Set up small working party to investigate other way to engage in exchange of information and experiences from other countries.

h. Continue small grant awards scheme to members/users and other professionals.

To be completed by the end of Year 3

a. Hold regional events in areas underrepresented in membership.

b. Identify and distribute other in house or commissioned publications on general areas of interest and issues.

c. To promote idea of user mentoring throughout the UK which may include:

   a. compiling a book of ideas, encouragements   and warnings from users to be made available to new users

   b. sponsoring competent users to meet and train other users

d. Organise or sponsor Regional Study Days for families, users and facilitators.

e. Produce materials and training packs that people can use for awareness raising in their local area.

f. Continue small grant awards scheme to members/users and other professionals.

News from CASC

Communication Aid Suppliers Consortium

As this year draws to a close, there have been **CASC Road Shows** in Oxford, Oldham and London. In 2001, the Road Shows will be going to more venues in the UK and Ireland:

Jan	5	**Aylesbury, Bucks -** Park School
Feb	16	**Burton-on-Trent -** Bladon House School
March		**Ireland** (provisional)
April		**London** (provisional)
May	1	**Newcastle -** Communicate
May	2	**Scotland** (provisional)
May	3	**Perth -** Dewars Centre
May	4	**Edinburgh -** CALL Centre
May	17	**Oldham -** St Anne's Rugby Club
June	6	**Westerham, Kent -** Valence School
July	6	**Stourbridge, W. Midlands -** Sunfield School
Oct	3	**Mirfield, W. Yorks -** Holly Bank School
Nov	8	**Ivybridge, S. Devon** - Dame Hannah Rogers School

David Hawkins

The recent death of David Hawkins has robbed us of a man who lived a life of service to others. He was a man whose quiet gentle manner put people instantly at ease and whose enthusiasm for life was an inspiration to us all.

As a young man David served in Chile as a part of the VSO scheme, returning to the UK to take up a position with the National Children's Home where he met Mary. They married and had three children Alison, Kevin and Mandy.

David was a committed Christian and an active member of his local parish church. He was involved with many aspects of church life, particularly supporting young people, encouraging them to take a constructive role in society, but David told me that he felt his true calling was to serve and support people with disabilities and special needs.

So it was this calling that led him to use his technical abilities in the field of assistive technology. He worked for many years at RSL Steeper Ltd (formerly Hugh Steeper Ltd). His involvement has certainly had a profound effect on the development of equipment and support services available to users. He was instrumental in the design and introduction of much of the equipment currently being used by people today.

David had that wonderful ability of seeing good in every one and encouraged others to give of their best with kindness and by setting high standards through his own example and wisdom. Those of us that knew him have, I am sure, shared in his tremendous sense of humour and love of sport, music, the theatre and the love of life in general.

It will not be possible to replace David since the knowledge he had of his subject was unique, but his example remains as an inspiration to us all. To David's family we extend our warmest sympathies.
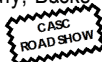
Greg Dodd

Diary Dates

5 January 2001   Aylesbury, Bucks
CASC Road Show at Park School, Aylesbury
FREE; Tel: 01296 423507

17 January 2001   Communicate, Newcastle-upon-Tyne
Advice Sessions & Equipment Demonstration
Contact: Communicate Tel: 0191 219 5640/1

25 January 2001   Oxford
AAC with an Adult Focus (AAC SIG, Oxford)
Contact: Jackie Reeves Tel: 01865 227600

19-26 January 2001   Elveden Forest Center Parcs, Suffolk
Seven Day Intensive AAC Course for AAC System Users
Contact: Chatability/Independent Expressions 01438 813658

26 January 2001   CALL Centre, Edinburgh
Personal Passports
Cost: £45 Contact: CALL Centre Tel: 0131 651 6235

February 2001   Newcastle-upon-Tyne
AAC Special Interest Group
Contact: Communicate Tel: 0191 219 5640/1

1 February 2001   ACE Centre North, Oldham
Assistive Technology - A Guided Tour
Cost: £100 (full day) Contact: Lisa Kelly Tel: 0161 627 1358

2 February 2001   CALL Centre, Edinburgh
Special Access to Computers
Cost: £45 Contact: CALL Centre Tel: 0131 651 6235

7 February 2001   CALL Centre, Edinburgh
**Effective Collaborative Working amongst Schools and
Visiting Specialists**
Cost: £45 Contact: CALL Centre Tel: 0131 651 6235

9-16 February 2001   Elveden Forest Center Parcs, Suffolk
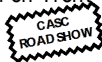**Seven Day Intensive AAC Course for AAC System Users**
Contact: Chatability/Independent Expressions 01438 813658

16 February 2001   Burton-on-Trent
CASC Road Show at Bladon House School
Contact: Susan Kirkwood Tel: 01283 563787

28 February 2001   CALL Centre, Edinburgh
**Exploiting Information and Communication Technology in
the Education of Deaf Pupils**
Cost: £45 Contact: CALL Centre Tel: 0131 651 6235

1 March 2001   ACE Centre North, Oldham
Making Windows Work for You
Cost: £100 (full day) Contact: Lisa Kelly Tel: 0161 627 1358

2-9 March 2001   Elveden Forest Center Parcs, Suffolk
Seven Day Intensive AAC Course for AAC System Users
Contact: Chatability/Independent Expressions 01438 813658

7 March 2001   CALL Centre, Edinburgh
ICT and Special Educational Needs Update
FREE; Contact: CALL Centre Tel: 0131 651 6235

8 March 2001   Communicate, Newcastle-upon-Tyne
Advice Sessions (clinical, policy, service delivery, funding)
Contact: Communicate Tel: 0191 219 5640/1

12 March 2001   CALL Centre, Edinburgh
**Exploring Internet Resources for Pupils with SEN
(including Deaf and Visually Impaired)**
Cost: £45 Contact: CALL Centre Tel: 0131 651 6235

20 March 2001   CALL Centre, Edinburgh
Dynamic Screen Voice Output Communication Software
Cost: £45 Contact: CALL Centre Tel: 0131 651 6235

30 March - 6 April 2001   Elveden Forest Center Parcs, Suffolk
Seven Day Intensive AAC Course for AAC System Users
Contact: Chatability/Independent Expressions 01438 813658

April 2001   London
CASC Road Show in London (provisional)
Contact: Communication Matters Tel: 0870 606 5463

2-3 April 2001   CALL Centre, Edinburgh
Picture Exchange Communication System (PECS)
Two Day Workshop. Contact: CALL Centre 0131 651 6235

4 April 2001   ACE Centre North, Oldham
Getting Started with the Intellitools Suite
Cost: £100 (full day) Contact: Lisa Kelly Tel: 0161 627 1358

27 April - 4 May 2001   Elveden Forest Center Parcs, Suffolk
Seven Day Intensive AAC Course for AAC System Users
Contact: Chatability/Independent Expressions 01438 813658

1 May 2001   Communicate, Newcastle
CASC Road Show in Newcastle
Contact: Communicate Tel: 0191 219 5640/1

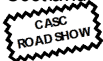**2 May 2001**   Scotland
CASC Road Show in Scotland (provisional)
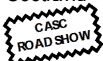Contact: Communication Matters Tel: 0870 606 5463

3 May 2001   Perth, Scotland
CASC Road Show at The Dewars Centre, Scotland
FREE; Contact: Rhona Matthews Tel: 01738 473714

4 May 2001   CALL Centre, Edinburgh
CASC Road Show at CALL Centre, Edinburgh
FREE; Contact: CALL Centre Tel: 0131 651 6235
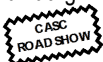
12 May 2001   CALL Centre, Edinburgh
CALL Centre Family Open Saturday
(In partnership with KEYCOMM, Edinburgh)
FREE; Contact: CALL Centre Tel: 0131 651 6235

16 May 2001   ACE Centre North, Oldham
As Easy as AAC!
Cost: £100 (full day) Contact: Lisa Kelly Tel: 0161 627 1358

17 May 2001   Oldham
CASC Road Show at St Anne's Rugby Club, Oldham
FREE; Contact: Lisa Kelly Tel: 0161 627 1358

Do You Need a Small Grant?

Communication Matters welcome applications for small grants. Consideration will be given to applications for projects or activities that further the aims of Communication Matters. Examples include:

- organising or travel to an **AAC User event**
- the costs of publishing an **information leaflet**
- the costs of a **social research project**

The applications will be reviewed by the Small Grants Committee and an external reviewer in March, June and September. For an application form, Tel: 0870 606 5463 Email: admin@communicationmatters.org.uk

SPEAK FOR YOURSELF
Campaigning for People's Right to a Voice

Leading disability organisation, SCOPE, has recently published a new report, *Speak for Yourself*, as part of its civil rights campaign to ensure people without speech get the equipment and training they need.

Back in 1998 at SCOPE's annual conference, communication aid users spoke from the floor urging SCOPE to campaign to ensure people without speech get the equipment and service they need. Two years on and SCOPE has now completed detailed survey work with over 300 communication aid users and published its findings.

Equipment is key to disabled people's equality, equipment is empowering and ensures that people can live more independently. Many survey respondents are frustrated that people's right to mobility is accepted (for instance through the wheelchair service) whilst their right to communicate is often denied.

Like all SCOPE reports, *Speak for Yourself* is rooted in the rights agenda. Disabled people and their organisations have welcomed the establishment of the Disability Rights Commission to provide the teeth to uphold their rights, and disabled people broadly welcome the bill to extend disability rights in education that is currently going through Parliament. But for many people without speech, their right to equipment is not being upheld and *Speak for Yourself* has found that people are missing out on educational and social development.

Speak for Yourself found that speech-impaired people are being denied their fundamental human right to communicate for want of an efficient and properly resourced service. Despite having been professionally assessed as needing equipment, disabled people are not getting the devices they need from statutory organisations. Some therapists' time is misused on making funding applications.

The report uses the experiences of disabled people to highlight good and bad practice. We found that nearly a third of respondents had not had sufficient training in how to use their equipment. Some users find they cannot use their aids outside or find they are difficult to use because of the weight or design. 70% of users' aids have broken down, leaving users without a voice. Some people are prevented from using their equipment in school holidays and have to give an aid back when they leave school or move house. Our survey reflects what communication aid users and many people working in the field have been saying for years. It shows that the present system is failing disabled people. New investment is required to ensure people get the equipment, warranties and training they need.

SCOPE has made key recommendations to Government:
- Government should set up a central fund to ensure anyone assessed as needing a communication aid gets the appropriate equipment and training they need free of charge
- The Department of Health should conduct research to identify the numbers of users & potential users of communication aids.
- The Department of Health should issue new national guidance on the provision of communication aids, ensuring users get the equipment they need at the right time.
- The Department of Health should set clear national standards for the provision of communication devices and other disability-related equipment and end the postcode lottery.

SCOPE has written to the Government with its recommendations and is waiting for an official response. Meanwhile, following our successful report launch to delegates at the Labour Party Conference (see Jane Wink's article below), SCOPE is holding a Westminster launch early in 2001. If we want a society where the thoughts and ideas of speech impaired children and adults are as valued as those of everyone else, Government must make effective arrangements to provide people with the means to speak.

Mo Mowlam (left) speaks with Jane Wink (front) and Martin Wink at the SCOPE launch

As we approach the General Election, this is an excellent time to urge politicians and the next Government, to meet the needs of communication aid users. So when the politicians knock on your door, invite them in and state the case that communication is a basic right, and with improved investment and a newly structured service people without speech will have a chance to get the equipment and training they need to live more independently.

James Ford, SCOPE Campaigns Officer

Note: 'Speak for Yourself' is available from SCOPE on Tel: 020 7619 7341 or Email: information@scope.org.uk. Price £12.50 to professionals and £3.00 to AAC users.

Jane Wink, CM Trustee, writes: With the help of *Communication Matters* and *CASC,* a number of communication aid users were present on the SCOPE stand to support the *Speak for Yourself* campaign at the recent Labour Party Conference. I was invited to attend the Conference on behalf of SCOPE. During the day I was on the exhibition stand where I met Cherie Blair and Mo Mowlam. I spoke with them briefly about SCOPE's campaign and the need for funding for communication aid users to have the right device and training to use it.

At a reception that evening I was to present SCOPE's campaign to Margaret Hodge MP, Minister for the Disabled, and whilst waiting in the reception of the Grand Hotel I met the Prime Minister very briefly. Unfortunately I did not have time to speak with him, only to say 'hello'. The reception went very well. I spoke for a couple of minutes about life without a communication aid, and what a difference it makes to the standard of living being able to communicate. Margaret Hodge MP also spoke about what the Government had done during its term to help disabled people, but did not give any response to SCOPE's campaign document.

Lightwriter
(Toby Churchill)
Advertisement

Lightwriters: A New Way Forward

by Kim Harris

This paper was presented at the CM'99 National Symposium, Lancaster University, September 1999

Introduction

The Lightwriter is usually considered to be a communication aid for people who have fairly high level literacy skills. However, as long as a person can match letters of the alphabet and understand the concept of symbols, they can access a Lightwriter.
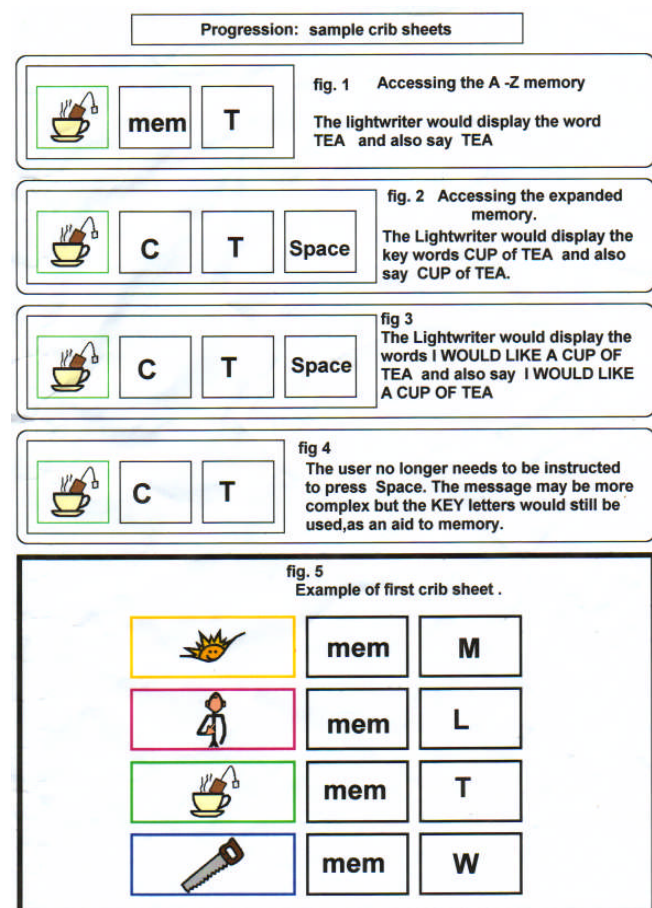
How?

- Using the direct and/or abbreviation-expansion memory functions on the Lightwriter.
- Using a combination of symbols and letters, e.g. using PCS symbols from the Boardmaker™ program.
- Referring to 'crib sheets'.

Case Studies

1. B.P.

Female, aged 31 years. Diagnosed with spastic cerebral palsy affecting upper and lower limbs; wheelchair user. Speech intelligible at simple sentence level but affected by stressful situations. Has a mild-moderate learning disability.

Progression: sample crib sheets

fig. 1 Accessing the A-Z memory

The lightwriter would display the word TEA and also say TEA

fig. 2 Accessing the expanded memory.

The Lightwriter would display the key words CUP of TEA and also say CUP of TEA.

fig 3 The Lightwriter would display the words I WOULD LIKE A CUP OF TEA and also say I WOULD LIKE A CUP OF TEA

fig 4 The user no longer needs to be instructed to press Space. The message may be more complex but the KEY letters would still be used, as an aid to memory.

fig. 5 Example of first crib sheet.

Self-referred for a compact, portable communication aid with visual display and voice to act as a backup to her speech. The Lightwriter (SL35) would be an ideal solution, however, her limited literacy skills posed a problem. Would a solution lie in the linking of Boardmaker™ and Lightwriter, creating a picture-based colour-coded crib sheet. On liaison with B.P., 20 messages were agreed upon initially and stored, using the Lightwriter's abbreviation-expansion memory function (see fig. 6). B.P. is currently operating on 40 stored messages but is capable of more.

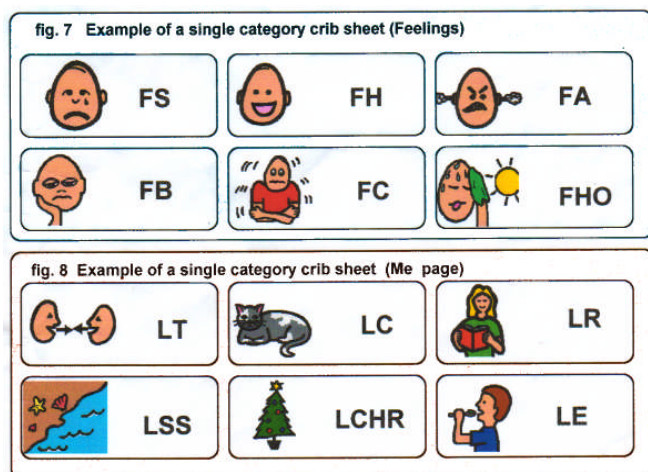fig 6. Example of a mixed category crib sheet
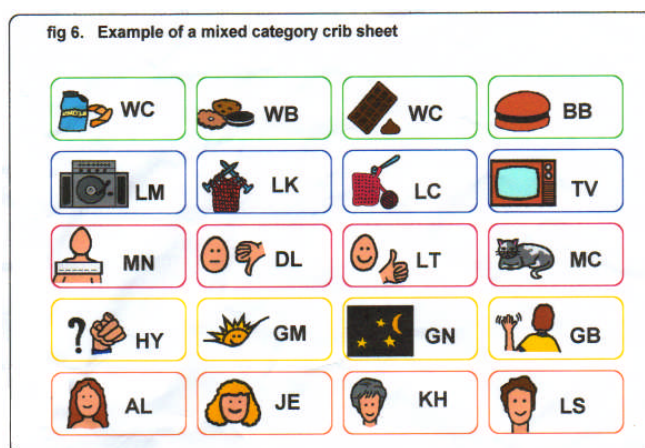
2. R.B.

Female, aged 39 years. Diagnosed with cerebral palsy affecting upper and lower limbs. Saddle seat used for mobility. Speech unintelligible beyond a few basic single words. Has a moderate learning disability. Originally, an unvoiced aid (Lightwriter SL1) was purchased and presented to her by a local charity. Following intervention for other difficulties, R.B. expressed an interest in a voiced aid. On the introduction of the new Lightwriter (SL30) it became apparent that R.B. was restricted by the inconsistency of her literacy skills. She was then offered the opportunity to participate in the project. R.B. began with 11 messages with a crib sheet incorporating a mixture of key words (sample not included) and symbols (fig. 5). This was designed at R.B.'s request. Review of current needs is underway.

3. K.T.

Female, aged 34 years. Rubella victim diagnosed with a dual sensory impairment. Has useful vision with glasses. Severe to profound sensori-neural bilateral hearing loss. Restricted mobility but is ambulant. Has no speech but vocalises. Has a mild learning disability. Uses a variety of signs from two or three different sign systems. Learnt Paget-

Gorman at school, which parents use at home. As adult learnt Sign Supported English and involved in peer group tutoring etc. however, communication with strangers remains difficult. Symbols diary work commenced with K.T. recognising a large range of symbols but there was some difficulty with supporting this system across venues. Trial of the Lightwriter (SL31) began, following an assessment carried out by Sense (The National Deafblind and Rubella Association). Difficulties with literacy skills restricted use and there was a need to achieve a more functional system as well as demonstrating increased potential for K.T. This is a complex case and due to the range of systems available to K.T., limited use of the Lightwriter through lack of confidence and restrictive support systems, there was a planned return of the aid. However, following some discussion, K.T. was included in the project and on initial introduction is using four semantic category colour coded crib sheets of 6 symbols to a page; 24 messages (fig. 7 & 8) are currently being introduced.

fig. 7 Example of a single category crib sheet (Feelings)

fig. 8 Example of a single category crib sheet (Me page)

Equipment

• Lightwriter
• Boardmaker™ software to produce crib sheet

By using Boardmaker™ symbol crib sheet in conjunction with the Lightwriter's context memory function, these clients now have access to a communication aid which previously could only be accessed by people who have high level literacy skills.

Preparation

• Appropriate assessment of client's skill level to determine the following:
  i. Client is able to recognise a visual symbol (photographs, picture symbols, line drawings, graphemes etc.) as representation of a verbal and written message.
  ii. Client has visual matching ability.
  iii. Client has the ability to follow a sequence of instructions.
  iv. Client has the manual dexterity to access the keyboard or the potential for switch use.
• The new user will be facilitated in the choice of messages and symbols.

• An appropriate crib sheet will be produced.
• Using the A-Z (Direct) memory function with the Abbreviation-expansion memory function, the Lightwriter will be pre-programmed and set to speak each word.

Method

• Using the Crib Sheet, the client is asked to find the picture/symbol of e.g. 'tea'.
• The client is then encouraged to match the corresponding letters on the keyboard following the correct sequence of visual instructions.
• When activated, the Lightwriter will speak the pre-programmed message and display the words on both screens.

Progression

1. Early Stages

• Use of key words for message to aid further development of visual and literacy skills.
• Use of single crib sheet with sequence of visual instructions to follow.

2. Development

• Expansion of number of messages available.
• Use of more complex sentence structures to aid language and literacy skills.
• Use of colour coded crib sheets to aid development of semantic categories and provide structure for a book of crib sheets.
• Mix A-Z (Direct) and Abbreviation-expansion memories on the same page.
• Reduce crib sheets to picture/symbol only.

NB At this stage the user will have demonstrated the necessary memory skills.

3. Further Development

• Recognition and memory to activate the message through use of the appropriate keys, without the need for a crib sheets.

Kim Harris
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Notes:

The Lightwriter Project was developed from an idea by Kim Harris, a Speech & Language Therapy Support Worker responsible for a joint Communication Aid budget, between the Adult Learning Disability Team and the Adult Acquired Team. Kim works hands-on with both client groups in the specified areas of AAC, including Sign Support, being qualified to BSL Level III. The project developed further with the aid of both team leaders and a practising clinician.

Lightwriters are available from Toby Churchill Ltd.

Boardmaker™ (by Mayer-Johnson) is available from Don Johnston Special Needs Ltd.

Chat with Symbols

by Jo Cremelie & Bart Noë

This paper was presented at the CM2000 National Symposium, Lancaster University, September 2000

Abstract Internet Relay Chat (IRC) is one of the most popular and most interactive services on the Internet. It gives you the possibility to have a real-time conversation with people all over the world. Considerable effort has already been put into making the Internet accessible for everyone, but solutions for people who communicate with symbols are hard to find. That is why Mind Express, a multimedia toolbox to support alternative communication and therapy, has been extended with a chat module. The first test sites will be set up in different countries to evaluate this way of communication.

The Internet

Internet gives us a world of information right on our computer screen. But at the same time it is a gateway to anyone in the world using the Internet. The *World Wide Web* (WWW) is probably the best known part of Internet. Information about the most diverse topics can be found in beautifully designed web pages. Whether you are looking for a hotel in New York, or wondering how to fix your car, or you are interested in the birth-date of Bill Gates, just look on the Internet; you'll probably find an answer. The search engines can help you to find the desired web pages, images, videos or audio clips on the World Wide Web.

When you visit a Web site, you're using the Internet, but there are a lot of other ways to use the Internet. When you go to a *FTP* (File Transfer Protocol) site to download files or when you are sending an email, you are also using the Internet. *Email* stands for Electronic Mail. It is just like regular mail, except instead of receiving a letter in your mailbox at home or in the office, you receive email in an electronic mailbox on your computer. Email is sent electronically, from computer to computer, using the Internet to deliver the message. The Internet is much faster than the regular mail. It usually takes less than a minute to reach its destination and you receive the message in a digital format.

Another very popular service on the Internet is *Internet Relay Chat* (IRC) (Fig. 1) or simply chat. With the Internet Relay Chat talking with people all over the world becomes very easy. It is interactive and makes real-time conversations possible. It all starts with a chat community. Within such a community, you can encounter people in various chatrooms where discussions or conversations about specific topics take place. A chat community is a great and new way to learn, to keep in touch, to educate, or just to have fun!

Access for all

A lot of effort has already been done to make the Internet accessible for all and many other initiatives are still under development. Of course the first step in making the Internet accessible for disabled people is to make the computer accessible. Technologies such as touch screens and voice software help people to access information they were not able to find before. Screen readers translate on-screen text into audio output or into braille. Although computers are largely accessible to those with hearing loss, software and Operating System vendors have to understand the need for captioning of audio events. As multimedia computers become mainstream, for example, tutorials may use video and audio to teach. Without captioning, hearing-impaired users are locked out of these types of features. For those with drastic physical impairments voice-recognition programs, alternative keyboards and mouse alternatives can help access to the computer.

Much work has been done to improve the accessibility of the World Wide Web. Guidelines for creating accessible Web site designs are available at the Trace Research Project [1] and at the World Wide Web Consortium (W3C) [2]. Even software tools to analyze web pages for their accessibility to people with disabilities have been developed [3]. The other Internet services, like email and chat, become accessible for people with disabilities once the computer is accessible for them.

But there is still a group of disabled people without access to all these services. People who need symbols to communicate
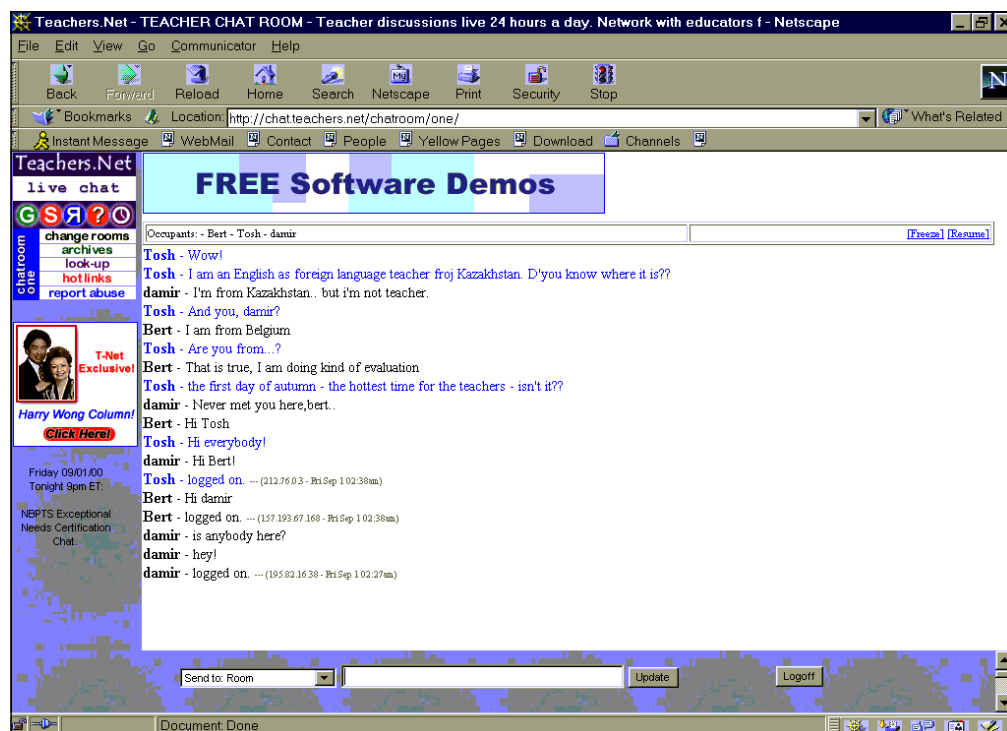

Figure 1 A chatroom at chat.teachers.net

Sensory Software
Advertisement

cannot read the information on the World Wide Web. Some-one who communicates with symbols, is not able to read or to write an email or to chat with someone else. For these speech and language impaired people only a few tools are available to access the Internet services. For that reason Technologie & Integratie has developed a chat module for their AAC software solution *Mind Express* [4].

Mind Express

Mind Express is an open and flexible toolbox to support graphical communication, education and therapy. It is a soft-ware solution for creating or improving the direct communication, telecommunication and independent living abilities of disabled people. *Mind Express* offers the possibil-ity to communicate by means of symbols, words and pictures, and uses state of the art speech technology. The main module is a communication grid that can be filled in with symbols from symbol sets like Bliss, PCS, BETA and pictograms. You can extend the databases with your own pictures, drawings, or photo-graphs. The grid can consist of different pages (dynamic display).

The basic principle of *Mind Express* is the connection of a visual object with a certain action. The action can be the pronunciation of a word or a sentence (recorded or with text-to speech), it can be a command like 'jump to another page', it can be a function to start writing new sentences or letters, it can be an action for environmental control and so on. The grammar module of *Mind Express* can handle the conjugation of verbs, the plural form of substantives or the declension of adjectives whenever necessary.

To select an object the user can use a mouse, a joystick, switches or a touch-screen. Different scanning algorithms are implemented including auditory scanning.
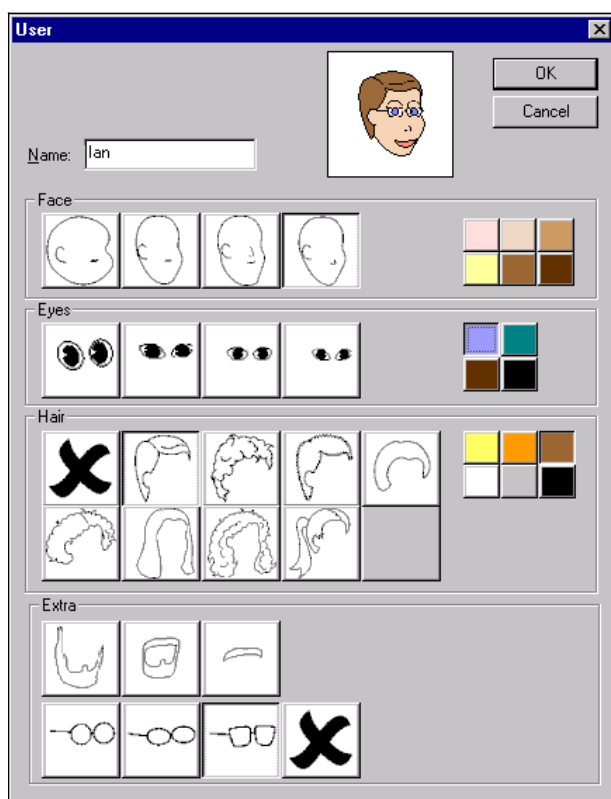

Figure 2 Tool for creating faces

A new module of *Mind Express* is the chat module. An ordinary chat program consists always of two sections. In one section a person can type his message. The other section contains the conversation of all persons connected to the chat channel. Everyone can send messages and simultaneously follow the ongoing conversation. The chat module of *Mind Express* is based on the same principle (Fig. 4). The user first builds a sentence using the communication grid and then he or she can send it to the chat channel. At the same time he or she can read the sentences other users have already sent and follow the conversation in the chat window.

Chat with symbols

The current chat module allows communication with symbols between people who use or understand the same symbol sets. The users preferably should be from the same native language group as chat messages in symbols are supported with text and with text-to-speech output.
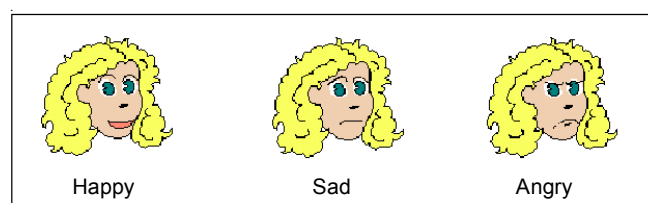

Figure 3 Showing emotions in *Mind Express*

Before starting a chat session you have to create an icon representing your personality: how you want to be visualized and recognized during the chat session. Instead of using a nickname, like in the common chat programs, or your photo, we have chosen to use something like cartoon faces. (Photos consume a lot of memory and they are not flexible when it comes to adding emotions.) To create your face you can use a tool in *Mind Express* (Fig. 2). This tool allows you to choose the shape of the head, the shape and the color of the eyes and hair, the color of your skin. You can have the face with a beard and/or glasses.

When you have decided what you want to look like, you have to make a connection to the Internet and enter a chatroom. Both actions are functions in *Mind Express* which can be linked with any visual object and added to your communication grid. The chatroom is a virtual place where you can 'meet' and commu-nicate with other people joining the same chat room. Your entrance into (and departure from) a chatroom will be an-nounced to everyone who is present. A special function in *Mind Express* shows the faces of everybody in the chatroom and allows you to address a member in it.

Once you have entered a chatroom you can simply observe and follow the conversation going on between some of the chatroom guests or you can participate at your convenience or when you are asked to do so. Every message will be displayed and preceded by the face identifying the messenger. The messages are pronounced by the text-to-speech synthesizer. The gram-mar module of *Mind Express* is responsible for the conjugation of the verbs so that the messages sound more natural which improves the intelligibility. Using drawn faces identifying the messenger gives him/her the possibility to load the messages emotionally by means of changing the expression on the face.

Currently, *Mind Express* provides three functions to support the emotions: happy, sad and angry (Fig. 3). If this extra emotion information turns out to be useful and efficient we will add extra emotions like surprised, questioning, and so on.

A chatroom can be public and accessible for everyone, or it can be private and thus only accessible for those having the key (a password) to enter the chatroom. The codes to enter the public chatrooms and the description of the chatrooms will be available on the Internet (www.tni.be). To create a private chatroom you have to register to get a private code. You will be considered as the chatroom master and you will be responsible for the distribution of the private chatroom key.

Applications

One of the first applications you might think of is a (private) conversation between two people in different locations. The people are not necessarily both symbol users: a child could be chatting with a family member or a pupil chatting with a teacher. A very important and interesting experience during the first tests was that of a non-symbol user chatting with a symbol user. You begin to realize what it feels like when you can only communicate with symbols and you gain a better understanding of the problems involved. It also helps a lot in building or improving the vocabulary set of the user.

session between users of different symbol sets is technically possible but probably not very useful or efficient if they do not understand the different symbols. The text-to-speech support of the messages will help but because of the volatile nature of speech it will not be sufficient for those who cannot read. Automatic symbol translation is one of the biggest challenges in our further development. Symbol translation should allow all users to chat with each other no matter what symbols they are using. For instance, a PCS user composes a sentence with PCS symbols and sends it to the chatroom. All chatroom
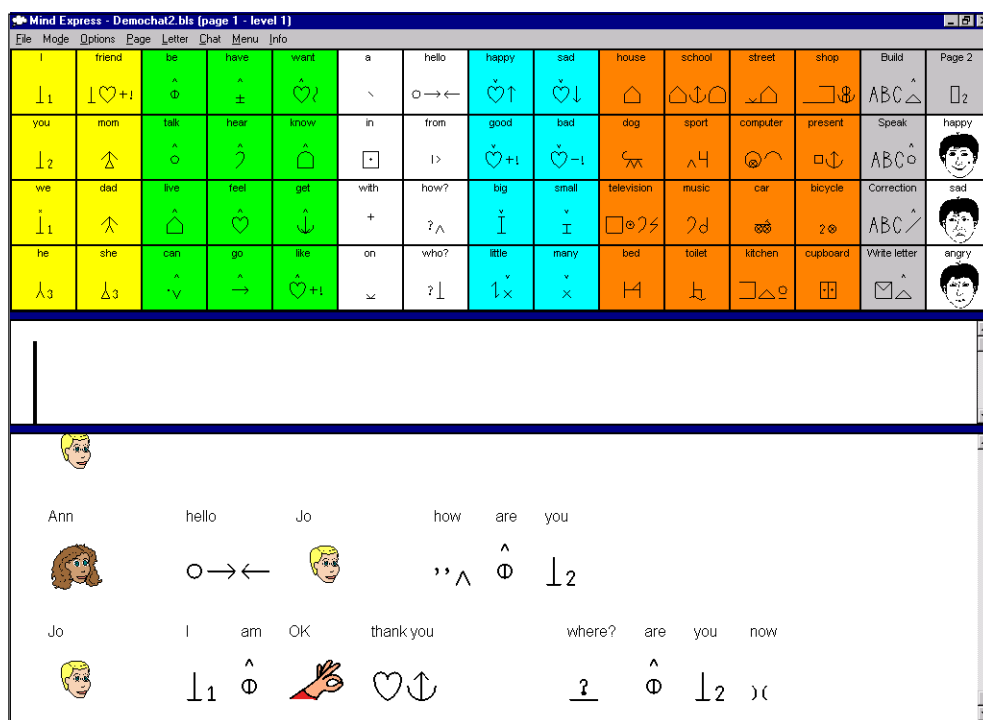

Figure 4 A Chat session with *Mind Express*

members will receive the message translated into the symbols they personally understand. This implies that every object, action or concept has a representation in each symbol set, which is at present not the case! A standardization of symbol sets would help in solving this problem.

Another challenge related to the symbol translation is the language translation. Suppose a Bliss symbol user wants to chat with a non-symbol user speaking a different language. In that case the person could only rely on the translated text and on the corresponding text-to-speech output. To solve that problem we could use existing translation software or we could work out a symbol-to-text and a text-to-symbol translation.

Jo Cremelie & Bart Noë
Technologie & Integratie, Belgium
Email: info@tni.be Website: www.tni.be

Another challenging application is 'distance learning' or 'distance therapy' by means of a virtual classroom where a number of pupils attend lessons and have the opportunity to interact in real time. The classroom can be private and only accessible for pupils from a specific school or institution. But it can easily be extended to a more public classroom admitting pupils from different schools or institutions. It is important to avoid making the number of pupils attending too large. The classroom does not necessarily have to be virtual, it can be a real classroom where the pupils, or some of them, and the teacher are physically present.

Like any other lesson, these chat sessions need to be planned and moderated by a teacher or a therapist. Tests have shown that the teacher or therapist has an important extra task as the moderator of the chat session. To make the session successful the lessons need to be well prepared, but that again stimulates the user to improve or to increase his or her vocabulary.

Challenges for the Future

Although we believe that the current chat module is useful for various applications some questions still need to be answered. The first restriction which emerged quite early in the evaluation stage was the problem of the different symbol sets. A chat

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[1] Trace Research & Development Center, University of Wisconsin – Madison, http://trace.wisc.edu

[2] World Wide Web Consortium – Web Accessibility Initiative, http://www.w3.org/WAI

[3] Bobby, CAST (Center for Applied Special Technology), http://www.cast.org/bobby

[4] *Mind Express,* Technologie & Integratie, http://www.tni.be

An Investigation of Developmental Trends in Speaking and Non-speaking Children: AAC Implications

by Janice Murray

The paper was presented at the CM'99 National Symposium, Lancaster University, September 1999

Aim

The aim of this study was to explore some of the skills required for successful use of voice output communication aids (VOCA) with multi-meaning icons. In particular, the study focused on the ability to sequence picture material and the ability to find and correctly insert an element that had been omitted from a picture. The first task (picture sequencing) investigated the significance of rehearsal strategies as an aid to memory, with an emphasis on the use of silent (inner) speech as a possible rehearsal strategy. The second task explored the idea that a picture (or indeed, a multi-meaning icon) may have several elements to it, and, that to understand the element you must first understand the whole event or activity implied by the picture.

Participants

Sixty young people, aged between 3 and 6 years took part in this study, with a gender mix of 29 boys and 31 girls. Participants were drawn from schools, nurseries and preschool assessment units in England and Scotland. This allowed for a rural, urban and socio-economic mix of individuals.

Thirty participants were impaired by cerebral palsy (CP), 28 were anarthric and 2 severely dysarthric. All were being considered for, or in the early stages of, AAC use. Eighteen children were described as having mixed type CP; seven predominantly spastic type, and the remaining five predominantly athetoid type. All except one child had quadriplegia, the remaining child had diplegia. All were from a mono-lingual English speaking background and perceived as of average intelligence (detailed selection criteria were used).

Thirty participants were matched, as far as possible, for age, gender, urban, rural and socio-economic mix. These participants were able-bodied individuals attending mainstream school or nursery school with no known medical or speech and language diagnoses.

Participants were organised into six age groups. These were 3, 4, 4.5, 5, 5.5 and 6 years. To qualify for an age banding an individual had to be a maximum of two months plus or minus the target age.

Method

Two experiments will be described in this paper. Experiment 1 is a memory rehearsal task specifically looking at the effects of verb material on participants responses. In another part of this study adjective knowledge was investigated, but, this will not be considered here. Noun material was intentionally avoided as it has been exhaustively researched elsewhere. Experiment 2 considers the participants' ability to manipulate events in respect to different parts of speech (nouns, verbs, adjectives). In other words, do these individuals have sufficient knowledge and judgement to make appropriate choices about the elements of a depicted event that must be present for that activity to legitimately take place. The experiments will be referred to as:

Experiment 1 Rehearsal of verb picture sequences

Experiment 2 What's Missing?

Experiment 1

Materials

Three sets of 6 pictures were used in this experiment.

Verb pictures: (1) control (eating, sleeping, brushing, sitting, running, washing); (2) long (hammering, watering, carrying, splashing, telephoning, listening); (3) phonologically similar (kick, lick, stick, wink, tick, pick).

If the participants were using silent (inner) speech as a rehearsal strategy, the long words and phonologically similar words should be more difficulty to remember because there are more sounds to articulate or the words sound the same and may be confusing.

All items were piloted on children attending the Speech Therapy Clinic at Manchester Metropolitan University. All items were colour drawings, purposely chosen for their visual complexity. The rationale for this came from the composition and frequent use of certain types of multi-meaning icons (Baker,1989; Baker, 1991; Baker, 1994; Baker & Erickson, 1996; Calculator, 1997; Raghavendra & Fristoe, 1990).

Procedure

All participants were trained in the use of an eye-transfer ('ETRAN') frame. Before testing a set of pictures, each item was named as it was attached to the frame. Memory span was established by presenting sequences of pictures, from a duplicate set, to each individual, then hiding the duplicate sequence and allowing the participant to replicate the sequence by looking at the pictures on the frame in the appropriate sequential order. If a sequence error was made the individual had a second attempt with a sequence of the same length. Testing was discontinued after two failed attempts at a sequence length. In this way memory sequence length was established for familiar (control), long and phonologically similar verbs. In addition, these picture sets were presented over two trials.

Trial 1: spoken presentation of pictures. Throughout the testing the adult imposed labels on each child's experience of the pictures.

Trial 2: silent presentation of pictures. Apart from naming items as they were attached to the frame, no further labelling occurred.

Ordering of the picture sets and the trials were randomised across both groups of participants.

Experiment 2

Materials

 = 1 item from 1 set

Three sets of three items were used in this experiment. Each item (as above) consisted of four pictures: (1) a picture with a missing element; (2) a target element which would complete picture(1); (3) a semantic distractor; (4) a visual distractor.

The sets were organised in such a way that they assessed the participants knowledge of different parts of speech and their knowledge of every day events (Nelson,1992; Paul, 1997; Pinker, 1989; Sutton & Gallagher, 1993). For example:

a. NOUN omission

*Pooh is sleeping in **bed***
   Missing element: bed
   Response options: bed, chair, slippers

b. VERB omission

*Chip is **cutting** a cake*
   Missing element: knife
   Response options: knife, spoon, pan.

c. ADJECTIVE omission

Minnie is hanging out the clothes
   Missing element: clean jumper
   Response options: clean jumper, dirty jumper,
                 torn jumper

All items were complex and in colour for the same reasons as previously stated. The Eye-Transfer frame was used to display the picture elements. During Trial 1(spoken) the following type of monologue was used to elicit a response from each participant " Minnie is hanging out the clothes - OH OH There's something missing? - Does she need the clean jumper, the dirty jumper or the torn jumper."

During Trial 2 (silent) because the participants were so young the following monologue was used "OH OH - There's something missing - Is it this, this or this."

Presentation of items and trials were randomised across both groups of participants.

Results

In Experiment 1 several hypotheses were predicted The ones to be considered here are:

1. The able-bodied children would perform significantly better, on all tasks, than the children with cerebral palsy.

2. The children with cerebral palsy would be significantly affected by mode of presentation whilst the able bodied children would not.

3. The able-bodied children would demonstrate the use of inner speech as a rehearsal strategy from 4.5 years upwards.

4. The children with cerebral palsy would not demonstrate the use of inner speech as a rehearsal strategy at any age.

These predictions are based on previous work and findings (see discussion).

Experiment 1- Rehearsal of verb picture sequences

1. **The able-bodied children would perform significantly better, on all tasks, than the children with cerebral palsy.**
   Analysis of variance (ANOVA) and Post hoc Tukey Test analyses were carried out on the data. ANOVA analysis will highlight differences across the whole group, whilst the

Tukey Test enables you to look at specific age bands or characteristics in the data in more detail.

Spoken presentation - Three way analysis of variance produced a significant main effect of group for phonologically similar words, $F=13.95$, $p<0.001$; and for long words, $F=7.89$, $p<0.01$. The research hypothesis was supported for both phonologically similar words and long words where the able bodied children consistently remembered longer picture sequences.

Silent presentation - Three way analysis of variance produced a significant main effect of group for phonologically similar words, $F=13.70$, $p<0.001$; and for long words, $F=13.07$, $p<0.001$. Again, supporting the research hypothesis.

2. **The children with cerebral palsy would be significantly affected by mode of presentation whilst the able bodied children would not.**
   Phonologically similar words -This hypothesis was only partially supported by a three way analysis of variance which produced a significant main effect of word in *silent* presentation, $F=3.60$, $p<0.01$; whilst no significant effect was found for *spoken* presentation. As there was no significant group-word interaction effect for either mode this implies that both groups were affected by mode of presentation.
   Long words - This hypothesis was supported by a three way analysis of variance which produced a significant main effect of word in *silent* presentation, $F=5.20$, $p<0.05$, and *group-word interaction effect,* $F=2.49$, $p<0.05$. Post hoc Tukey test revealed that the children with cerebral palsy were significantly affected by mode of presentation, $q=3.79$, $p<0.05$; whilst the able- bodied children were not. There were no significant effects found in *spoken* presentation.

3. **The able-bodied children would demonstrate the use of inner speech as a rehearsal strategy from 4.5 years upwards.**
   The null hypothesis was supported for both *spoken and silent* presentation. Although, from a three way analysis of variance, a significant main effect of age was revealed in all conditions, there was never a significant group-age-word interaction.

4. **The children with cerebral palsy would not demonstrate the use of inner speech as a rehearsal strategy at any age.**
   The research hypothesis was supported here by the absence of a significant group-age-word interaction.

Experiment 2 - What's missing?

In Experiment 2 a number of hypotheses will be considered here:

1. There will be no significant difference between groups for noun tasks.

2. The children with cerebral palsy will demonstrate a significantly different error pattern than the able-bodied children for verb and adjective tasks.

3. There will be significant differences between groups across all ages for the verb and adjective tasks only.

4. The children with cerebral palsy's error patterns will be significantly affected by mode of presentation whilst the able-bodied children's error patterns will not.

A Chi-square as a 'goodness of fit' Test and a Mann-Whitney U Test were used to analyse the data.

Using the 'goodness of fit' test allows you to examine whether a pattern of frequencies significantly differs from an expected pattern of frequencies. In this instance, I wanted to look at the distribution of error patterns. This test only allows you to look at one group of participants at a time, which means that any interesting comparisons across groups is observed rather than statistical. The *error categories* used were *(1) semantic only, (2) visual only, and, (3) a combination of semantic and visual error responses.*

Using the Mann-Whitney U Test, I was able to look for similarities and differences in response to tasks at 6 different age levels. This provides a useful contrast with the 'goodness of fit' test which is looking at the participants as two whole groups.

(For ease of presentation I will discuss spoken presentation then silent presentation throughout. Hypothesis 4 will draw on results presented from 1-3.)

1. **There will be no significant difference between groups on the noun task.**

   From the 'goodness of fit' test the children with cerebral palsy appear to support the null hypothesis for *spoken* presentation. If they made an error in selection they were predictably choosing type (3) a combination of semantic and visual errors. This was significant at the level of p=0.05 (X=5.99, df=2). By contrast, the able-bodied children did not demonstrate a significant error pattern and were equally likely to choose any of the 3 error types.

   In *silent* presentation the research hypothesis appears to be supported as neither group produce a significant error pattern. From eye-balling the raw data both groups show a similar error distribution pattern.

   The Mann-Whitney U test identified a significant difference in performance between groups at age 3 for both *spoken* (U=0, n=5, n=5, p=0.005 for a 1 tailed test) and silent (U=1, n=5, n=5, p=0.01 for a 1 tailed test) presentation. There were no significant differences between groups at any other age level.

2. **The children with cerebral palsy will demonstrate a significantly different error pattern than the able-bodied children for verb and adjective tasks.**

   Verbs - The null hypotheses would appear to be supported for *spoken and silent* presentations as neither group produced a significant response at the level of p=0.05 in a 'goodness of fit 'test analysis. This implies that error patterns are similar across all three categories in both groups.

   The Mann-Whitney U test offers some confounding, yet more specific, information in that significant differences in performance were found at ages 3 and 6 years for *spoken* presentation (U=2, n=5, n=5, p=0.025 for 1 tailed test and U=2.5, n=5, n=5, p=0.05 for 1 tailed test respectively) and ages 3 and 6 years for *silent* presentation (U=2.5, n=5,n=5, p=0.05 for 1 tailed test and U=1.5, n=5,n=5, p=0.025 for 1 tailed test respectively).

   Adjectives - Again, the null hypothesis would appear to be supported for *spoken* presentation in the 'goodness of fit' tests. The children with cerebral palsy and the able-bodied children produced strikingly similar error patterns. Both groups were equally likely to produce a (1) semantic error

as a (3) semantic and visual error. Purely visual errors were not observed (X=5.99, df=2, p=0.05 in both groups)

The Mann-Whitney U test found significant differences for *spoken* presentation at ages 3, 4 & 6 years (U=2, p=0.05 for 1 tailed test; U=3, p=0.05 for 1 tailed test; U=2.5, p=0.05 for 1 tailed test, respectively).

For *silent* presentation both groups appear to respond similarly, thus supporting the null hypothesis. Both groups produce a significant error frequency in the 'goodness of fit' test. However on closer inspection of the raw data, the children with cerebral palsy (X=9.21, df=2, p=0.01) were most likely to make a (1) semantic error rather than any other type of error, whilst the able-bodied children (X=5.99, df=2, p=0.05) were as likely to make a (1) semantic error as a (3) semantic and visual error. This mirrored the able-bodied children's responses for spoken presentation. In reality then, this would appear to be more supportive of the research hypothesis.

The Mann-Whitney U test found significant differences in performance between groups at ages 3 & 6 years (U=0, p=0.005 for 1 tailed test, and U=1, p=0.01 for 1 tailed test, respectively).

3. **There will be significant differences between groups across all ages for the verb and adjective tasks only.**

   The data would partially support this hypothesis for ages 3 and 6, which, from the Mann-Whitney U test consistently produce significant differences between groups (see earlier).

4. **The children with cerebral palsy's error patterns will be significantly affected by mode of presentation whilst the able-bodied children's performance will not.**

   Nouns - the research hypothesis would appear to be supported in this instance. The children with cerebral palsy appeared to benefit from *silent* presentation of tasks where they produced similar error patterns to their able-bodied peers, i.e. errors reduced in number.

   Verbs - the null hypothesis was supported in this instance where both groups of individuals presented with similar error frequencies.

   Adjectives - the research hypothesis may have been supported in this instance. The children with cerebral palsy's error patterns changed from mode to mode whilst the able-bodied children's performance remained constant.

Discussion

Memory sequencing

Although memory for sequences of pictures was consistently better for the able-bodied participants, there was no evidence to suggest that either group was using silent (inner) speech as a rehearsal strategy to aid memory. This may require us to consider again evidence demonstrating this type of rehearsal in 4 year olds presented with object pictures that were labelled (Hitch, Halliday, Dodd & Littler,1989; Hulme, Silvester, Smith & Muir, 1986).

Silent presentation of pictures 'improved' the memory sequencing skills for long words in the children with cerebral palsy whilst having no effect on phonologically similar words. It is generally agreed that phonologically similar words will be more difficult to remember (Baddeley,1990; Hitch, Sebastian,

Schaafstal & Hefferman,1991; Henry,1991) However, most previous research would find that spoken presentation of items would have a positive effect on memory and rehearsal strategies in able-bodied children (Baddeley,1990; Bishop & Robson,1989) This difference between groups of children may require further exploration.

This present finding may imply that the children with cerebral palsy were better able to deal with long words rather than rhyming or phonologically similar words more as a symptom of poorer literacy development, rather than a memory issue (Musselwhite,1996).

What's missing? (Event knowledge)

Although semantic errors figured more in all error patterns, there is no conclusive evidence to assume that if a child with cerebral palsy is to make an error in a task of this type that it will be semantic. However, it does require us to revisit error patterns in general as some of the evidence from preschool able-bodied studies implies that errors tend to be more visual in nature (Miller & Pressley,1987; Pressley, Cariglia-Bull, Deane & Schneider, 1987).

Additionally, this present study implies that parts of speech are differently affected by mode of presentation. Interestingly, the verb tasks seem to reveal similar responses across groups (Romski, Sevcik & Adamson,1997). The noun and adjective responses appear to support a study by Ackerman (1987) which finds nouns, which are familiar, are negatively affected by labelling in a semantic task whilst adjectives benefit from this kind of input. A confusing picture (!) which challenges us to give greater consideration to the input we use to accompany language stimulation work.

From a developmental trend perspective the findings that the two groups were functioning significantly differently at ages 3 & 6 years, across all tasks, is an important one (Sutton & Gallagher, 1993). This implies that at around 3 years of age many potential AAC users remain difficult to assess, probably because they appear to be delayed in development. The significant finding here is this jump in development that has occurred at age 4. What has caused it? and, Is it merely a quirk in the data or something that deserves further attention? Additionally, and more worryingly, the children with cerebral palsy start to lag behind their peers again, by age 6.

What are the implications for AAC use?

- Rehearsal of sequences does not appear to occur through silent(inner) speech at these ages, yet rehearsal and memory of icon sequences are things that we require of young AAC users. Motor patterning and visual rehearsal may be more helpful strategies or indeed may be what many young AAC users are doing naturally.

- What attention is given to the descriptions and scripts used to introduce a multi-meaning icon and the many semantic associations required?

  These studies would imply that a verbal description may not be the most beneficial 'learning' strategy and, indeed, different grammatical elements may benefit from different types of input, e.g. visual only, experiential, etc (Calculator,1997).

- Given the findings on age differences, is there a need to pay further attention to language learning experiences in the

able-bodied person to help inform us of potential causes of gaps in language development that start to re-appear at age 6, in the child with cerebral palsy?

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How Reliable is the Evidence?
The Role of AAC in Legal Situations

by Janet Scott

In the Spring of 2000, *Communication Matters* was involved in a consultation exercise carried out by the Communications Forum on behalf of the Home Office. This paper provides a summary of what I found out, as well as information and contacts subsequently identified.

Part of the Youth Justice and Criminal Evidence Act 1999 (in England and Wales) enables courts to appoint an intermediary to assist vulnerable or intimidated witnesses to give their best evidence in criminal proceedings. *Communication Matters* was asked to contribute to the body of knowledge being gathered by the Home Office Intermediary Project group which aims to develop guidance and identify training needs for intermediaries working in Crown Courts. They were keen to hear about existing good practice from people who had had experience of acting as a communication intermediary/facilitator in judicial or other formal situations. This was obviously an opportunity for *Communication Matters* to highlight the specific needs of people with severe communication difficulties and of people who may use an AAC system.

Problems experienced by AAC users confronted with the legal system does not seem to be a problem restricted to the UK. From conversations with AAC colleagues in Israel and Australia this would seem to be a fairly universal problem. Subsequent to the original consultation exercise the Home Office have commissioned Sauve Bell Associates to explore this topic further and to come up with guidelines. They have carried out structured interviews with a number of people working with people with severe communication impairments and have developed a website to act both as a source of information and as a method for people to continue to be involved in this consultation (Sauve Bell's website is given at the end of this article).

In addition, the Communications Forum is expanding their website to include information to assist people who are involved in legal procedures. It will include information on, for example, assessment of mental capacity, and finding facilitators and interpreters (see website address at the end of the article).

So what is the problem? Why is it so difficult?

People with a severe communication impairment may use AAC. However there is some evidence that AAC systems, which support communication in the everyday environment may not be sufficient for the very specific communication requirements presented by the legal process. Sue Balandin (2000) has written an excellent paper called "Witnessing without Words" on this topic. In summary the main problems seem to be:

- relevant vocabulary missing from the person's communication aid, either low-tech or high-tech.

- the stressful nature of the situation makes it even more difficult than usual to physically control or to access the AAC system; the person may fatigue more rapidly.
- the stressful nature of the situation making it even more difficult for the person using AAC to be able to provide the necessary information even though they have the relevant vocabulary available.
- factors specific to many augmented conversations such as the active involvement of the communication partner to co-construct meaning and rate of message production may not be acceptable in a formal situation.

So, what did I find out?

It was very difficult to get 'hard facts' about what people are doing in terms of supporting people with severe communication impairments in courts or other formal, legal type situations. There was quite a lot of anecdotal information.

Frequently people seemed to be involved with cases which did not actually come to court. More people had been involved in supporting the person with the disability before going to court and during the taking of evidence – making sure that the person knew what was happening and the significance of the various events.

Others were more directly involved in facilitating the person's communication before court proceedings started – ensuring that the person had relevant vocabulary available to them and that they knew what the words meant, teaching the vocabulary in a totally different context.

Quite a number had been involved working with police, child protection officers and social service staff – explaining how the person communicated, giving advice on how to ask questions/what level of understanding of spoken English the person had/what kind of vocabulary to use etc. Some were involved in providing written materials in a more accessible and understandable form (Walker and Keating, 2000 a and b).

The more I have become involved in trying to find out what is happening – and what might be needed – the more I realise that this is a huge area of need which is largely unmet. There are groups doing some work in this area – but there does not seem to be much communication and sharing of knowledge and resources.

Perhaps the advent of the two new websites specifically addressing this issue will help. Do members of *Communication Matters* have a role to play in highlighting the need, training people in methods of communicating with people with little or no useful speech, supporting people with a severe communication impairment in their dealings with the legal situation? I think we do – but we need people to put their hands up, become involved and share their experiences and knowledge with the wider world. This is an area I have become

involved in by default, one of the joys of being Chair of an organisation like *Communication Matters.* I am NOT an expert in this area at all, but it is very interesting. I am sure there are lots of people, members of Communication Matters and people who have never heard of us, who know much more about these sort of things than I do. *Please get in touch!*

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Below are some resources which may be useful to you if:
- you are a person working with someone using AAC (or with a severe communication impairment and not using AAC) who has legal issues looming
- you are a person with a severe communication impairment worried at the prospect of having to go to court, speak to a police officer or a lawyer, etc.
- you are involved in providing training to police officers, child protection officers, appropriate adults, etc.
- you teach students with special needs

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Walker, L. and Keating, F. (2000a) Being Arrested, contact Lynn Walker for more information: Speech and Language Therapy Department, Woodlands Hospital, Craigton Road, Cults, Aberdeen AB15 9PR

Walker, L. and Keating, F. (2000b) Being a Witness, contact Lynn Walker (address above) for more information

RESOURCES

Training Materials

Larcher, J. et al (1998) "Speaking Up, Speaking Out: Pathways to Self Advocacy", published by Communication Matters, available from Communication Matters, c/o ACE Centre, 92 Windmill Road, Headington, Oxford OX3 7DR (Handbook: ISBN 1 898527 01 6 Practical Guide: ISBN 1 898527 02 4).

Accessible Materials

Books Beyond Words - These stories are told totally in pictures although there is text available at the back to assist if required. They are based on the English legal system though although the story line is appropriate for anywhere:
- Hollins, S., Sinason, V. and Boniface, J. (1994): 'Going to Court', St. George's Mental Health Library, London (available from Royal College of Psychiatrists, Booksales, 17 Belgrave Square, London SW1X 8PG – tel: 020 7235 2351 ext. 146) ISBN 1 874439 08 7
- Hollins, S., Clare, I. And Murphy, G. (1996a): 'You're Under Arrest', St. George's Mental Health Library, London (available from Royal College of Psychiatrists, Booksales, 17 Belgrave Square, London SW1X 8PG – tel: 020 7235 2351 ext. 146) ISBN 1 901242 01 3

- Hollins, S., Murphy, G. and Clare, I. (1996b): 'You're on Trial', St. George's Mental Health Library, London (available from Royal College of Psychiatrists, Booksales, 17 Belgrave Square, London SW1X 8PG – tel: 020 7235 2351 ext. 146) ISBN 1 901242 00 5

Information Leaflets

These leaflets are written in simple text with accompanying pictures and symbols – they outline what will happen if you are arrested and if you are a witness. They are written for the Scottish legal system:
- Walker, L. and Keating, F. (2000a): "Being Arrested", contact Lynn Walker for more information: Speech and Language Therapy Department, Woodlands Hospital, Craigton Road, Cults, Aberdeen AB15 9PR
- Walker, L. and Keating, F. (2000b): "Being a Witness", contact Lynn Walker (address above) for more information

Organisations

- Communications Forum, Camelford House, 87-89 Albert Embankment, London SE1 7TP Tel: 020 7582 9200 Website: www.communicationsforum.org.uk
- Special Interest Group: Working with Offenders – contact the Royal College of Speech and Language Therapists for details: RCSLT, 2 White Hart Yard, London SE1 1NX Tel: 020 7378 1200 Website: www.rcslt.org
- Sauve Bell Associates – website: www.caats.com/intermediaries

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JOINING
Communication Matters & ISAAC

Communication Matters is the UK Chapter of ISAAC (International Society for Augmentative and Alternative Communication), so members of Communication Matters are automatically members of ISAAC.

What are the benefits of Membership?

Members of Communication Matters receive this Journal three times a year, reduced delegate rate at the Annual CM National Symposium, and all the benefits of ISAAC membership. ISAAC membership entitles you to order ISAAC publications at reduced rates (AAC Journal, ISAAC-Israel Newsletter, AGOSCI News), and to receive special delegate rates for the Biennial ISAAC International Conference. You also receive quarterly issues of the ISAAC Bulletin and, if you join early in the year, the ISAAC Membership Directory.

How do I become a Member?

If you live in the UK, you can become a member of Communication Matters (and therefore of ISAAC) by contacting: Communication Matters, c/o The ACE Centre, 92 Windmill Road, Headington, Oxford OX3 7DR Tel: 0870 606 5463 Email: admin@communicationmatters.org.uk Website: www.communicationmatters.org.uk

If you are outside the UK, you can become a member of ISAAC or subscribe to this Journal by contacting ISAAC, 49 The Donway West, Suite 308, Toronto, Ontario, M3C 3M9, Canada Tel: +1 416 385-0351 Fax: +1 416 385-0352 Email: secretariat@isaac-online.org Website: www.isaac-online.org

Parents and Enablers Page

I have just finished programming Nadia's Dynavox for our *One Voice* Family Weekend which is this coming Friday. We've got things on like "BOO!", "HOORAY" and "WAKE UP" for the Theatre Workshop on Saturday afternoon. Plus questions to ask for the family quiz on the Friday night - and lots more. Unfortunately, Nadia is not all that well at the moment as she has an extremely chesty cough - but we will all be there in Blackpool with kids plus nebuliser.

Tamsin Crothers and I have communicated mostly over the phone to organise the weekend, with the occasional meeting in a pub half way between our homes in Wigan and Halifax. There are 12 families coming and a grand total of 37 children, 5 users, and 17 helpers.

We were really pleased with the response from families who heard about the weekend, and could have quite easily doubled the numbers. If it all goes well and everyone has a good time then we hope to plan future weekends and further family information days.

At school today we had Nadia's Annual Review with the main emphasis being on her AAC skills (of course) and differentiating the curriculum. The school are very skilled at working with deaf children and are dedicated to supporting and including Nadia. However, I do feel that for mainstream education to be successful - not just for Nadia but for other children with such complex needs - teachers ought to be trained in AAC. This needs to be done through specialist input from teachers who have experience in communication and learning needs of non-speaking children with cerebral palsy. However bright Nadia is, it is continually challenging to find ways to adapt the curriculum and teach her literacy skills.

Meanwhile, there has been no electric wheelchair at school for 6 months, so not only has Nadia lost that independence, but we cannot sort out the mounting system until it is in use. Mounting systems continue to be a cause for concern at home as still no one will fund the Wizz-kids wheelchair mount. We are also aiming to change over to a joystick instead of Nadia using direct access and I know it will be ages before that is all sorted out. Things all take so long. Nothing is simple!

At home we are living with builders, plumbers and electricians - who luckily make their own cups of tea! We are extending the house and getting a through-floor lift to an upstairs adapted bedroom for Nadia. We are having to pay for everything ourselves as it is all means tested on the family and not the child. The means test is done on income but not outgoings, and not the fact that we have six children including a disabled child which costs at least £100 a month more that a non-disabled child. Yet another campaign to join, called "Homes Fit for Children", and more letters of complaint to write, plus a visit to our local MP!

Well, it is 11.30pm and I am going upstairs now to check the children and to pack our bags for the Family Weekend.

Katie Clarke
c/o Communication Matters

Essential Publications from Communication Matters

### Speaking Up and Speaking Out! Pathways to Self-Advocacy

This pack is intended for carers, facilitators and others concerned with the advocacy needs of people with severe communication difficulties who need or use AAC. It is useful for staff development, especially for those working with adults. Developed by a special task force of Communication Matters members, the pack comprises two books. One is a comprehensive and detailed Handbook which includes case stories, discussion points and references. The other is a Practical Guide which summarises the main points of the Handbook in a series of photocopiable overheads, checklists and activities designed to help users build an advocacy plan for individuals.

Price: £30 including p&p available from **Communication Matters**

Michelle Finds a Voice

This book is a story about Michelle, a young adult with disabilities who is unable to speak or communicate effectively. A number of events cause her to feel unhappy and isolated until she and her carers are helped to overcome the communication difficulties. Various solutions are explored, including the use of signing, symbol charts and electronic communication. Michelle's story is told through pictures alone to allow each reader to make his or her own interpretation, but there is also text at the back of the book to provide one possible narrative for the pictures. The book was created by Sarah Barnett and Sheila Hollins and published by the Royal College of Psychiatrists, with financial support from Communication Matters.

Price: £10 plus £1.50 p&p from **Communication Matters**
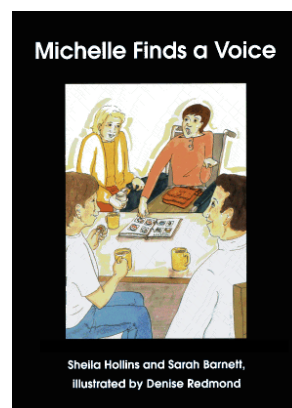
Alternatively Speaking

Published three times a year, this eight page newsletter, from Augmentative Communication Inc. in the USA, contains AAC issues and in-depth reports on topics vital to the AAC community. It is written by Michael Williams, who is an AAC user and serves on ISAAC's executive committee.

Ring **Communication Matters** for an order form.

Augmentative Communication News

Published six times a year by Augmentative Communication Inc. in the USA, each issue contains eight pages of in-depth information on particular topics researched and written by Sarah Blackstone.

Ring **Communication Matters** for an order form.
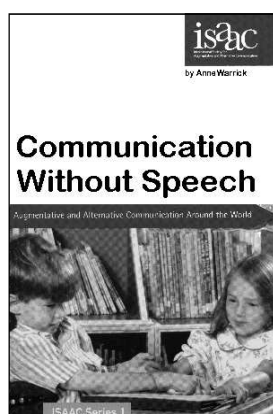
Communication Without Speech:
### Augmentative and Alternative Communication Around the World

This ISAAC book, written by Anne Warrick, is a highly accessible but very comprehensive introduction to augmentative and alternative communication. It contains lots of questions and practical tips such as vocabulary selection, assessment, education and vocational considerations, making communication boards, and includes excellent photographs and illustrations.

Price: £15 plus £1.50 p&p available from **Communication Matters**

In Other Words (ISAAC video)

This 30 minute awareness raising video was produced in the UK by Caroline and James Gray. It is an excellent introduction to the field of AAC and would be great to show parents and students from a variety of disciplines, as well as to staff new to AAC.

Price: £10 to CM members (otherwise £15) including p&p
only available from ACE Centre (ring 01865 759800)
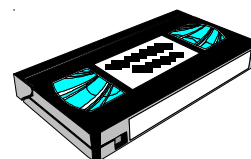
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