


COMMUNICATION MATTERS

INTERNATIONAL SOCIETY FOR AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

UK CHAPTER

AUGUST 2003 Volume 17 Number 2



IN THIS ISSUE

CAP - Communication Aids Project
Fun for All the Family
InterAAction
It's not about you, it's about me
Let Language Develop, Let People Develop
Music at Claremont School
1-Voice Family Network Day
WordCore: Word-based communication

REGULAR COLUMNS

CASC News
Diary Dates
Parents and Enablers Page
Trustees News
What's New

COMMUNICATION MATTERS

Contents

- 2 **Music and AAC at Claremont School**
by Doug Bott
- 5 **"It's not about you, it's about me"**
by Eddie Ashcroft
- 8 **InterAAction: Strategies for Intentional
and Unintentional Communicators**
by Marnie Cameron
- 13 **Parents and Enablers Page**
by Terry Gibson
- 16 **Let Language Develop, Let People Develop**
by George Turner
- 19 **Trustees News
News from CASC**

Contents

- 20 **Stop Press - What's New?**
- 22 **Diary Dates**
- 23 **The Communication Aids Project (CAP)**
by Mick Thomas
- 26 **News from FAST**
- 27 **1-Voice Family Network Day**
by Faith Douthwaite
- 29 **WordCore™: Word-based Communication
Software for the Vantage Communication Aid**
by Russell T. Cross
- 34 **Fun for All the Family!**
by Sally Millar and Allan Wilson

The Communication Matters Journal is the official publication of
Communication Matters / ISAAC (UK), and is an ISAAC affiliated publication

Front Cover: BBC sitcom 'All About Me' (see page 21)
Front row - Ryan Cartright plays Peter; Jamil Dhillon plays Raj; Robert Cartin plays Leo
Back row - Alina Iqbal plays Kavita; Natalia Keery Fisher plays Sima

Journal Editors, Artwork & Desktop Publishing:

Sally Millar & Patrick Poon
c/o The CALL Centre, University of Edinburgh
Paterson's Land, Holyrood Road, Edinburgh EH8 8AQ
Tel: 0131 651 6236 Fax: 0131 651 6234
Email: sally.millar@ed.ac.uk

CM Enquiries, Advertising and Overseas Subscriptions:

Tel: 0845 456 8211 Email: admin@communicationmatters.org.uk

CM Website: www.communicationmatters.org.uk

Registered Charity No. 327500

Company Registered in England & Wales No. 01965474

Printers: Crowes of Norwich

This Journal provides a forum for discussion, and views expressed in any section of this publication are the views of the writer(s) exclusively; publication in this journal does not constitute endorsement by *Communication Matters / ISAAC-UK* or *ISAAC* of those views expressed. This is in no way affected by the right of the Editors to edit all copy published. Publication of advertisements in this journal is not an endorsement of the advertiser nor of the products and services advertised. *Communication Matters* reserves the right to reject or cancel without notice any advertisement.

Music and AAC at Claremont School

by Doug Bott

This paper was presented at the CM2002 National Symposium, Lancaster University, September 2002

Introduction

The Drake Music Project is a registered charity that exists to enable physically disabled people to play music. It was founded in 1988 by Adele Drake to take advantage of the fact that music technology makes it increasingly possible for anyone to learn about playing, composing and performing music, regardless of physical disability.



In essence, The Drake Music Project finds ways to convert any movement that a physically disabled person can make into control over music. This is realised by working with groups and individuals in schools, colleges and day-centres throughout the UK and Ireland, using a range of mainstream and specialist technology.

The Drake Music Project South West came into existence in September 2000, thanks to a grant from South West Arts. We have been working with children at a number of special needs schools in Bristol and Bath, and with adults at Lockleaze Community Centre in Bristol. A new project is about to start at 'The Soundhouse'; a fully accessible music and performing arts centre at Estover Community College in Plymouth, which will provide fantastic opportunities for disabled musicians in that area.

Claremont School AAC Music Project

Claremont is a primary school for children with physical disabilities and associated learning difficulties. Two Drake Music Project tutors work at Claremont one day a week, in close consultation with teachers and other school staff.

In October 2001, Sally Chan, who runs the Speech and Language Therapy Department at Claremont, asked if we might be interested in collaborating on a project to investigate the integration of switch use into music workshops in as comprehensive a manner as possible. It seemed logical for us to work on switch use together, since we both routinely use switches in our respective fields - speech & language therapists to facilitate communication and the Drake Music Project to facilitate access to music.

Aims

The overall aims of the project were to:

- Encourage switch use in order to play musical sounds.
- Attach a picture to each switch relevant to the sound it triggers.

- Encourage the children to discriminate between different musical sounds.
- Encourage the use of VOCAs (voice output communication aids) to initiate turn taking and choice making.
- Enable the children to take away recordings of their favourite sounds on their VOCAs at the end of each session.

The Project

We worked with the Early Years class at Claremont School (age 3 to 6) over the course of 6 workshops and in 2 phases.

During phase 1, guest instrumental musicians were invited to demonstrate their instruments to the children. This was a completely new experience for some of the children. In fact, judging by the extremely mixed responses of both fascination and fright, the bassoon was perhaps a new experience for all of them!

Before each workshop began the instruments were digitally photographed and each photograph was attached to a switch. After each instrument had been demonstrated to the children, a 'sample' of the instrument's sound was recorded into a Yamaha A3000 sampler. Each sample was then assigned to the switch bearing the picture of that instrument using a Soundbeam 2 Controller and switchbox, and the children were invited to play the switch themselves. They were encouraged to learn the name of the instrument and to make connections between the instrument itself, the picture on the switch and the sound produced by pressing the switch.

The guest instrumentalists took great care to ensure that each sample was in the same key and had a simple harmonic and rhythmic structure so that they worked together musically. After the first few workshops, we had a collection of samples that included violin, accordion, saxophone, bassoon, flute and tin whistle.

It's worth mentioning that in order to record samples of each instrument, complete silence was required in the room. The children became very good at this, transforming each recording into a brief ritual where most of them were hushed and expectant. Once they got used to what was happening, some couldn't wait for each sample to be ready so that they could play the sound themselves.

Having collected enough instrumental samples, we embarked on Phase 2. This revolved around a song led by myself and my fellow tutor Colin Williams on guitar. Each verse of the song introduced a new instrument to the children and at the end of

each verse the children were asked if anyone would like to play the sound of the instrument on a switch:

*So many instruments I can play,
Which one shall I play today?
The ... is the instrument I have found,
Who would like to play this sound?*

The children could respond verbally or by using VOCAs pre-recorded with the request, "Can I play the sound please?" The child who made the clearest response could then play to the class, accompanied by the guitar. For those keen to sing, or able to use instruments other than switches, a tuned guitar, a xylophone, some percussion and microphones were included.

Once each child had a switch, microphone or instrument, we sang a final verse inviting all the children to play together.

*So many instruments we can play,
Which ones shall we play today?
These are the instruments we have found,
Let's play together & make a big sound!*

The resulting cacophony caused great delight and provided a distinct musical contrast to the preceding solos. The song was performed a couple of times in workshops, and then we transferred to the school hall to perform to the rest of the school.

Conclusion

The children greatly enjoyed the project, as did the staff who felt that it had not only benefited the children's musical confidence, but also their communication, turn taking and choice making skills.

What worked well in the project overall?

- Most children found the instrumental demonstrations compelling.
- A couple of children learnt to name the instruments by looking at the pictures or by hearing the sound.
- Most enjoyed the game of choosing an instrument (switch) through the song and performing to their classmates.
- Many became thoroughly absorbed in the song, demonstrating excellent concentration and patience while others were performing, especially considering that the song itself lasted about 15 minutes.
- Almost all revelled in the instant ensemble they were able to create by playing all the switches and instruments together at the end of the song.
- Many of those children with whom we had worked before progressed a great deal in musical confidence during the course of the workshops, requiring less encouragement to participate and sustaining musical activity for longer periods.
- Those with whom we had worked little or not at all soon grew in confidence and became comfortable with exploring musical sounds both as solo players and in an ensemble.
- The performance was a great success. The positive response from the audience boosted the children's confidence in their own musical, communicative and decision making abilities.

Considerations

- With at least 10 children participating in the song, it wasn't always easy to work out who responded first, so this approach wasn't strictly 'fair'.
- Although we were ostensibly going for the clearest response in reply to the invitations to play instruments, to a certain extent this had to be mediated by the school staff and their understanding of each child.
- Using switches and microphones always presents difficulties because leads and cables end up trailing all over the floor.

It is frustrating that wireless switches, microphones and electronic musical instruments in general are not more affordable.

What worked well in terms of AAC

- The combination of musical switches and VOCAs meant that children could learn about musical instruments, play sounds and express preferences about which sounds they would like to play on an equal basis with their vocal peers.
- At the end of each session, those with VOCAs were able to take away a recording of their favourite instrument.

AAC Considerations

- Organising the children's VOCAs as well as the children themselves was a major undertaking for the school staff before each session.
- Although the children could take sounds away from workshops recorded on VOCAs, the resulting sound quality was very poor and unrecognisable from the original instrument.
- It would be much better to be able to up-load sounds onto VOCAs as an audio file (in Wav format for example). This would make the process quicker, easier and improve the quality of the sound.
- The VOCAs we were using could only store one sound at a time, so the children's instrumental sounds were always replaced with other sounds or messages before the end of each day. It would have been better if the VOCAs had been able to store multiple sounds.

Many thanks to Colin, Judy, Anna, Rosie, Audrey, Sally, Hannah and all other Claremont school staff who worked so hard to make the project a success.

*Doug Bott, Senior Tutor
Drake Music Project South West*

For information about the Drake Music Project South West, please contact:

Anna Batson, Project Co-ordinator, The Drake Music Project South West, Claremont School, Henleaze Park, Westbury-on-Trym, Bristol BS9 4LR Tel: 0117 9425096
Email: annabatson@drakemusicproject.com

For information about the Drake Music Project nationally, please contact:

The Drake Music Project, Central Services, 79 East Road, London N1 6AH Tel: 0207 253 9111
Website: www.drakemusicproject.com

Lightwriters

- Small, compact and portable
- Wide range of acceleration techniques
- Adapts to scanning for progressive conditions
- Direct selection and scanning models
- Designed to accommodate the wide range of other disabilities which may accompany loss of speech



SL87 - direct selection and switch access

TOBY CHURCHILL

TOBY CHURCHILL Ltd.
20 Parkside Street,
Cambridge, CB2 1HP

Tel: 01223-676117

Fax: 01223-676118

Email: sales@toby-churchill.com

www.toby-churchill.com



"It's not about you, it's about me"

by Eddie Ashcroft

This paper was presented at the CM2002 National Symposium, Lancaster University, September 2002

Introduction

Review processes and systems can be confusing and daunting for both clients who are the subject and the people involved in supporting them. Whatever their titles, whether it's Care Management, Individual Personal Planning or Lifestyle Planning, it is vital these processes and structures are as transparent for all parties and as person centred as possible.

This paper describes the development of a users pack for a review process called 'Care Programme Approach' (CPA) which originated following a DOH guidance document (HC (90) 23) in 1990 and was further defined in a Health of the Nation Handbook. This stated that CPA involves a:

"Systematic assessment of the health and social care needs of the patient with particular regards to whether the patient has a severe and enduring (i.e. chronic mental illness)"

It involves:

"Agreeing a package of care agreed with members of the multi-disciplinary team, GPs, service users and their carers; identifying a Care Coordinator to monitor the package; regular review meetings to monitor the delivery of the package and the overall progress of the client."

While this development was initially focused on clients with primary mental health problems, it has since been adopted by many services supporting clients with learning disabilities who have additional mental health problems or a dual diagnosis.

I had my first taste of CPA as a Speech and Language Therapy student in the late 1990s. It appeared to have its own language and rules of conduct, full of sections, orders and levels. Jargon was something I had dealt with quite well up to this point, but this took things into a different ballpark.

Observing meetings where clients would arrive and depart without as much as a "Hows yah far ver?" I wondered who we were actually talking about during these sometimes-gruelling affairs. I left that placement feeling positive about most aspects of my time and training, but, somewhat perplexed and mystified by this complicated and absorbing review process.

A long awaited White Paper has since arrived, entitled 'Valuing People: a new strategy for Learning Disability' (DOH March 2001).

It set out four key principles, which are sensible whether, written by old Greek blokes with beards, French revolutionaries or Tony Blair and friends.

These principles involve recognising people with learning disabilities as citizens with the same human rights as all other citizens, maximising their independence and choices and endeavouring to include them in all aspects of local commu-

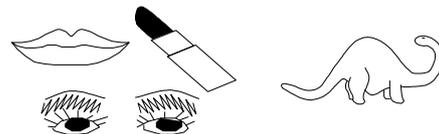
nities. It is without question a bold and forthright vision (although a little lacking in using the term communication).

The White Paper places Person Centred Planning (PCP) at the core of its agenda. PCP is essentially the guiding philosophical underpinning of the white paper. A phrase from a users information leaflet that particularly sets the tone for PCP is: 'Nothing about us without us' (DOH 2002).

These are undoubtedly positive moves signalling to service providers and commissioners of services of the need to listen to, inform, and facilitate people with learning disabilities to self-determine the sorts of services provided and the sorts of lives they want to lead. This will need to involve a real shift in beliefs, attitudes and culture and will take years to achieve.

While shifts in attitudes and values are long-term goals, it is important that we look at processes already in use with a critical eye to determine their congruence with the new guiding philosophy of valuing people and underpinned by PCP. If not then change and adaptation should be on the tip tongues. CPA is one such dinosaur that needed a re-brand / makeover / shake up across the Primary Care Trust.

How to do a Makeover on a Dinosaur



Organisational change is always laborious and an ongoing process. It needs commitment from management, training of staff, and clear goal setting among other things.

What we did...

- A CPA working Party was established made up from the multidisciplinary team including Social Workers, Doctors, Speech and Language Therapist, and a Community Nurse.
- Informal consultations with other professionals and a client who was currently on CPA also took place.
- Library searches were carried out to identify other projects nationally to avoid overlap and reinventing the wheel (and to crib good practice.)

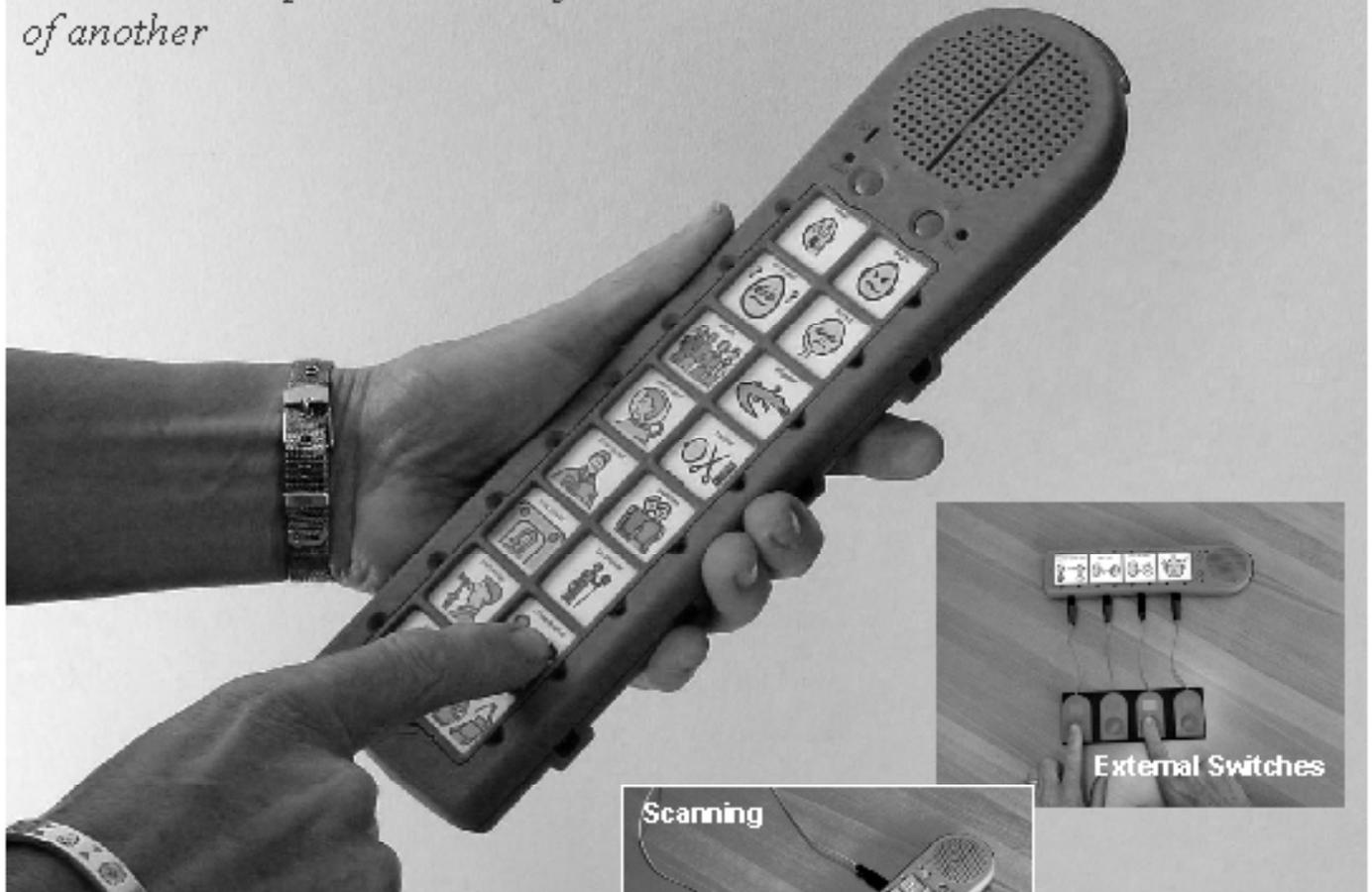
Following this, a parallel CPA process was designed in order to minimise structural changes to the current local CPA arrangements, while aiming to maximise a client's involvement and understanding of the process involved in designing their care plans.

In order to make the above possible the users pack was developed.

adVOCate

a new dimension in digital recording communication aids

advocate (ad-vō-kăt)
*someone that speaks on behalf
 of another*



adVOCate is a new digital recording communication aid which is packed with features to meet the widest range of needs.

Easy to set up and programme, and with a wide range of setups to configure it to the particular requirements of each user.

It uses the latest speech recording technology to provide 16 minutes of high quality speech, and can be configured from 1 to 16 locations.

Auditory feedback may also be used by direct selection users with vision or cognitive limitations.

Optional Environmental Control functions.

3 alternative selection modes:

Direct Selection (using the keypad)

External Switches (direct selection, with up to 4 external switches)

Scanning (with 1 or 2 switches)

- 4 alternative scanning modes:
 - single switch Automatic scanning
 - single switch Inverse scanning
 - 2-switch Inverse scanning
 - 2-switch Step Scanning
- Full range of Auditory Scanning options

TOBY!CHURCHILL

TOBY CHURCHILL Limited
 20 Park Street
 Cambridge CB2 1HP

Tel: 01223-676117
 Fax: 01223-676118

email: sales@toby-churchill.com
www.toby-churchill.com



What is the users pack?

A pack that uses symbols and clear information to help people make decisions to maximise their involvement in their own life planning. It includes:

1. A semi-structured interview tool covering broad areas of a person's life (e.g. health, day opportunities, leisure activities)
2. Explanatory information and guidance regarding:
 - CPA (outline of its purpose and process)
 - How to use the pack
 - Rationale / criteria and advice for using symbols

The tools are designed using Writing with Symbols software from Widgit Software and some Change Picture bank illustrations.

It is hoped that where possible tools and information will be personalised for clients through using photographs of relevant people and places.

The pack is currently limited to symbol users and text readers and is designed in order to allow use with clients with additional physical disabilities. The pack is also limited to a range of areas and cannot feasibly cover every area of a person's life. Essentially the pack is designed to help begin discussions; and remind people working or caring for a person with a learning disability of the range of decisions that are often taken without involving the person themselves.

Future directions

As yet, due to unforeseen circumstances (vacancies and babies primarily) time has been limited and the pack has not yet been piloted. This is priority number one and careful monitoring and reviewing of its effectiveness will be vital to its future development. In order to pilot the pack a number of care-coordinators will need to be identified and trained as facilitators (using the pack). It will be important that initially care coordinators come from a variety of settings including social services, health, a home, residential home and possibly voluntary organisations to give as broad a picture of the pack's pros and cons.

In the long term it is hoped that review processes can become as person centred as possible. This must involve finding a means by which various different review processes can talk to one another. This will help minimising disjointed planning and thinking, and bring about clear and cohesive person centred review processes that fit in with the new spirit of change set out in the Valuing People white paper.

Eddie Ashcroft
Community Team for Learning Disabilities
313 Ballard's Lane
London
N12 8LY

REFERENCES

- Department of Health Guidance Document HC (90) 23, 1990.
Health of the Nation Handbook. Department of Health 1991.
Valuing People: a new strategy for Learning Disability. Department of Health March 2001.
"Nothing about us without us". Department of Health June 2002.

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, including ISAAC publications at substantially reduced rates (AAC Journal, ISAAC-Israel Newsletter, AGOSCI News), and 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.

What is ISAAC?

Formed in 1983, ISAAC is a multidisciplinary organization devoted to advancing the field of augmentative and alternative communication. ISAAC has over 3,000 members in more than 50 countries, including 15 national chapters in Australia, Canada, Denmark, Finland, French speaking countries, German speaking countries, Ireland, Israel, Italy, Netherlands-Flanders, Norway, Spain, Sweden, United Kingdom and the USA.

The Mission of ISAAC is to promote the best possible communication for people with complex communication needs. The vision of ISAAC is that AAC will be recognized, valued and used throughout the world.

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, Oxford OX3 7DR
Tel & Fax: 0845 456 8211
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

InterAACTion: Strategies for Intentional and Unintentional Communicators

by Marnie Cameron

This paper was presented at the CM2002 National Symposium, Lancaster University, September 2002

Background

InterAACTion is a resource that has developed out of work done by SCIOP (Severe Communication Outreach Projects), and the Communication Resource Centre over the last 6 years in Victoria, Australia. (Bloomberg, West, Johnson and Caithness 2001)

In 1996 Denise West and Karen Bloomberg of SCIOP, developed a training package called **PICTURE IT: Partners In Communication Training Using Real Environments – through Interactive Teaching**. It was designed for staff and carers who live and/or work with people with complex communication needs (CCN) and moderate to severe multiple disabilities. The term CCN is synonymous with the term Severe Communication Impairment (SCI).

In Australia CCN is defined as:

“People with complex communication needs (CCN) are unable to communicate effectively using speech alone. They and their communication partners may benefit from using Alternative and Augmentative Communication methods (AAC) either temporarily or permanently. Hearing impairment is not the primary cause of CCN.” (Department of Human Services 2000)

The framework for PICTURE IT was based on Grunlund and Olsson’s ‘Ways to communicate- a staff training package’ (1998).

The focus of this package for direct care staff was:

- To improve their interaction skills with people with CCN.
- To increase their knowledge of early communication skills and Alternative and Augmentative Communication (AAC).
- To increase their problem solving skills.
- To be actively involved in the assessment of, goal setting and intervention for people with CCN.

The focus of this package for people with complex communication needs was:

- To create communicative environments .
- To increase the frequency of communicative behaviours of people with complex communication needs.

Several gaps in assessment tools were identified during the development of the PICTURE-IT package. One of these was a user-friendly observational communication assessment for staff and carers to use. This assessment became known as the Triple C - Checklist of Communication Competencies (Bloomberg and West 1999). The Triple C package comprises of a checklist, manual and teaching video.

The authors of InterAACTion have used the Triple C assessment as the basis for determining a person’s communication skills. The interventions presented in the InterAACTion pack-

age correlate with stages of communication abilities identified by the Triple C. The stages are not unique and are drawn from the developmental literature on language development (Coupe O’Kane & Goldbart, 1998). The literature on the development of language agrees there are specific stages. Some refer to primitive, conventional and referential acts (McLean & Snyder-McLean, 1988). Others refer to pre-symbolic (or pre-linguistic) and symbolic (linguistic). Coupe O’Kane & Goldbart (1998) refer to six stages, reflexive, reactive proactive, intentional informal, intentional formal and intentional referential. Philips (1993) simplifies those six stages into: preintentional (or unintentional), intentional informal and intentional formal.

In the Triple C Stages 1, 2 and 3 represent the unintentional communication stages; Stage 4 is the intentional informal communication stage and Stage 5 & 6 are the intentional formal (symbolic) communication stages. It is of course possible that the person might be identified as transitioning between stages or may demonstrate ‘splinter’ skills across stages. In those cases professional judgement should be sought as to which intervention is the most appropriate.

The Triple C is becoming more widely used in Australia. Staff and carers have reported this to be a useful resource for determining the communication abilities of people they live and or work with. However understanding the person’s level of communication functioning is only the first step in the process. Many of the staff who complete the assessment still need support in interpreting, understanding and implementing appropriate intervention strategies. The InterAACTion video was created to address these needs.

In 2001 the video ‘InterAACTion: Strategies for intentional and unintentional communicators’ was completed. This video was produced to assist staff and carers to understand, develop and use appropriate communication strategies to enhance and support the communication of people they live and/or work with. The video includes a range of communication strategies used in both community and segregated settings. People with disabilities, carers, disability and community service providers worked in partnership with SCIOP to produce the video. The 35-minute video is divided into three sections. Each section presents different communication strategies for each level of communication as determined by completion of the Triple C.

The first section looks at strategies for people who are unintentional *communicators* -active and passive (Stages 1-3 on the Triple C).

People who communicate unintentionally do so by using facial expression, body language, eye gaze towards or reaching out for what they want. They are unaware that other people

are useful and that their actions can influence what people do around them. They rely on their communication partner to read and interpret their behaviours and assign meaning to these for communication.

The second section looks at strategies for people who are *informal intentional communicators* (Stage 4 on the Triple C). People who are intentional informal communicators understand that other people are useful to get their needs met and that their actions can influence what happens around them. However they do not use any means of formal language (spoken, signed, symbol or written). They communicate by using body language, facial expression, natural gesture, real objects, and possibly noises and vocalisations.

The last section of the video focuses on strategies for *intentional formal communicators* at basic and established levels (Stage 5 and 6 on the Triple C). People at this stage use and understand some simple language (spoken, signed, or symbol). The person recognises the importance of the communication partner and can also use some formal methods of communication, perhaps a few words or some signs, or can pass over a picture in exchange for what they want or need.

The next stage in the development of the InterAAction resource is the completion of an accompanying intervention manual. This is a current work in progress, due to be published by the end of 2002.

Summary of Video

As discussed, section one of InterAAction presents strategies for people who are *unintentional communicators*. It is divided into two main scenarios. The first scenario introduces Michael who is a *passive unintentional communicator*. This corresponds to Stages 1 and 2 of the Triple C assessment (Stage 1 – reflexive and Stage 2 – reactive). Michael depends on his communication partner to interpret his actions and facial expressions. He has a personal support manual that helps communication partners understand how to interact with Michael to best meet his needs. The video shows Michael relaxing at home in the spa.

Some of the strategies outlined and demonstrated for Michael include: use of touch and object cues, use of a personal support manual; use of consistent routines; and sensory-based activities.

In the next scenario we are introduced to Sharon. Sharon is an *active unintentional communicator*. This corresponds to Stage 3 on the Triple C. She is involved in making a milk shake with her peers and also engaging in a range of multi-sensory experiences. Sharon's communication partner interprets her facial expressions and body language. Sharon's communication partner comments and describes what is happening around Sharon and uses a personal communication dictionary to identify Sharon's idiosyncratic communication style. Other strategies demonstrated include use of co-active assistance, where a person is provided with physical support and guidance through a movement to participate in an activity more fully, and sensory based activities.

Section two of the video looks at strategies for *informal intentional communicators* (Stage 4 Triple C) Kate has an autism spectrum disorder. She is beginning to use her com-

munication partner to get her needs met. Kate uses facial expression, body language and some natural gesture to communicate. Her communication partner responds to any attempts Kate makes to communicate. Kate is seen getting ready for her day's activities, which include completing chores and going out for lunch. Kate's communication partner uses clear, simple language combined with key word sign and gesture. These strategies are used to assist Kate to understand what is said to her. Object cues are also demonstrated to assist Kate to understand what is happening around her and to make choices. Other strategies demonstrated include the use of community request cards, which Kate uses to order her lunch independently.

The third and final section of the video focuses on strategies for *intentional formal communicators* (Stages 5-6 Triple C). At first we see Jeannie who is a *basic symbolic communicator* (Stage 5 Triple C). Jeannie is provided with visual supports in the form of pictorial shopping list, a photo menu board and a picture chores chart. These strategies assist Jeannie to understand and participate in daily routines. She is seen at home planning the evening meal and a trip to the shops. Jeannie's communication partner also uses clear, simple language accompanied with key word sign and gesture, to assist Jeannie's comprehension. Jeannie is also seen having morning tea and using a community request card to order a drink independently.

In the final scenario we meet Trevor. He is an *established symbolic communicator* (Stage 6 Triple C). Trevor understands simple conversation, and is able to comment about an event using a word, a picture and/or a key word sign. He is able to initiate interaction with familiar people. We see Trevor at the bowling alley using a range of communication strategies. Trevor is able to comment on losing his bowling ball, and order his lunch, using a picture-based communication book. Other strategies demonstrated include the use of a 'Chat Book', which describes up-to-date events and activities that Trevor has participated in and a 'Book about Me' which describes information about Trevor, such as his likes and dislikes, important people and places. Many of the strategies demonstrated earlier in the video such as the use of key word sign and gesture, and use of objects to support understanding of daily activities are still useful and appropriate for Trevor.

Use of InterAAction

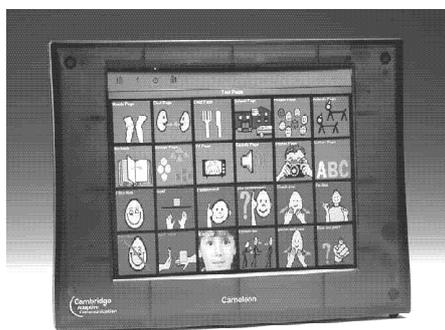
Relevant for:

- speech and language therapists
- trainers / teachers / educators
- families and carers of people with complex communication needs
- anyone interested in the area of complex communication needs and alternative and augmentative communication.
- students
- service providers

How to use it:

The InterAAction video can be used as a variety of ways including:

- As a training tool.
- As a tool to assist people identify appropriate intervention



New Cameleon XP

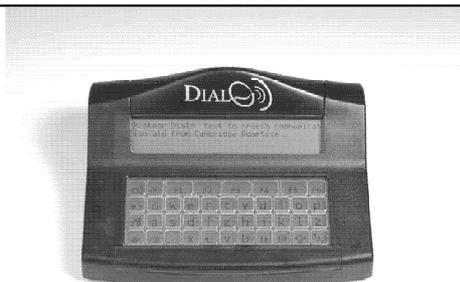
PC-based Communication Aid

- Faster, more memory, more storage
- Microsoft Windows XP
- Increased range of communication software for both Text and Symbols
- Improved communication software
- Wider choice of vocabularies
- CASSP rescue package

Proteor DialO

Text-to-Speech Communication Aid

- Learning word prediction
- Sentence prediction
- Dual display
- Loud clear speech
- Dynamic touch screen keyboard
- Abbreviation expansion
- Direct Access or Switch
- Simple on-screen menus



Say-it! Sam

Symbol & Text based portable Communicator

- 6,500 PCS symbols
- 1*1 to 6*6 cell, page layouts
- Text input with learning word completion, word prediction, phrase prediction & abbreviations
- Setup on the device or on a PC
- DECTalk voices
- Digitised speech
- Use external graphics and photos
- Choice of vocabularies
- 135x84x28mm – 270g



Communication Software

- Personal Communicator
- Speaking Dynamically Pro
- Talking Screen XP
- EZ Keys XP
- The Grid
- Others on request

Vocabularies

- Ingfield Dynamic Vocabularies
- Chailey Communication System
- CALLtalk
- WordPower
- Message Maker & more...

Accessories

- Wheelchair mounting systems
- Switches
- Wheelchair connectivity kits
- Page Turners
- Bluetooth & Wi-Fi
- Text Messaging
- Laptops & PC's

Environmental Control

- Controllers
- Telephones
- Intercoms
- Electric sockets
- Door/Window Openers
- Curtains & Lights
- Life Skills Centres & lots more...

The Possum Group

Established more than 40 years ago, The Possum Group are leading supporters of independent living via Electronic Assistive Technology (EAT).

The Possum Group has specialist knowledge and experience across a range of environmental controls, communication aids, mounting systems, access methods and assistive technology solutions which places us in an unrivalled position to help with the integration of many differing special needs technologies.

The Possum Group consists of Possum Controls, Cambridge Adaptive Communication, Gewa UK and PossAbility Services. We have a national network of professionally qualified field engineers. Our regional sales teams are able to offer help and advice to you on any of the group's products. Product specialists within the sales and engineering departments are able to offer more in-depth advice.

For further information or to request a demonstration, please contact:

Cambridge Adaptive Communication
 A division of Possum Controls Ltd
 8 Farnbrough Close
 Stocklake Park Industrial Estate
 Aylesbury
 Buckinghamshire
 HP20 1DQ

Tel: 01296 461002
 Fax: 01296 461107
 Internet: www.possum.co.uk
 Email: cambridge@possum.co.uk

strategies for an individual with complex communication needs.

- To assist communication partners implement appropriate and meaningful communication with people who have complex communication needs.

General guidelines:

There are some general guidelines for people who use the InterAACTion video. Some of these include:

- Have a person in mind that they want to increase their ability to communicate with.
- Check they know the current communicative abilities of the person (include information from their family, day and residential services, investigate completing an assessment such as the Triple C).
- Talk to other communication partners and think about what communication strategy for this person is 'do-able', realistic and useful.
- Share this information with other communication partners and make the strategy happen.
- Make sure everyone who comes into regular contact with the person knows how to maximise the person's communication.
- Observe the person's responses. If the strategy is not helping think about why and how to change it.
- If the strategies are working, go back to the video and think about what to do next.

Future Directions

The production of the InterAACTion video, is one part of a comprehensive resource for people who live and or work with people with complex communication needs.

Other initiatives, developments and resources as part of InterAACTion include:

- A comprehensive communication intervention manual which is currently being completed and due for publication by the end of 2002.
- Training packages to assist speech pathologists, teachers, trainers and educators to increase the knowledge and skills of the communication partners of people with complex communication needs.
- Provision of secondary and tertiary speech pathology services via the Communication Resource Centre for people who work and/or live with people with CCN. Secondary services focus on passing on knowledge and skills to key people including primary carers and support team members. Tertiary services involve developing and improving services at a system level, e.g. research, training, mentoring, and product development.
- Promotion of creating communicative environments to ensure that a person with complex communication needs has (based on Mount and Shea 1982):
 - someone to communicate with that understands and responds appropriately to communication attempts
 - something to communicate about
 - a means of communication
- Promote diversity of communication methods as valued and accepted in the community.

Summary

The InterAACTion video includes a range of communication strategies to enhance and support the communication of people with complex communication needs. It is for the use of people who work/ and or live with people with CCN.

The video presents strategies that:

- Are 'do-able'.
- Promote inclusion and participation.
- Are appropriate given a person's level of skill and ability.
- Are flexible and adaptable to meet a person's individual needs.
- Demonstrate that people need a means of communication, time to communicate, and something to communicate about.
- Promote the philosophy that augmentative and alternative communication methods are valued, respected and powerful.

The accompanying intervention manual will provide staff and carers with detailed information about the strategies presented. The manual has additional information on each of the communication stages. It presents a comprehensive overview of ideas and strategies to assist receptive and expressive communication skills for people with complex communication needs.

*Marnie Cameron, Speech Pathologist
Communication Resource Centre
PO Box 381, St Kilda, Victoria, Australia 3182
Telephone: +11 61 03 9536 4220
Fax: +11 61 03 9525 3274
Email: cameron.crc@scopevic.org.au*

REFERENCES

- Bloomberg, K., West, D., Johnson, H. & Caithness, T. (2001) InterAACTion: Strategies for intentional and unintentional communicators Melbourne, Australia: SCIOP, PO Box 381, St Kilda 3182 Australia.
- Bloomberg, K., & West, D. (1996). PICTURE IT: Partners In Communication Training Using Real Environments – through Interactive Teaching Melbourne, Australia: SCIOP, PO Box 381, St Kilda 3182 Australia.
- Bloomberg, K., & West, D. (1999). The Triple C- Checklist of Communication Competencies. Melbourne, Australia: SCIOP, PO Box 381, St Kilda 3182 Australia.
- Coupe O'Kane, J., & Goldbart, J. (1998). Communication Before Speech. Development and Assessment (Second Edition ed.). London: David Fulton.
- Grunlund, M. & Olsson, C. (1998). Ways to communicate- a staff training package
Stiftelsen ALA, Box 5410, 11484, Stockholm
- Light, J. (1997). "Communication is the essence of Human Life": Reflections on Communicative Competence. AAC, 13(2), 61-70.
- McLean, J. E., & Snyder- McLean, L. K. (1988). Application of pragmatics to severely mentally retarded children and youth. In R. Schiefelbusch & L.Lloyd (Eds.), Language perspectives: Acquisition, retardation and intervention (pp. 255-288). Austin: PRO-ED.
- Mount, M., & Shea, V. (1982). How to Recognise and Assess pre-Language Skills in the Severely Handicapped. Lawrence, KS: H&H Enterprises.
- Philips, S. (1993). Creating Communicative Contexts: Resource Support Unit, Special Education Directorate, NSW Dept of School Education.
- Ruiter, I. D. (2000). Allow Me. Toronto: The Hanen Centre.

Els Koerselman

It is with the greatest sadness that we have to report the tragic and untimely death, in July 2003, of Els Koerselman, from the Netherlands.

Els worked tirelessly in augmentative and alternative communication for over 25 years and was a well-known figure and good friend to many in this field.

Els was full of kindness and humour. She was clever, creative, and hard working, and she was 100% dedicated to the young people with disabilities in her care. She will be painfully missed by all staff and students at the 'Trappenberg' Centre where she worked loyally for so many years. One of her colleagues wrote, *"It is always possible for parents to discuss their problems with Els and in almost all cases she will find a good solution. Always the interest of the AAC consumer placed on top."*

Els will also be sadly missed by the international AAC community and especially by her friends in the Bliss 'family'.

Els was one of the very first professionals to see the value of using symbols with non-speaking children, back in the 1970s, and was a founder member of the international Bliss Symbols community.

She was to continue to be a pioneer and a leader in many new developments. She always remained fully committed to Bliss, adding in new systems and technology as well.

She transformed the lives of many youngsters by giving them the gift of communication. She followed through and kept in touch with many of them long after they left school. She gave much of her own time to attending and organising events for people who use AAC.

Els founded the Netherlands / Flanders Chapter of ISAAC and was its President and/or office bearer for many years.

She was a member of the ISAAC Board from 1992 to 1998. She was chair of the programme for people who use AAC for the International ISAAC conference in Maastricht in 1994 and hosted more than one Bliss International Affiliate/Panel meeting.

Sally Millar, Bliss Symbols UK member & CM Journal Editor writes:

In meetings, I always admired Els for being *sensible*. When everyone else in a discussion was wallowing in abstractions, details and confusion, Els often seemed to come up with a common sense and practical solution that she could communicate positively, simply and directly. Such people are rare and golden.

However, she never took herself too seriously. Above all, Els was good fun! I vividly recall first meeting Els way back in 1979, at Castle Priory in Wallingford, Oxfordshire, when Shirley McNaughton from Toronto came to train the first ever cohort of Bliss trainers/presenters. Since then, it was always a pleasure to see Els's big smile when we met in many countries all around the world – Belgium, the USA, Israel, Canada, Sweden; wherever there was a Bliss International meeting or an ISAAC Board meeting or conference, Els would be there and there would be hard work and lots of laughter!

I think she loved traveling, meeting new people and other cultures so I am happy to think that she was able to do so much of that in her life. She certainly gave back with interest. Look at <http://pages.istar.ca/~bci/netherlands01.htm> to see the kind of annual party Els organized.

Gill Hazell, Chair of Bliss Symbols UK writes:

My memories of Els are of someone with enormous energy and determination, generous with her time and always striving to bring out the best in her students and colleagues.

I remember Els dressing up in a tablecloth in a freezing South Africa, sunbathing (and working) in Sweden, swimming with Inga at Furuboda, sitting on the floor of various buses in various parts of the world and enjoying the African dancing on the beach in Sweden! Els gave of her time to speak to the Specific Interest Group in AAC in Oxford last June so many more people in the UK are aware of her excellent work. Although we usually met at Bliss Panel and Affiliate meetings and ISAAC conferences, my memories are of someone who was great fun to work with and a lively debater who lived life to the full!



Parents and Enablers Page

by Terry Gibson

Let me bring you up to date with Michael's AAC. English remains the only lesson where Michael gets the opportunity to use his DeltaTalker, and I'm very grateful to his English teacher for sailing the AAC boat single-handedly all year. She reports his brilliant progress and says that Michael is ready to move up a group, if not two groups, but she is keeping him with her to continue their work with his DeltaTalker. She intends to have a video taken of Michael reading to her so that she can show the other teachers.



I tried to explain to the head teacher that my requests to come in to Michael's lessons were to investigate which part of core vocabulary would be most useful and how I could go about teaching him it and that my interest in what Michael was studying was not to get lists of extended vocabulary. One difficulty has been that the only means of communicating with most of the teachers before the March parents' evening is through the home/school diary. I was relieved when March came and every teacher had something good to say about Michael's progress. They have realised that his not using his Delta Talker in their lessons is due to his inability to do so and not reluctance on his part. He carries it with him to every class – I must have misled him that things were about to take off when I got him to practice his lists of curriculum words every day last school year. The lovely teacher who takes Michael for French and PSHE, invited me in to her lessons and Voila! We have some core vocabulary in French. Greetings, body parts, rooms in the house etc., just as they are in English, but preceded with the Snail icon, for now – Michael had already chosen the Snail to represent weapons from his PlayStation games.

Most things in the collaboration department are still ongoing and not at the 'concrete feedback to report' stage. Our SLT has been off on maternity leave since last summer so we haven't had our monthly 'core-team' meetings and unfortunately I missed two other important meetings. Michael was sick the morning I arrived at school to submit his CAP referral so the stand in SLT asked me to take him home and submit the

application myself. Then school mistakenly assured me that the visit from Learning Support Services in April was to speak with Michael's class teacher and do some initial observation and that I should not come in. The visit was for Michael's CAP assessment and I wasn't there. Both Learning Support and ACE Centre North have answered some questions for me on the phone and we will meet up during the autumn term when they are planning to give Michael, his teachers and myself some AAC and Clicker training.

Minspeak on a handheld device?

Apparently Michael performed like a star reading on his Delta talker and the assessment team was impressed with his efforts, in reading, answering questions and communicating with a classmate on it. They have recommended a Pathfinder and laptop for Michael but have put the idea of a handheld device on hold until one with Minspeak can be sourced. I don't know what developments there have been since I was at the CM National Symposium last September but up until then there wasn't one. I did email Tony Jones in March to ask how his software version of LLL was coming on. I wrote that if it was possible to fit 128 dots on a handheld screen, perhaps a person who knew the icon locations by heart or who was prepared to use a reference grid could have Pocket Minspeak? Or perhaps the icons could be redrawn in vector format so they could be panned and zoomed? I only thought recently that scrolling might be viable. The most frequently used icons are all in the top left quarter of the overlay and so would be visible all the time.

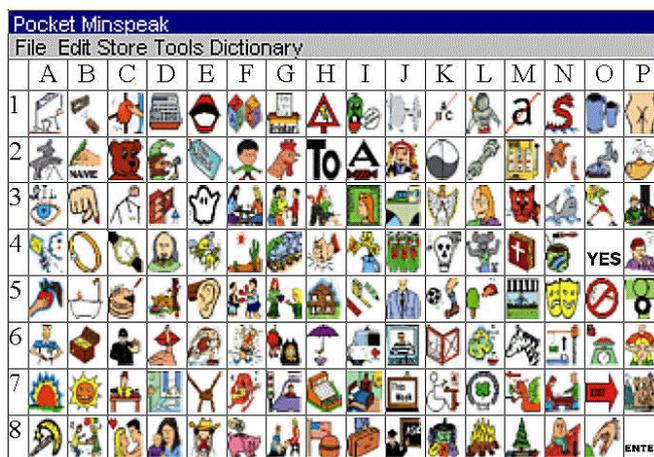


Figure 1 'Pocket Minspeak' with 16 x 8 cells

It was only last week when Michael and I were on the train home from Oxford hospital that I decided to see what it would look like (Figure 1). I made a table 320 pixels wide by 240 and then put a 16 x 8 cell grid in it. I then measured the width of a cell and reduced a copy of our icons to that size. The text names of the icons still need adding to the pictures. They are perfectly viewable at this small size and I feel like we've got Pocket Minspeak already! The hardware can hopefully offer accurate

hits with cells 0.5cm wide? An onscreen keyboard has the same number of keys. Perhaps the Menu Bar and Toolbar could sit side by side to save a row of screen space? I forgot to make space for a text editor in this first copy.

Core Words Dictionary

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	had		hair		hand																				
	happen		happy		has																				
	have		haven't		he																				
	he'll		he will		he's																				
	her		hers		herself																				
	head		hear		Hello																				
	help		here		here's																				
	Hi		high		hill																				
	him		himself		his																				

Figure 2 'Core Words' dictionary

Michael's 'Core Words' dictionary is an A4 Word document with 3 columns x 9 rows, portrait (Figure 2). Exactly three columns by 9 rows, landscape, would fit on a handheld screen. The pages would be spatially identical to his paper copy, with the added bonus of the choice to scroll or link jump the alphabet. Michael's Personal Communication Passport pages are almost the right size already to fit.

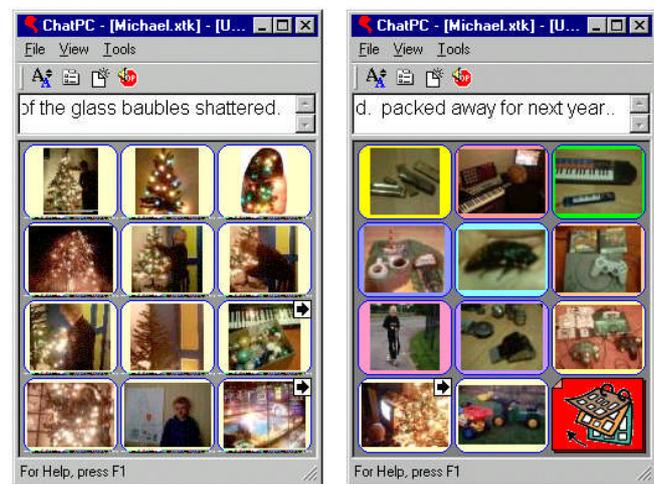


Figure 3 A ChatPC 'talking photo album'

Figures 3 and 4 are screenshots of some pages we edited on a ChatPC February 2002 to show how we used it as a talking photo album and experimented with resizing some of our icons to make Minspeak words that would fit the square cells in the software. We really need rectangular cells for Minspeak words.

Ideas from the PRI Study Day

I didn't pursue Debbie Taylor's LLL programme when I found that her 'LLL' didn't stand for 'Language Learning and Living' and that we wouldn't be embarking on a course of combining literacy with learning how to use Minspeak. So it wasn't until the PRI Study Day with Bruce Baker at Portland College that I got some concrete material to work with.

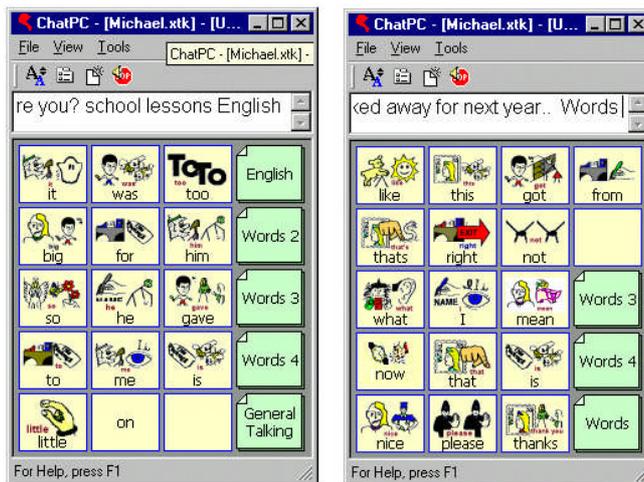


Figure 4 The cell 'now' is from a resized Minspeak icon

Bruce Baker gave us two lists of high frequency words, taken from language sample analyses; 100 words in order of frequency and 329 in alphabetical order. I studied the lists at home to see what kinds of words were most predominant – verbs, pronouns and pronoun/verb phrase abbreviations, and prepositions mostly. There were only 38 nouns and fewer adjectives. All but 16 of these words were already stored in Michael's Delta Talker as default, the only missing words being abbreviations like 'I'm', 'they're', 'he'll' and words like 'candy', 'gonna', 'guys', 'stuff', 'huh', 'hum', 'um' and 'ya'. I guess the sample must have been American. I've combined the two lists with some of the highest frequency words from the Skippy dictionary and made Michael a Core Words dictionary with just fewer than 500 words in it.

I've always had to store at least half of the words we have been using with Michael because we have concentrated on extended vocabulary - storybook text, lines for pantomimes, lesson specific words, favourite topics and activities. Of the thousands of words in his talker we now know which few hundred words account for 89% to 98% of spoken language. (Figures from Bruce's fringe words analysis are shown in Table 1).

Analysis Setting	No Of Words In Sample	Of Which Are Fringe	Fringe % Of Total
Work	25,678	1,443	5.6%
Fact Finding	13,912	1,122	8%
Food	13,119	286	2.2%
Family Life	6,520	703	10.8%
Judgements	5,355	561	10.5%

Table 1 Fringe Words Analysis (courtesy of Bruce Baker)

On my draft layout for a Minspeak handheld device, the icons for the words that are most often combined to form the most popular word strings, those phrases that account for 20% of daily speech are placed together on the overlay in the first eight cells of rows A3 and A4.

The common operator icons, those that define which pronoun or verb form to generate, for example, Me, Myself, I, My, Mine, and Be, Is, Was, Being, Been, To be, I was, I am, Am I? I will, I will have, I could, I could have, are in the eight cells just above in row A2.

Janet Larcher advises having a few test sentences to hand when putting a potential communication aid through its paces. I'm too indecisive to make one or two sentences but with my new understanding of the 20% stuff I think I could make a whole page of core phrases conversation, and give a copy of it, and a Bruce Baker's frequent words list, to anyone just starting out.

I've asked to be consulted and involved in any teacher training that is arranged. I have used PowerPoint to prepare some materials that I hope will be useful as a user guide or reference to print out for Michael, his English teacher and anyone else interested in learning LLL. The first introductory slide presentation does not include all categories of words, just mainly core words (e.g. pronouns and verbs).

I've copied the layout from Bruce Baker's presentation for my own slides. The images don't jump around the screen as you flick from slide to slide with the same row of icons in the same place on each slide. And a comprehensive introduction to core language and the most common phrases can be given in two sections, one with the 'pronoun eight' and any one operator displayed, the other with the first eight from the 'preverbal' row and a pronoun icon displayed. All that needs to change from slide to slide is the content of the text box and whichever operator/pronoun icon is being demonstrated.

Michael is still working with single words at the moment but school has loaned me the full set of Set A and Set B Wellington Square books so that I can make a note of the phrases for next term. The English teacher said she'd use a coloured marker to link the phrase words in the books. Where there is a choice of

which two of three words to link into a phrase, we could put one coloured line above the text and one below. I think the colour coding will be a good teaching of phrases tool. And, I may not have to 'Insert Picture from File' or 'Copy n Paste' a phrases dictionary for Michael because a parent of a user has already written a Minspeak phrases dictionary for Writing With Symbols. I believe PRI and WWS are in the final pre-release stages. We'll just be able to type our text and the icon sequences will appear on the screen. This is brilliant news. It will save hours of preparation time and, without any knowledge of Minspeak, the teachers will be able to join in.



Finally... A few dreams weren't realised this year. If I bring Michael to the CM2003 National Symposium in September, he won't be able to converse with you much on his talker. Maybe he will read a Wellington Square book for you? Nevertheless I am really looking forward to CM2003. See you there!

Terry Gibson
terryjohnmick@yahoo.co.uk

Order these ISAAC publications today!

Augmentative and Alternative Communication

The Official Journal of ISAAC

Editor: Teresa Iacono, Victoria, Australia

The only publication integrating AAC theory, research and practice. *Augmentative and Alternative Communication* is of special value to speech therapists and professionals who have a clinical, educational and research interest in this growing field. Each issue includes:

- Tables and illustrations show valuable research data
- Related studies sections list topical articles and their abstracts
- Valuable sub-heads guide you quickly through the article

International in scope and transdisciplinary in approach, the AAC Journal presents articles, case studies, position papers, conference abstracts, with direct implications on program development, assessment and intervention. This Journal stimulates development and improves service delivery in non-speech communication.

Published Quarterly: March, June, September, December

CM Members rate (per year): £43 (airmail)

Members of Communication Matters (ISAAC UK) must send their orders to CM (address at bottom of page)

Readers outside the UK can order in local currency from their local Chapter of ISAAC, or in dollars directly from ISAAC, 49 The Donway West, Suite 308, Toronto, ON M3C 3M9, Canada Tel: +1 416 385 0351
Email: secretariat@isaac-online.org Website: www.isaac-online.org

When ordering from Communication Matters, make your cheque payable to **Communication Matters**, and send to:

COMMUNICATION MATTERS

c/o ACE Centre, 92 Windmill Road, Headington, Oxford OX3 7DR

CM Tel & Fax: 0845 456 8211 Email: admin@communicationmatters.org.uk Website: www.communicationmatters.org.uk

AGOSCI News

AGOSCI News is the newsletter of the Australian Group on Severe Communication Impairment. It is an ISAAC affiliated publication and is published twice a year.

CM Members rate (per year): £21

ISAAC Israel Newsletter

ISAAC Israel Newsletter is an ISAAC affiliated publication. Published annually in the spring of each year, in Hebrew with a few English abstracts.

CM Members rate (per year): £19 (airmail)

Unterstützte Kommunikation

This ISAAC affiliated publication is published four times a year in German by ISAAC-GSC.

CM Members rate (per year): £35 (airmail)

Let Language Develop, Let People Develop

by George Turner

The thesis of this article is simple. People who need communication aids aren't stuck for words or phrases or whole sentences. They just can't make intelligible sounds so let the machine do that. Let's try to avoid endless screens full of ready-made language. Instead let's have a screen full of phonemes (units of sound) and let the user use this modest palette of sounds to express themselves.

Of course there will be no short term gains. The child who has never spoken will not suddenly announce, "I would like to go to the toilet, please". There will be a lot of trial and error, a lot of random noises and a great deal of babble but this is nothing new. We all did this. We all took time – a very long time – to speak even our first word. Now words pour out of us.

So let's give the communication aid user a simple voice – not a dictionary, still less a phrase book. Consider some of the advantages. Users would learn to play with language rather than merely reproduce it. In playing they would join sounds to create fresh words. They would discover rhymes, enjoy alliteration and make nonsense words galore. Also users would go through the same stages of language development (babbling, one-word sentences, two-word sentences etc.) as everyone else and they would have the same problems with grammar, pronunciation and over-generalisation. By serving the same linguistic apprenticeship we all did users may come to appreciate the nature of language better. In particular they will learn its rules, its exceptions and how best to 'transmit...an infinite variety of messages' (Brown 1965). Using screens full of someone else's words, phrases and sentences may not lead to such understanding. Children especially may simply associate pressing a particular part of the screen with obtaining a particular reward (e.g. top-left means I get my favourite drink). This may be effective communication but such conditioning teaches the child little about the nature of language or its endless possibilities. Learning to use language creatively may not be unique to humans but it is vital human skill.

If screens of phonemes are used then no help would be needed with spelling as it is the sounds not the letters that create the words. None of us learned to spell before we could speak and even correct spelling is no guarantee of correct pronunciation (polish or Polish?).

As the need for a helper decreases the power of the user increases. By creating their own words users get a double benefit. Firstly, they can make far more words than any machine contains. Typically non-speakers use a very limited vocabulary and even their receptive vocabulary is smaller than other people (Goossens' and Crain 1986). Making your own words could reduce this problem. It may allow users to express their thoughts, feelings and needs more effectively to others. Secondly, words might be more than the servants of communication. We all tend to 'think out loud' in difficult situations so perhaps words can guide and shape our thoughts (e.g. Bruner 1966). Communication aid users may even use the

words they create to help them to think. If so, restricting someone's words can be a kind of intellectual strangulation. The philosopher Ludwig Wittgenstein has claimed that 'the limits of my language mean the limits of my world'.

Unfortunately the language found on some communication aids can be very limiting, especially for children. For example:

- It may not be appropriate to the child's age or stage of development. Parents love to hear their child speaking in a polite, grown-up manner but this may not be how most children communicate or want to communicate.
- It may confuse oral with written language so children end up trying to chat to their friends in grammatically perfect sentences.
- It may not be sufficiently stimulating (Bernstein 1961). A child's IQ is affected by the language they hear and use.

If their communication aid encourages children to use only simple language structures with few adjectives and adverbs or if it concentrates on the present and tends to avoid abstract thought then it may suppress intelligence.

Giving users the power to create their own language lets them escape both restrictive formats and restrictive contents. Language will always be appropriate to the user's level and situation and intelligence may be more likely to flourish.

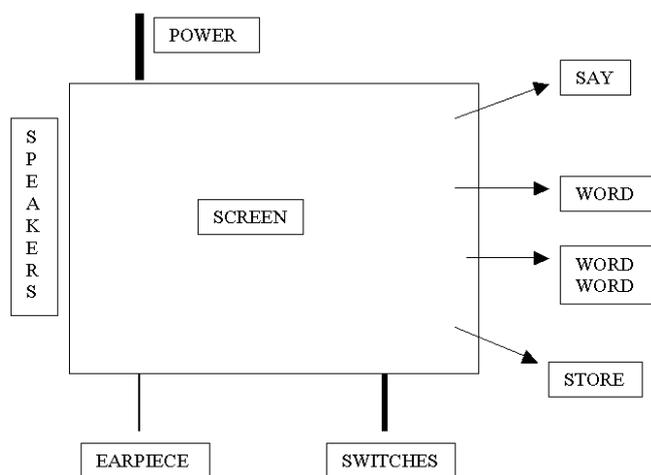
Alongside this increased power of the user comes an increased responsibility. Autonomy can be delightfully dangerous: it is no longer a question of whether users should be given inappropriate words they will simply generate their own. Adapting your language to your audience is an important social skill. Moreover, learning to control your language, like learning to control your actions, is part of growing up.

The benefits of letting users create their own language may not be confined to speech. Children with communication aids often have trouble acquiring literacy (e.g. Taylor and Eames 2002) yet building language from phonemes would give such children two advantages. Firstly, they are more likely to develop 'phonological awareness'. Such awareness helps children to read. Indeed it is a better predictor of reading success than even IQ (Wagner and Torgeson 1987). Secondly, as the children have to construct their own language they will learn how to join words together. Poor syntax is a major handicap when children start to write in sentences. Selecting the speech of others may be a poor preparation for literacy. Finally, almost all communication aids give users a voice. However voice can mean more than the ability to utter sounds. A 'voice' can refer to the distinctive use of particular words, phrases or syntax. Our voice can express not just our sentiments but also our personality— our whole approach to the world and ourselves. Not only is our voice part of our identity it may help to generate and reinforce that identity. It may be hard to develop your own linguistic voice, your individuality through the words and syntax of others.

The problem is simple: restricting someone's language may stunt their development – intellectually, socially and psychologically. The solution is equally simple: reduce linguistic deprivation by letting users create their own language. Don't let users of language become mere 'choosers'.

Modern communication aids often have high definition, full colour screens bursting with icons and labels. Perversely for machines designed mainly for speech they seem to devote more money and effort to vision than to sound (Small wonder 'listeners' are tempted to peek at the screen!). The proposed scheme would not need elaborate screens. Instead it would just need good quality sound to produce the forty-odd phonemes accurately and software to help with blending. This, together a storage/retrieval system, would be all that is required. It may not even be necessary to label the phonemes given. Grouping similar sounds together on a screen may be enough. After all we don't have labels on our lips, throat and tongue.

A phoneme-based communication aid might look something like this:



Such an aid could have three levels of use:

Stage 1 Instant Phonemes

Phoneme sounds as soon as the screen is touched or the area is selected by joystick or an input device, e.g. s-a-t. The phonemes are programmed into the machine. This gives a chance to avoid American accents for all and even to speak a foreign language – just change the phonemes. Manufacturers could produce a single world-wide machine which could be easily adapted for different countries.

If the full set of phonemes is initially too difficult then start with just a few. For example, in English many short words can be made from only six phonemes (s,a,t,i,p and n).

Stage 2 Blended Phonemes

At this stage the phonemes are only spoken after the 'say' area is selected. However, if desired, the sounds can be monitored through an earpiece. Simple programmes could play the phonemes in quick succession perhaps giving the initial phoneme extra volume. E.g. not s-a-t but *sat*

More complex programmes could begin to allow for the different way phonemes act when combined. The idea is to create as natural a voice as possible and it should be slightly easier to do this from phonemes than from text.

Stage 3 Stored and Retrieved Language

The communication aid comes with no stored words, phrases or sentences. While initially inconvenient this puts the user, not the manufacturer, in charge of the vocabulary. Thus the language will always be relevant and appropriate. To store a word the following sequence might be used:

- Select 'store'.
- Select the required phonemes.
- Select 'say' (to check the word and blend phonemes).
- Select 'word' when content with the result (If not happy start again with 'store').

To retrieve a word give the initial two or three phonemes then press 'word'. So s-a-t might become Saturday. If this is the desired word (it can be monitored through the earpiece) then choose 'say'. If it is not, then pressing 'word' again gives more options from the memory.

The machine could record how often each stored word is selected and then present them according to their popularity. So if Saturday is the most frequently chosen word starting with s-a-t then it would be given first. However if the child becomes especially keen on talking about Space then satellite might become the most common ending to s-a-t. If so, it would be given first – at least until the interest fades. Such a feature could create a dynamic vocabulary which adapts to the individual and their usage. To store groups of words the sequence might be:

- Select 'store'.
 - Select the phonemes for the first word (either given separately or, to save time, word retrieval can be used).
 - Select 'say'.
 - Select 'word,word'.
- (Repeat b and c for each further word)

Before storage there is a further chance to create more natural sounding speech e.g. words that denote questions could trigger a slight rise in pitch. To retrieve the word sequence give the initial two or three phonemes and then press 'word,word' until the desired sequence is reached (monitor through the earpiece). Then select 'say'. For example, s-a-t might become "Saturday is my bestest day". Again the most popular choice could be given first so while some phrases and sentences are reinforced by use others will decline through neglect. This allows users to develop their language and their 'voice'.

Traditional communication aids often store words in categories like food or drinks. This can lead to two kinds of problem – words with multiple meanings, such as orange, need to be stored under several headings while other words may have no obvious home. This can be especially true of some abstract words: try storing 'impossible' and 'dream'. Instead of using categories the proposed aid stores words etc. in sound-based groupings. No spelling is needed, every word has a clear home and there is no prejudice against either abstract language or its associated thought. Table 1 on the next page summarises how the proposed communication aid differs from many traditional ones.

Sadly other disabilities may accompany loss of speech. So some people may find dealing with the proposed aid (and its screen of phonemes) physically or intellectually too difficult. However, many people will be able to cope. The urge to

Traditional machine	Proposed machine
Multiple screens	Single screen
Instant language	No instant language
Language usually selected	Language always created
Often limited options	Unlimited options
Frequently the user has to adapt to the machine	Machine adapts to the user's language and usage

Table 1 Features of traditional and proposed machine

communicate is very strong and from a single screen users can make, store and retrieve any word, any phrase and any sentence. The young may be especially likely to benefit for they bring two great gifts to their communication - their flexibility (Babies can learn almost any system) and their lack of self-consciousness. Thus while linguistically aware adults may want to deconstruct words into their component phonemes before even trying to speak, the average three year old will just say them.

So why not give all non-speakers a chance. Start everyone off with a system, using phonemes or anything else, that puts them in charge of creating their own speech. Remember the benefits this gives – the understanding of language, the linguistic freedom (and responsibility), the spur to thought and intelligence and the preparation for literacy. Remember too people who have never spoken have not lost their voice, they have never developed it. This will take time for speech is as much

a product of the human mind as the human throat. Therefore give the user time - plenty of time - to see if they can cope with the demands of a truly DIY system. We all want miracles. We want the dumb to speak instantly and fluently. Therefore the temptation is to provide a traditional machine and ready-made language. However, this is a temptation that should be resisted for a single compelling reason: by letting language develop you let people develop.

*Dr George Turner
1 North Meadowside, Walmer Bridge,
Preston, Lancs PR4 5QT Tel: 01772 616700*

REFERENCES

Bernstein, B. (1961) Social class and linguistic development. In A.H. Halsey, J. Flaud and C.A. Anderson (Eds), Education, Economy and Society. London: Collier-Macmillan

Brown, R. (1965) quoted in R.D.Gross Psychology – the Science of Mind and Behaviour. Hodder and Stroughton 1992 p769

Bruner, J. (1966) Towards a Theory of Instruction. Cambridge, Massachusetts : Harvard University Press

Goossens', C. and Crain, S. (1986) Augmentative Communication Intervention Resource. Wauconda, IL : Don Johnson

Taylor, D. and Eames, J. (2002) Combining Literacy and Communication for Pupils who use AAC. Com. Matters Journal Vol.16 No.3 p14,15

Wagner, R. K., & Torgeson, J. K. (1987) The nature of phonological processing and its causal role in the acquisition of reading skills. Psychological Bulletin, 101(2), 192-212

EASIAIDS LIMITED

DigiMax

Robust and portable, storing from 16 to 142mins of digitised speech on up to 48 levels. Direct access and scanning with verbal cues.



VocaFlex

Small, high quality digitised speech with interchangeable SmartGuides with 4, 8 or 16 locations with from 32 to 128 mins recording. Single or two keysequence (providing 255 different sentences).



PortaCom

Portable, 8 to 16 mins of digital speech stored under from 2 to 40 keys each with levels. Direct access or multiple scanning options.



Freiburg Speech Amplifier

High quality, powerful amplifier available with hand-held, mini lapel, headset or earclip microphones and booster speaker.



Eclipse

Direct access/scanning with up to 40 mins digitised speech on up to 128 squares on multiple levels. Verbal cueing. Simple set-ups.



Also Distributors for:

- Electronic Artificial Larynges
- Speech Amplifiers
- Macaw, Spokesman, Tana Talker
- Hearing Amplifiers
- and many other products...

Assessments gladly undertaken. For details and full catalogue contact:

EASIAIDS LIMITED

5 Woodcote Park Avenue, Purley, Surrey CR8 3NH Tel/Fax: 020 8763 0203 Web: www.easiaids.co.uk



Trustees News

from Janet Scott, CM Chair

Welcome to the last Communication Matters Journal before the CM2003 National Symposium at Lancaster University in September. I hope many of you are planning to attend – it is a really good chance to meet other people with an interest in AAC to share ideas, successes, problems, research ideas, to find out about new communication aids and software...and to have some fun! If you are coming for the first time – don't worry, you won't be alone! You will be able to meet other 'first timers' at the drinks reception on Sunday (after the AGM). This reception is also a chance to orientate yourself to the layout of the George Fox Building where the symposium is held and to view the AAC suppliers' exhibition when it is a bit quieter. If you use AAC or are a family member then don't forget this reception is also for you...no matter if you are an 'old timer' or a new comer!

As well as a full academic programme, there will be social events, and the trade exhibition will have over 20 of the UK's leading suppliers of AAC equipment and software. Which leads me neatly on to our ongoing search for a bigger venue. Those of you who have been to the symposium over the past few years will be aware that we are in danger of outgrowing the accommodation at the present venue. A group of the Trustees have been exploring alternative venues which would provide us with larger exhibition space, more breakout rooms, a larger number of accessible rooms, etc. This is not proving particularly easy...our requirements are quite specific and demanding, but hopefully we will have some news about this at the AGM.

The AGM will take place during the symposium on Sunday 14th September at 5pm. It's your opportunity to hear what has been happening over the past year, to ask questions, to get your views heard by the membership and by the Trustees. This is also when new Trustees are elected - don't forget that you can vote by post if you are not able to be at the AGM – every paid-up member will be sent a postal ballot paper.

What has been happening over the past few months? Members of Communication Matters have been involved in discussions about how to progress the Integrated Community Equipment Services in England to include provision of communication aids (see www.icesdoh.org). We have also been given the opportunity to contribute to a study on improving the design of taxis to make them more accessible to people with a range of disabilities (see www.communicationmatters.org.uk). Communication Matters has also been consulted in Carlton Television's disability campaign, 'Changing Attitudes'.

However, not everything has gone as smoothly! Unfortunately we have hit some obstacles during our work on redrafting the Constitution, which have slowed down the process - hence the lack of the consultation document promised in the last Journal. The Trustees are still working hard on this and will be able to report on the current state of play at the AGM.

But most importantly summer is here again! Enjoy the longer evenings – balmy or not! Relax and have fun! I am looking forward to meeting up with those of you able to attend CM2003 in September.

News from CASC

by Dave Morgan, CASC Chair

If you remember, in the last issue I said I would give you more comments from the CASC meeting in March following the replies to our questionnaire about people's perception of CASC. So, what were the results? The biggest finding was that respondents viewed CASC not as a *trade association* but more of an 'overseeing and Road Show organising charity'! With this in mind, we have made a few changes to our Constitution and Code of Practice, namely:

- Change the CASC logo and all references to: *CASC (The Trade Association of Communication Aid Suppliers)*
- Have a vetting procedure for prospective new members
- Update the principal activities to show that CASC is involved in lobbying or promoting for better funding, and is willing to be involved in discussions regarding changing aspects of Government or other legislation.
- Encourage member companies to carry out any necessary checks on staff who will be working with children.
- Implement a basic complaints procedure.

Having made these changes, CASC members are now required to sign the new, updated Constitution and Code of Practice.

CASC Road Shows

CASC members are currently reconsidering the format of the CASC Road Shows. Before I explain why, I must emphasise that there is *no* intention of stopping the Road Shows but merely to make them more effective. The discussion really started after two Road Shows were cancelled at the last moment due to lack of delegates. The effect is a cost to be shared between the companies due to attend, and a wasted day, as it was really too late for the people concerned to make alternative appointments. Apart from being annoying, it is this sort of waste that ultimately drives costs, and therefore prices, up. So should CASC Road Shows be bigger but less frequent events, and much better planned on a geographical basis? Is there a way of ensuring that more people are able to travel less distances to get to a Road Show, but with the trade-off that there will be fewer Road Shows? Should the Road Shows be in centres of cities (which usually have better public transport, but poor/expensive car parking) or more rural areas, with the exact opposite pros and cons? Should we be planning several Road Shows around one geographical area in a three or four day session, then not returning for perhaps six to nine months? We will be discussing the subject again at our next CASC meeting (during the CM2003 National Symposium in September). If you want to make any comments or suggestions, please email me at david.morgan@sunmed.co.uk.

Finally, we are also considering other aspects that may or will affect our industry such as PAT regulations (Portable Appliance Testing) for electrical goods. This is the recommendation (but not law) that all electrical appliances that are used in organisations, companies and so on are regularly tested (minimum once per year) and a 'passed' or 'approved' sticker attached to the equipment. More about this in the next edition of this Journal.



STOP...PRESS...STOP...PRESS...

Transform 2004 World Conference

UMIST, 7-10 July 2004

Transform 2004 is a world-class conference that will explore and celebrate the latest developments and most successful outcomes in assistive technology (AT). It will bring together all those involved in using hardware and software to help people with special needs to live and learn: practitioners, researchers, policy makers, commercial developers, technology users and international leaders. Delegates will share expertise and ideas; consolidate good practice; find new ways that software and technology can help people with special needs; and discover the latest technology and applications. They will gain a better understanding of how the lives of those with special needs can be transformed by the new technologies. And how all people, whatever their circumstances, are now able both to learn and to live life to the full by a proper understanding and an appropriate use of those technologies.

Christopher Reeve, actor, director, spokesperson for people with disabilities and campaigner for medical research, will give the first keynote speech of Transform 2004. While pursuing his career in the arts, Christopher Reeve is also focused on raising awareness about the issues that affect those living with disabilities.

Transform 2004 gives all involved in the field of AT the opportunity to network and to learn from each other by submitting proposals for sessions at the Conference. These sessions can include current research findings; practical classroom experience and practise; successful applications of computer technology for users with disabilities; innovations in the development of new technology; and many more.

There will be plenty in the programme relating to practical advice and support such as managing resources, learning support and assessment. There will be a rich and diverse programme of events, presentations, papers and hands-on workshops which will be of interest to everyone, but essentially cross any barriers so that delegates can integrate research, practice and innovation into their work.

A host of computer software, access devices and communication aids will be on show alongside Transform 2004, at a complementary special needs exhibition. Major developers, suppliers, publishers and other organisations involved with the field of assistive technology worldwide will be demonstrating their latest technologies, innovations and applications. For further information, visit www.transform2004.org

STOP...PRESS...STOP...PRESS...

New Products from Sensory Software

Sensory Software International has announced a number of new products, including: *The PowerBox 4000* wheelchair mounted tablet PC with The Grid communication software installed (ready-made vocabularies available); *The PocketGrid* communicator running in a robust Windows CE handheld device; a flat screen touch monitor; and the *Mini Note* Talking Computer. More details at www.sensorysoftware.com

STOP...PRESS...STOP...PRESS...

ACiP: Scotland Project Awards

Augmentative Communication in Practice: Scotland have announced details of their Project Awards for users of augmentative and alternative communication (AAC) systems.

The organising committee have made available a sum of up to £2,000 for a number of projects, which must directly involve one or more users of an augmentative communication system in Scotland.

Applications from users of augmentative communication systems are particularly welcome. Possible activities include, for example: user attendance at a conference; organising an event that brings users of augmentative communication systems together (e.g. a party); a visit to a multi-sensory play facility; an activity undertaken to fulfil an ambition.

Project money cannot be used to pay for a communication aid, or similar equipment, or for training.

Further details of the Project Awards can be obtained from SCTCI Tel: 0141 201 2619 Email: sctci@sgh.scot.nhs.uk

STOP...PRESS...STOP...PRESS...

A Proposal from Axel Bohm...

I am writing this because I think I can offer something very useful help to you.

I came from Cape Town in South Africa in 1991. And I am very happy that I came with my mother to England, because England has so many things for disabled people. At first I couldn't believe my eyes. I have cerebral palsy. I can't speak through my mouth. So I have got a communication device. It is called DeltaTalker, and my wish is to help disabled people. I can show them and their carers how the DeltaTalkers works. Because it comes from a disabled guy, it could come over more clearly to parents and carers what this machine can do.

When I was younger I could communicate just with my eyes; I could communicate with my mother. That was hard for my mother and myself. Then a friend built a special typewriter for me. The keys were in a half circle and I had a headpointer. I used this when I wanted to say something long and when I wanted to say something short I used a communication board.

Before I had the DeltaTalker I had a LightTalker. The Light Talker was in a big casing and slower. The LightTalker was a very big help as it attached to my wheelchair. So I could speak wherever I went. I taught myself the program.

The LightTalker had a QWERTY program, I learned that program at first and as I could speak faster Words Strategy was put into it also. This program was a big help for me. I have the DeltaTalker since June 1996, which is faster; lighter and I can use it as keyboard for my computer. I am using my DeltaTalker with 128 locations and an optical headpointer.

I went to several training courses, in 1995, in 1997 and in 2001, where I learned all about the Liberator machines and the various ways to operate them. I became Gold Ambassador for Liberator in 2001, but they haven't got enough jobs for all



ambassadors. In May 1999 I attended the 1st International Minspeak conference in England.

So I would be very interested to offer my services to someone who needs it, within 30km of Birmingham where I live. I would like to work with a speech therapist. I am a very patient guy and I have all the time in the world. This what I would like to do.

Please let me know what you think of my proposal. Email: axel@ashmill.freereserve.co.uk

STOP...PRESS...STOP...PRESS...

BBC Sitcom 'All About me' Features Cast Member using a Communication Aid

The second series of the BBC One's sitcom, featuring Jasper Carrott as builder Colin Craddock and Nina Wadia as Rupinder, returns to TV screens later this year, with their disabled son, Raj, acquiring a 'new voice', courtesy of a DynaVox speech aid.

The first series of *All About Me*, shown last year, was described by the BBC as one of the bravest commissions in the channels history. Attracting audiences of up to 7.5 million in its first series, *All About Me* offers a fresh and funny insight into 21st Century life in Britain.

This series the Craddock family has a new baby, and for Colin this spells nights on the sofa while wife Rupinder struggles to adjust to increased pressures in the overcrowded household. Peter, Colin's elder son, pursues a passion for an ecological girlfriend whilst eight-year-old Leo develops a fixation on birds of a different kind. Rupinder's daughter Kavita shows us how hard it is to adjust to a new baby, and Sima, Rupinder's half-sister, begins to explore the trendy side of Asian culture. Only Raj sees the big picture, and now with his long-awaited communication aid, he can have his say.

The DynaVox communication aid was programmed with a new vocabulary for Raj to use. After a brief demonstration of how to build new sentences, and the feature that caters for difficult pronunciations, the production team quickly transferred the scripts for Raj (played by Jamil Dhillon) onto the DynaVox, changing them between scenes as required by the writers.

Jasper Carrott said: "*All About Me* is dynamic and well written and often hilarious! I'm delighted that it's been commissioned for a second series." Jamil, who used the DynaVox, commented, "I was surprised how easy I found the DynaVox to use. It's really simple, I only had to be shown how to use it once or twice and then I just worked the rest out for myself."

David Morgan of Sunrise Medical, who distribute the DynaVox products, said, "I am really pleased that the DynaVox communication aid will be seen on national TV in a normal family environment. For too long we treat people with any sort of disability as someone to be stared at - perhaps this initiative will promote better acceptance of people who have the need for products like these."

For further press information about the programme, contact: Natalie Fraser at Celador Productions Tel: 0207 845 6836. For more information about DynaVox communication aids, contact David Morgan at Sunrise Medical Tel: 01384 446565 Email: david.morgan@sunmed.co.uk

STOP...PRESS...STOP...PRESS...

New MSc Course in Assistive Technology

The MSc in Assistive Technology is a new programme at King's College London. It is the first course of its kind in the UK and one of very few in the world. It offers students from both engineering and clinical backgrounds a unique opportunity to study together the design and application of a range of assistive technologies, from wheelchairs and walking aids through to environmental controls and communication devices. The course aims to develop competent assistive technology professionals who are equipped with the personal skills required to be self-directed, autonomous learners and the professional skills required to take a user-centred, multidisciplinary approach to assistive technology design, development and delivery.

The first cohort of students, all part-time, are exactly half-way through and have had a lot of praise for the programme so far: "King's has done pioneering work in recognising the need for interdisciplinary education in this area and with its reputation, Assistive Technology is bound to become a core skill." The second group will start in September and will include part-time as well as fulltime students from the UK, other parts of the EU and other countries. The current students include professionals from occupational therapy, physical therapy, speech and language therapy, engineering and industrial design. Next year's students will include a prosthetist-orthotist and a sociologist among the therapists and engineers.

The course comprises six compulsory modules, five option modules and a research project. It takes one calendar year to complete the course on a full time basis attending four days a week, and two years on a part-time basis with one or one and a half days attendance to lectures. Each option module has a lecture component and also a one-week fieldwork placement. This year, students went to key clinical centres in Scotland, England, the Republic of Ireland and the United States; some were part of an educational or research placement. Industrial placements are also possible.

Most of the students have had some form of scholarship or bursary to aid them in their studies, as well as release from work to attend lectures. One of the part-time students comes from as far as Limerick every week during term time. In some cases employers have paid the registration fees on behalf of a student. Sources of funding can be the British Council (for foreign students), the European Union, Career Development funds, and the EPSRC, which has given a grant to get this MSc up and running.

Dr Ruth Mayagoitia-Hill, the course coordinator, commented that the best summary of the value of the course is from one of the students with a therapy background: "Before the course neither I nor my colleagues would have touched the technology. Now the technology isn't frightening anymore."

Further information available from www.kcl.ac.uk/core or contact Dr Ruth Mayagoitia-Hill, Centre of Rehabilitation Engineering, Department of Medical Engineering and Physics, King's College London, Denmark Hill, London SE5 9RS Tel: 020 7346 1653 Email: ruth.mayagoitia-hill@kcl.ac.uk



Diary Dates

- 14-16 September 2003 Lancaster
CM2003 National Symposium
 Contact: 0845 456 8211
 Website: www.communicationmatters.org.uk
- 17 September 2003 Lancaster
Collaboration for Inclusion: The AAC Context
 Contact: 0845 456 8211
 Website: www.communicationmatters.org.uk
- 22 September 2003 ACE Centre North, Oldham
Boardmaker Brilliance
 Contact: 0161 627 1358 www.ace-north.org.uk
- 23 September 2003 CALL Centre, Edinburgh
Making Personal Passports
 Contact: 0131 651 6236 www.callcentrescotland.org.uk
- 1 October 2003 CALL Centre, Edinburgh
Computers and Dyslexia
 Contact: 0131 651 6236 www.callcentrescotland.org.uk
- 7 October 2003 ACE Centre North, Oldham
Mouse Moves
 Contact: 0161 627 1358 www.ace-north.org.uk
- 8 October 2003 CALL Centre, Edinburgh
Picture Possibilities: Creating Curricular Resources
 Contact: 0131 651 6236 www.callcentrescotland.org.uk
- 13 October 2003 Dewsbury, W. Yorkshire
Collaborative Working and Inclusion
 Contact: Speechcare Training 0113 264 3994
- 24 October 2003 ACE Centre North, Oldham
Creating Communication Environments
 Contact: 0161 627 1358 www.ace-north.org.uk
- 28 October 2003 CALL Centre, Edinburgh
PowerPoint for Talking Books and other Resources
 Contact: 0131 651 6236 www.callcentrescotland.org.uk
- 30 October - 1 November 2003 Islington, London
SpecialneedsIT London
 Contact: 01923 690620 www.specialneedsexhibition.co.uk
- 10-11 November 2003 Edgbaston, Birmingham
RAATE 2003 - Assistive Technology
 Contact: CoRE 020 7346 1650 Email: core@kcl.ac.uk
 Website: www.kcl.ac.uk/depsta/kcsmd/mep/core.htm
- 12 November 2003 CALL Centre, Edinburgh
Getting to Grips with Boardmaker (PC)
 Contact: 0131 651 6236 www.callcentrescotland.org.uk
- 13 November 2003 Bolton
Kidz up North 2003 Exhibition and Conference
 Contact: 0161 214 5959 www.disabledliving.co.uk
- 19 November 2003 CALL Centre, Edinburgh
Getting to Grips with Boardmaker (Mac)
 Contact: 0131 651 6236 www.callcentrescotland.org.uk
- 19 November 2003 ACE Centre North, Oldham
A Switch in Time
 Contact: 0161 627 1358 www.ace-north.org.uk
- 2-4 December 2003 Fife, Inverness, Glasgow
CASC Road Show in Scotland
 Cost: FREE Contact: 0845 456 8211
 Website: www.communicationmatters.org.uk
- 5 December 2003 Durham
CASC Road Show at Durham County Cricket Club
 Cost: FREE Contact: 0845 456 8211
 Website: www.communicationmatters.org.uk
- 10 December 2003 ACE Centre North, Oldham
Express Yourself
 Contact: 0161 627 1358 www.ace-north.org.uk
- 24-27 February 2004 Johannesburg, South Africa
African Regional AAC Conference
 Website: www.up.ac.za/academic/caac
- 7-10 July 2004 UMIST, Manchester
Transform 2004 World Conference
 Contact: 01457 819701 www.transform2004.org
- 4-12 October 2004 Natal, Brazil
ISAAC 2004 Biennial Conference - Brazil
 Website: www.isaac-online.org

AWARDS AND GRANTS

The WORDS+ / ISAAC 2004

Outstanding Consumer Lecture Award

Applications are invited for this prestigious award which provides a platform for an outstanding person who uses AAC to present a topic in which s/he has special expertise using a voice output communication system. The award winner will present their lecture at the ISAAC Biennial Conference in Brazil in October 2004 and received a cash award of US \$3,000.

The closing date for applications is 15 October 2003.

Further details: ISAAC Secretariat, 49 The Donway West, Suite 308, Toronto, ON M3C 3M9 Canada Tel: +1 416 385 0351 Email: secretariat@isaac-online.org

Communication Matters Small Grants

Communication Matters welcomes applications for small grants (applicants must be resident in the UK). Consideration will be given to applications for UK projects or activities that further the aims of Communication Matters. Please turn to page 33 for more information.

The closing dates for applications are 31 January 2004 & 30 June 2004.

Application forms from: Communication Matters, c/o ACE Centre, 92 Windmill Road, Oxford OX3 7DR Tel: 0845 456 8211 admin@communicationmatters.org.uk

ACiP: Scotland Project Awards

Augmentative Communication in Practice: Scotland have up to £2,000 available for a number of awards. Please turn to page 20 for more information.

Further details from SCTCI Tel: 0141 201 2619 Email: sctci@sgh.scot.nhs.uk

The Communication Aids Project (CAP)

by Mick Thomas

It is estimated that 0.4 to 0.8% of the English school population require either augmentative and alternative communication (AAC) technology or a writing aid for those who have recording difficulties such as severe dyslexia. The right communication aid, geared to the needs of an individual pupil can have an enormous liberating effect and can, indeed, change lives.

On 27 March 2001, Schools Minister, Jacqui Smith, announced a new project to provide hi-tech communication aids to school age pupils who have oral or written communication difficulties. The Communication Aids Project (CAP) was originally scheduled to run over two years, from April 2002 until 31 March 2004 and involved £10million of Department for Education and Skills (DfES) funding. Currently, the CAP project operates only in England, not in Scotland, Wales or Northern Ireland.

Aims of CAP

There are two main areas of focus for the project. The first is to help pupils with communication difficulties to gain more access to the curriculum and to increase their ability to interact with others. The second is to help the transition of such pupils from one school to another and into post-school provision. The project aims to benefit children with speech and language difficulties and also considers applications for support for hearing impaired pupils and those with dyslexia.

Funding is used for assessments, hardware, software, training and to provide initial support to school staff, parents and pupils in their use of ICT. The aids are owned by BECTa (the UK Government's lead agency for ICT in education) but are provided on long-term loan to the individual rather than to their educational institution or LEA, enabling the pupils to take their aid with them between schools and into whatever provision is made for them beyond school.

During the first year of the Communication Aids Project (April 2001-2002) it was predicted that there would be around 1500 applications. The project actually received 1700 applications. Of those 1700 applications, 80% were accepted onto the project at the first attempt. The remainder were encouraged to re-apply to CAP when they met the criteria more fully, and were also offered feedback about their application.

Since the project began around 2000 pupils have benefited from over £3.5 million worth of assistive technology. Applications have soared from around 40 a month to over 200 a month and there are now over 2,400 pupils on the CAP database. Following the success of the first year, CAP has secured an extra £10 million of funding for a further two years. This means



that the project will run till 31 March 2006. By then CAP will have spent £20million over 4 years on equipment to support pupils who have communication difficulties.

Jessica - A Case Study

One of the many pupils who has benefited from CAP funding is Jessica. Her story is one of ten case studies on the CAP website (www.becta.org.uk/cap).

Moving on to secondary school is hard, but mastering a Tellus has helped by boosting an 11-year-old's confidence. Jessica is a lively, sociable 11-year-old with an active social life and a keen interest in skiing. She has just moved from Ingfield Manor, a SCOPE specialist school for children with cerebral palsy, to Treloar, a residential school in Hampshire.

Going to secondary school can be a tricky time for many children but in Jessica's case it was vital that she be set up with her new equipment and be able to use it confidently before she started. Jessica uses a wheelchair, is unable to speak, and her story shows multi-agency working at its best.

Sally Conner, the speech and language therapist who has worked with Jessica over a number of years, says, "Jessica is a bright girl, who has very well developed understanding. She uses a symbol communication book effectively but it has taken years to get her to use a switch reliably. After many assessments, and lots of support from the Oxford ACE Centre and SCOPE's Microtechnology Service, Jessica has learned to use a head switch. It has been an uphill process as it has taken a lot of trial and error to find a method which works for her."

Ingfield has very good links with the secondary school so staff worked together to find the best solution for Jessica. At her secondary school, she will need to move around the school more, so a portable device seemed the ideal choice.

With lots of staff support, she tried a Tellus (a PC-based communication and environmental control device for symbols and text users) with a pillow switch, and this was successful. Following a CAP assessment, BECTa agreed to fund a Tellus with its necessary peripherals, switches, USB switchbox, and wheelchair and table-top mounting. With technical support from the company, and lots of enthusiastic hard work from Jessica, everything was in place for transition.

Ingfield staff were so impressed with Jessica's determination and progress in her last year at the school that they nominated her for a Communication Matters Achievement Award.

Jessica is now coping well with her Tellus and is using it not just to do school work but in social settings too. "It's a joy to see how she has blossomed in confidence," says Sally. "She is so happy now and is making lots of new friends. For years she has been reluctant to work without one-to-one adult support, so this has been a real breakthrough."

The CAP Process

BECTa supports the UK Government and national organisations in the use and development of ICT in education to raise standards, widen access, improve skills and encourage effective management. Becta's role is to manage the Communication Aids Project on behalf of the DfES.

In order for BECTa to undertake the processing of applications, a system had to be established which enabled anyone, including the pupils themselves if that was appropriate, to make an application for equipment, to provide assessment for appropriate equipment, and for the recommended equipment and training to be purchased and delivered to the customer.

The launching of CAP also involved the establishment of six CAP Partner Centres all working towards a common aim. A number of the centres were already identified as they already had nationally recognised expertise in the provision of communication aids for a range of learners. The CAP Centres are: ACE Centre in Oxford (www.ace-centre.org.uk), ACE Centre North in Oldham (www.ace-north.org.uk), CENMAC (www.cenmac.com) and the Wolfson Centre in London (both of which are now working in partnership as LondonCAP), and AbilityNet (www.abilitynet.org.uk). Each Centre was already involved in assessment, provision and training in the use of ICT for pupils who had communication difficulties.

Two additional Centres were identified prior to the project going 'live'. They were SCOPE (www.scope.org.uk) and DCCAP Deaf Children's CAP (www.dccap.org.uk).

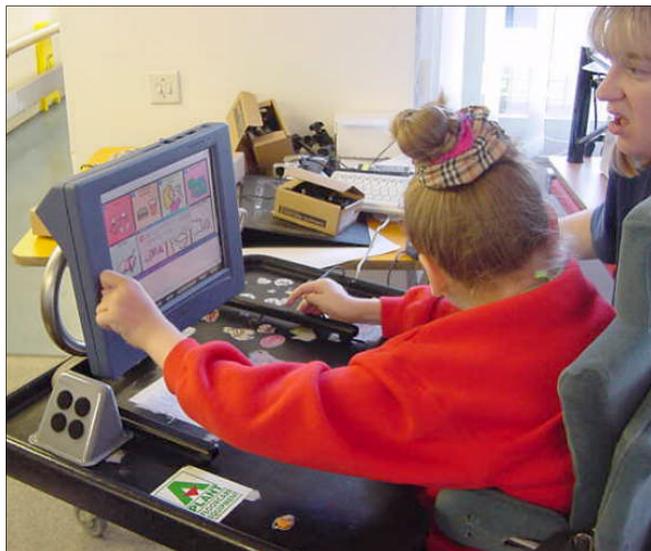
The involvement of these centres established a centre of expertise for all the different types of applications that were made to CAP. They also ensured a good geographical coverage, although it was acknowledged in the early days of the project that some gaps still existed (e.g. provision of specialist ICT assessments for visually impaired pupils).

Once applications are made to CAP, if it is accepted, it is then transferred to the most appropriate CAP Centre for that pupil, based on a variety of factors. The Centre then oversees the assessment or undertakes an assessment itself and recommends equipment for that pupil. The assessment details, including equipment recommendations are then passed back to CAP who purchase the equipment and training if needed and allocate it to the pupil.

The systems that CAP has developed means that the time taken from the initial application to provision of equipment is much faster than through normal LEA routes. A school term is our average 'turn round' time and often equipment can be with the individual in much less time than that, particularly as each Centre has a well resourced 'loan library'. This speed of provision can make a considerable difference for the majority of pupils, particularly those with degenerative conditions.

New Partnerships

This is the story of how one of the CAP Centres is developing new partnerships through its referrals. Trish Davidson works at CENMAC, an assessment centre in South London which specialises in providing guidance on the use of computers for children with communication difficulties.



Here Trish Davidson talks about her work as part of CAP:

"CAP is a really interesting piece of work for us. At CENMAC, we deal a lot with children who need writing aids and we are in and out of schools all the time. Through CAP we are working in partnership with the Wolfson Foundation, who are specialists in the field of child health and very closely linked to Great Ormond Street Hospital. It's given us the chance to learn about other areas.

For CAP, it's important that we deal with referrals quickly and decide who is the most appropriate person to do the assessment. We work in teams. One of the most important features of CAP is that we spread and develop expertise in others. We might have a really good CAP contact with lots of classroom experience who, with a little support from us or from Wolfson, can do a great job. Sometimes CAP contacts come and work alongside us in an assessment so they can do it for themselves another time. It's vital to spread the knowledge because if someone leaves, the work needs to carry on at the same professional level.

If we receive a referral we phone and make an appointment to talk to the person who has made the referral. CAP is designed to enhance LEA provision and it is crucial that the kit is appropriate to the child's skills and development. Occasionally we get asked for a particular piece of kit because the school has heard about it, but on close investigation we find that the child would not be able to use it. Quite a lot of the communication aids have dynamic screens and the child needs to be able to work with symbols and understand about information being in different categories. The equipment is just a small part of the process of communicating.

On days when we are involved in an assessment, we aim to get to the school by 8.30 and talk to the contact person there. We try to get together with as many of the adults who know the child as possible. The adults talk together first and we establish what the child can do now and ask about expectations. Is the child using a symbol book? Is he/she a switch user etc? Parents are invited to be present for the whole assessment and about 70 per cent take up our offer.

We usually ask the teacher or someone who knows the child well to work with him or her during the morning. If I ask children to do things I might get an atypical reaction. Some might try extra hard because I'm a stranger while others would be put off and I wouldn't see them at their best. We look at what is in place and suggest what might improve the process. When we introduce a new piece of software or peripheral, we try to personalise it. There's a lot of demand for football resources in London and I'm getting to be quite an expert on Arsenal, Leyton Orient and the new Charlton Athletic strip - and I'm not even a football fan!

We often leave a piece of equipment behind either on loan or as a trial. Then we follow up after a few weeks to make sure it is being used and not gathering dust in a cupboard. If it's a success, we know we can recommend it with confidence; if not, we can keep on trying alternatives until we find one that works."

The CAP website

The CAP website underpins the whole project. CAP has an 'open application' process and so it contains all the latest application forms and guidance for their completion. The criteria for potential applicants is also available as well as a series of Frequently Asked Questions (FAQs) to help people who are considering an application. The language used on the website is also intended to be accessible to parents. The website contains a catalogue of products available through the CAP scheme. Currently there are over 2500 products available in the catalogue area. We are told that the catalogue area is the largest single collection of AAC equipment that there is available on the internet.

The next phase of development of the CAP website is well underway. The new section will be the start of an on-line support area for anyone involved in CAP. Initially, by September, a 'chat' facility will be made available for CAP Contacts. This area will be monitored and administered by CAP, but will be available to anyone who is registered as a CAP Contact. It will include up to 20 'Chat rooms', 'Ask an Expert' sessions, and live conference facilities. CAP is also looking to develop a pupil's area on the website, to be known as CAP Club. This area will be useable by anyone who has a communication aid and be accessible by symbol users. We intend to use the pupils themselves to develop ideas and content by convening an 'editorial board' of communication aid users.

CAP Suppliers

In order for CAP to supply appropriate equipment it is important to work very closely with the industry. The market for communication aids is relatively small and so it is important that CAP gains the confidence of suppliers and develops appropriate relationships with all suppliers. Following a European tendering process CAP now has Framework Agreements with 60 Suppliers. They include specialist companies such as Sunrise Medical, but interestingly also a number of 'mainstream' suppliers such as PC World. Each of the suppliers is responsible for maintaining their own area of the CAP website. In this way new products and services can be added to the site without delay and the customer benefits from up to date information.

Potential new CAP suppliers are encouraged to get in touch with CAP in order that they can be informed as to when the next round of tendering will take place.



CAP Contacts

If CAP is to have been seen as a success it is important to leave behind a legacy beyond the lifetime of the project. CAP Contacts are seen as an important part of the project and integral to the success of CAP as they will be around long after the project has finished. CAP Contacts are people who are interested in CAP at one level, but at another level may also be interested in developing their assessment expertise in order to help with the CAP assessment process. If each of the Centres can extend their expertise to a wider number of professionals within the lifetime of the project, then this will be an important achievement. The range of benefits to CAP are both short term and long term:

1. The pupils get assessed for equipment within an acceptable time frame.
2. Once CAP has finished, the expertise which exists in the Centres will be spread more widely.
3. The work of CAP will continue beyond CAP as teachers, therapists and other professionals feel confident to make informed decisions regarding ICT provision for pupils with communication difficulties.

Finding out more about CAP

In order to promote the project an initial video was made. This has now also been updated to include a range of case-studies and interviews with a number of professionals who have benefited from CAP. Both videos are available free of charge by contacting the CAP Office. A termly newsletter is also produced by CAP. Each edition has a different focus. To receive copies of the newsletter, you will need to register your interest on the CAP website and we will be able to send you multiple copies for any events which you are planning. CAP also has a general information sheet available which outlines the scope of the project and gives more contact details. For multiple copies of this handout please contact the CAP office.

*CAP, BECTA
Millburn Hill Road
Science Park, Coventry CV4 7JJ
Tel: 02476 847173 Website: www.becta.org.uk/cap*

NEWS FROM FAST

Relocation

FAST has relocated to share offices with the Royal Association for Disability and Rehabilitation (RADAR) in London: FAST, 12 City Forum, 250 City Road, London EC1V 8AF Tel: 020 7253 330 Email: info@fastuk.org Website: www.fastuk.org

New Staff

Although we lost some staff when we moved, two new members of staff have been appointed:

Dr Marie Kelman (marie@fastuk.org) is the Assistive Technology researcher and database manager. Marie is responsible for our research and development database and Parliamentary Report. The last report was laid before parliament in July 2002 and is available from our website. The next report is still in preparation and if there is any research you would like to contribute please get in touch with Marie. She is also leading FAST's participation in the European project I-Match.

Ms Keren Down is the User Forum coordinator and office manager. A quarterly newsletter has been established featuring projects currently underway which enable members to participate as research partners. One small-scale project offered people who have difficulty turning keys the chance to evaluate a low-tech key turning aid which had just been launched on the market. The product inventor, working with one of the largest manufacturers in the field asked for FAST's advice on involving users in an ethical and practical way. At the other end of the research and design process, the ground work has been done for user collaboration with therapists at the Royal Nuffield Orthopaedic Hospital. Users of the sole UK functional arm splint will be supported to establish a steering group to set the research objectives for a redesigned product or system.

Peter Field MBE was one of FAST's founding members and its Chair until his death in June 2001. He helped to establish FAST's User Forum and gave a lot of voluntary time to it. One of the ways FAST chose to mark his work was to award three User Forum members grants towards continuing their education or enabling them to travel.

Assistive Technology Forum

The concept for the Assistive Technology (AT) Forum emerged at the RAATE (Recent Advances in Assistive Technology and Engineering) Conference in November 2001. At the conference a group discussed the need for a forum to promote the strategic development of assistive technology services and it was agreed that FAST would take

responsibility for its creation. In July 2002 the forum was launched with a membership of about 50 organisations involved in the provision of assistive technology. The Forum has an executive committee which represents the membership.

There are a large amount of initiatives currently underway in the field of equipment provision and in order to keep track of them and to keep its members informed the Forum has created an information resource which can be found on FAST's website (follow AT Forum link). As well as sharing information and keeping people informed the Forum is about to commence a piece of work looking at the experience of users' of both community equipment and specialist equipment services. This piece of work will be led by Moira Mitchell and if you would like further information or can suggest users who may wish to get involved please contact Moira at FAST.

I-Match Project

I-Match is a European Union funded project studying joysticks, mice and switches (known as input devices) which are used to control assistive technologies. Its aim is to match input devices to people with upper limb disabilities so that they can best control their assistive technology (wheelchairs, environmental controls, communication aids, etc.). FAST is one of a group of organisations who are contributing to the project which runs from 2002-2005. There will be two main results:

1. A publicly available database containing details about input devices available on the market for controlling assistive technologies.
2. A virtual reality assessment tool to measure the hand and arm skills of people who use assistive technology because of impaired hand function.

FAST's role, led by the Assistive Technology Researcher and Database Manager and in collaboration with the Don Carlo Gnocchi Foundation in Italy, is to develop an international database of joysticks, mice and switches containing descriptions, technical data and photographs. FAST is also conducting background research into the assistive technology assessment process which comprises a series of interviews with assessors and users in the UK to feed into the European picture. For more information, contact Marie at FAST.

Assistive Technology Event Calendar

Don't forget a comprehensive index of assistive technology events can be found on FAST's website (follow the AT events link). If you know of any events that should be posted please contact FAST.

1-Voice Family Network Day

by Faith Douthwaite

One parent's experiences of a network day for people who use AAC and family members held on 29 June 2003.

Firstly I would like to introduce my family, my name is Faith, my partner's name is Dave and between us both we have seven boys aged between 3 and 18 years old, and yes life is hectic but fun too!

Two years ago our youngest son Jake was diagnosed with a rare genetic disorder, a year on I had learned to use a computer and browse the web to glean as much information as I could about his syndrome, by the end of the year I attended a conference in the USA to meet families and children with the same syndrome.

Whilst there I realized his biggest hurdle to overcome would be his lack of speech but also at the same time I could see many children signing and using speech output devices. So it was back to England armed with all this new knowledge to try and get some form of communication going, the one thing I did know after speaking to many parents the earlier the better so that communication through AAC would be an effective part of his life, a quality and gift most people are given freely at birth.

One year on and I had found 1-Voice through the Internet, after getting in touch we were invited to attend the Family Network Day at Doncaster's Earth Centre.

Sunday the 29th June could not come fast enough for us we were very excited to be able to meet up with families that we knew would be further down a road we were just beginning to start.

At this time my son is unable to sign, we do get a big cheesy grin for yes and an arm wave for no and we have introduced several switches so he can ask for food/drink and to play. We also have pictures dotted around the house for eye pointing.

As soon as we arrived we met with some families in the car park and made our way to meet up with everybody else. I immediately felt at ease. After collecting our 1-Voice badges we had a short and informal meeting to find out what was on the agenda, we then made our way out to sign up for some work shops and explore the Earth center.

So far the day was off to a good start with the sun being out in its full glory, the venue itself was very peaceful and we had the Rapide brothers entertaining us with their circus tricks, we also had the chance to have some hands on fun with them too.

Dinner time arrived and we made our way to a BBQ lunch where we had the opportunity to speak with some more families, as we had been doing throughout the morning whilst roaming around exploring and doing a treasure hunt.

In the afternoon we explored more and visited the Scope and Becta stands and got to know yet more families. In fact I was

so busy chatting that we missed out on the poetry workshop which by all accounts was excellent and the children seemed to really have enjoyed.

As the day closed we gathered together once more to say our goodbyes, give away prizes to the children, thanks to the volunteers and swap home and e-mail addresses, but nobody was in a rush to go so we just kept talking.

Upon returning home we were then able to reflect and take in all we had observed and learned throughout the day.

It had been nice to meet somebody from ACE Centre North and talk about their role in AAC and what we could expect from their input into our sons new journey.

It had been good to talk to so many families who are at different stages of this journey so we could see the next step to take more clearly.

Having 'peers' about that day for the children, who were adept in using AAC, as well as having children like themselves around was evident in their faces that they had had fun, inspiration and a unity that will help them to persevere in the art of communication.

I feel very privileged to have been a part of 1-Voice Family Network Day, to share the rewards parents were reaping from themselves and their children's hard work, to have been given an invaluable supply of knowledge freely and to have met the people that give their time generously to enable it all to happen.

Communication was in abundance that day regardless of age or abilities but the children shouted the loudest they are special and work hard at obtaining the art of communication we as parents stand on the side lines cheering them on.

The Family Network Day inspired me and continuing to be a part of 1-Voice will help me to keep cheering my son when I feel a little hoarse. It also inspired our other children to learn sign language so they could have a share in the interaction that was going on between the children that day for the next time. The whole day had had a positive effect on us all.

I still have much to learn and a long journey ahead it is a shame that so much of this responsibility lies upon myself but with the help of other parents and professionals involved I am confident we will make it.

*Faith Douthwaite
17 Monkhill Mount
Pontefract
W Yorkshire
WF8 1JG
Email: faidid@aol.com*



Sensory Software Advertisement

WordCore™

Word-based Communication Software for the Vantage Communication Aid

by Russell T. Cross

This paper was presented at the CM2002 National Symposium, Lancaster University, September 2002

Introduction

The Prentke Romich Company produces a number of different voice output communication aids. The success of these products depends heavily on the language software used that codes language using a structured symbol system. The most popular program is called *Unity*® (1995). The two touch screen devices, *Vanguard*™ and *Vantage*™ use a version called *Unity Enhanced* that takes advantage of the large-screen technology.

In contrast, a new program was developed in response to the needs of the adult population who, because of a degenerative neurological condition, require a language system that is (a) based on words and spelling, and (b) is quick to learn. This program is called *AQLS*™: Adult Quick Learning System,” which has both Iconic and Alphabetic versions. The Alphabetic version has a non-picture keyboard that uses words and a QWERTY keyboard along with Word Prediction to generate speech.

The AQLS software is designed to work on the PRC devices *Liberator*™, *DeltaTalker*™ and *Pathfinder*™, all of which use a 128-location keyboard. Although many people are able to access this configuration, there are still elements of the population for whom the small key size is an issue.

In March 2001, PRC introduced the *Vantage* communication aid, which weighs just over 3lbs and has a small screen of 7 inches in diameter. The device includes the *Unity* language software as standard and this is used successfully by many individuals. However, some clients asked if they could have a solution based on words and letters rather than symbols, but on the portable *Vantage* platform rather than the larger 128-key platforms on those devices running *AQLS*. Although designed primarily for the *Vantage* device, it can run on any *Vanguard* using version 4.0 and above of the operating software.

Keystroke Reduction Focus

An important feature of the software design is that keystroke reduction was an explicit aim, but not necessarily rate enhancement. Keystroke reduction simply seeks to cut down on the number of selections necessary to produce a word, phrase, or sentence, as compared with regular spelling. Rate enhancement refers to the process whereby an aided communicator can produce communication output faster than other methods – again this is typically measured against regular spelling.

The relationship between keystroke reduction and rate enhancement is not necessarily linear. In fact, studies have shown that reducing keystrokes in a Word Prediction system can actually lower the communication rate (Koester and

Levine, 1994a;1994b). However, this has to be balanced against other factors, such as fatigue, where a reduction in overall rate may be seen as an acceptable trade-off against reduced effort.

In *WordCore*, although one element of the system uses Word Prediction, other keystroke reductions are achieved by using sequencing and single-word pages. There is therefore a blend of methods used to reduce the effort an individual needs to expend in order to communicate.

Program Parameters

Before designing the *WordCore* program, a number of parameters were set in place.

1. 45 keys only: The *Vantage* is designed to have a maximum number of 45 keys. If a 128-key configuration was implemented on a 7 inch diameter screen, the keys would be so small as to be impractical to use.
2. Optimal keystroke reduction: The aim was to provide a large vocabulary that can be accessed with as few keystrokes as possible as compared with regular spelling.
3. Word Prediction would be integral: Unlike the *Unity* program that is designed to use Word Prediction as a ‘back-up’ to thousands of pre-stored words in icon sequences, *WordCore* expects the Word Prediction feature of the communication aid to be used.
4. Voice output is primary: With only 45 keys available, having literary devices such as periods, commas, shift keys, exclamation points and so on should be avoided. The principal aim of the device is to provide speech output not written output.
5. Words should be chosen on the basis of frequency studies: Although a number of vocabulary lists were consulted, the two most heavily used corpora were the “LOB” corpus (Hofland and Johansson, 1984) and the “Reading” corpus (Raban, 1987). The former uses written text sampling from many sources and the latter uses the spoken vocabulary of five-year olds in the UK.

These basic parameters enabled the author to set limits on the development and provide guidelines when clashes occurred when having to make choices. For example, the word “need” is excluded from the program (although it can always be added) on the basis that the word “want” IS included. “Need” and “want” are semantically almost synonymous and can be used as such. Functionally, “I need some help” is no different from “I want some help.” Although frequency studies would suggest including both (Parameter 5) the limitation of 45 keys indicates that losing one of them would allow for the addition of another more semantically distinct word to the system.

DONT BE LOST FOR WORDS.... ...JUST SAY WHAT YOU WANT

with the new *DynaWrite* communication aid.

Just key in what you want to say, and let DynaWrite say it for you.

DynaWrite has many helpful features including:

full size keys for easier operation,
a multi line screen, so you can see what you are about to say, many shortcuts to speed up communication, a choice of voices plus the ability to record special messages, the option to add scanning, if required, full Environmental Control facilities (allows access to infra red controlled home appliances TV, stereo etc.)



CALL NOW ON **01384 446789** FOR MORE INFORMATION
ON DYNWRITE, DYNAVOX, DYNAMYTE OR DYNAMO.



Sunrise Medical Limited
AAC Department
High Street, Wollaston
West Midlands, DY8 4PS
England
Phone +44 (0)1384 446789
Fax +44 (0)1384 446799
eMail dynavox@sunmed.co.uk
www.dynavox.co.uk

Overall Structure

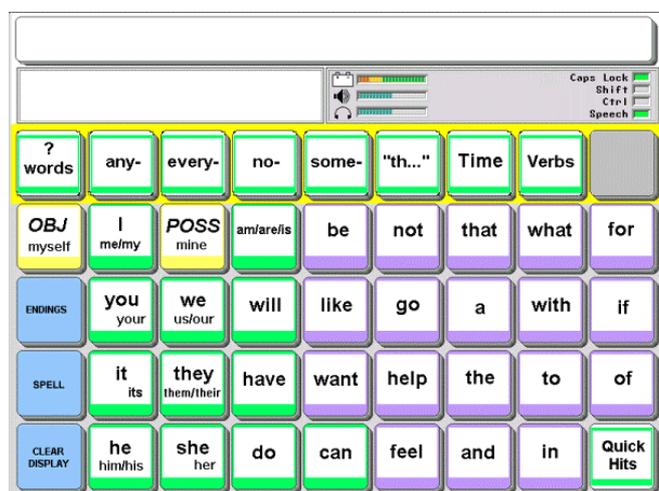
The WordCore program allows individuals to generate spontaneous vocabulary by using one of three methods:

1. Selecting a word directly from the CORE VOCABULARY screen.
2. If the desired word is not available via the Core, hitting SPELL will change to a screen that provides a spelling keyboard and WORD ROWS that contain up to 15 high frequency words that can be selected directly.
3. If the desired word is neither in the Core or the Word Rows, the individual can use the Word Prediction system to generate the word.

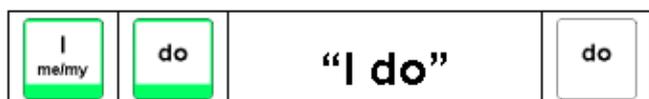
The methods are described in more detail below, complete with illustrations.

Core Vocabulary Screen

Here is the first screen the individual will see when turning on the device:



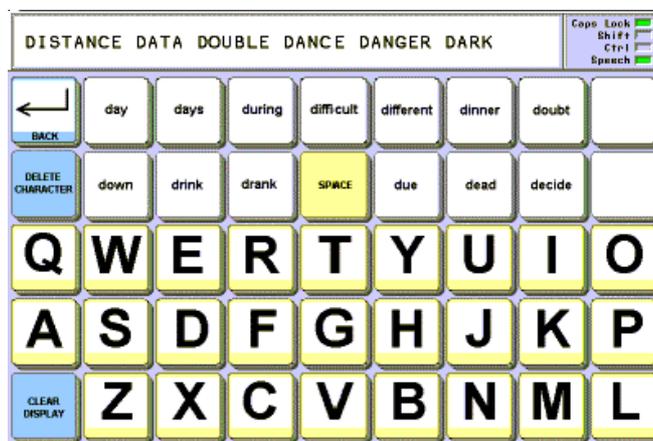
Selecting the keys will generate single words or phrases. The words are all very high frequency items. In the Core, there are some 140 words available that require one or two keystrokes. A significant feature of the program is that it uses sequencing to make maximum use of the small 45-key space available. This is seen best when generating phrases. Consider the following examples:



Each phrase is stored using the sequence highlighted. But after the first keystroke, the appearance of the second can change to the form shown in the final column. If a single page had been used with one-key-one-word, then it would have been necessary to have 6 separate keys to represent each word. However, by using a sequence, only 4 keys are needed, because the DO and the HAVE keys automatically change to accommodate the correct grammatical form. This saves potential key locations on a limited keyboard, yet it takes the same number of keystrokes to produce the phrases as it would have done with a page of 6 keys.

Word Rows

If a word isn't available in the Core, the client hits the SPELL key and is immediately provided with a spelling keyboard. Selecting the first letter of the desired word brings up a page containing a WORD ROW of high frequency items. For example, if the target word was "doubt," here is what would appear once the letter "d" has been selected:



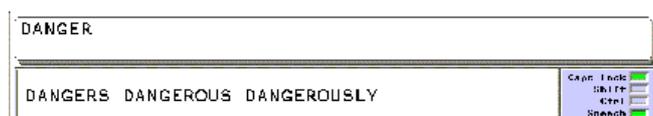
On selecting "doubt" from the Word Row, the program flips back to the Core, and the top row of the Core now includes a new row of possible ending for the word "doubt."



Selecting an ending will produce "doubter," "doubting," "doubts" or "doubted."

Word Prediction

If the word is not in the Core or the Word Row, the Word Predictor can be used. For example, if the target word above had been "dangerously," the client could have selected "danger" from that list of D words above the Word Row, which would result in the following options being presented:



How the System "Learns"

The Word Prediction software in the Vantage has been selected to work on a Recency basis, that is, the word last chosen

Eclipse

The Simple and Effective Communication Aid from Morphonics



- ▶ A unique talking menu to assist you through the settings & options
- ▶ Accessible via a keyboard, switches, joystick or optical headpointer
 - ▶ Peace of mind with a two year guarantee
- ▶ Only one hour charge time plus a battery monitor so you need never be left waiting
- ▶ A disc drive for saving & loading speech which doesn't even need mains power
 - ▶ Slimline & genuinely lightweight so you can take it anywhere
 - ▶ Now available with auditory scanning to assist visually impaired users

For a demonstration and details of our no quibble support simply call Neil on Tel: 01524 848 373

will appear in the first position of the Word Prediction window next time that letter is selected. So, if the client uses the "double" via the Word Predictor, the next time the "d" is selected, "double" appears as first in the prediction row. This has the effect of making recent vocabulary items be easier to select on subsequent occasions.

Words selected from the Core or Word Rows do *not* score on the Recency statistic so do not 'push' predicted words out.

The overall effect of this is that the Core and Word Rows handle the high frequency vocabulary while the Word Predictor handles the less frequently used items. Over time, the system adapts to the individual's use of lower frequency words yet responds to what might be called local' needs. For example, the word "christmas" may be used very often during December, so it is predicted relatively quickly in the Word Prediction window. However, as the word is used less, it will be replaced by more 'current' vocabulary items.

Other Short-Cut Features

Selecting either "a" or "the" from the Core will immediately move the individual to the Spelling Mode. This is based on the linguistic observation that determiners are typically followed by adjectives or nouns, none of which appear in the Core. This saves a keystroke (Parameter 2).

Selecting "a" also brings up the Spell screen that includes "an" as an option. This is so that there is no need to have both "a" and "an" in the Core screen, the variation being purely phonological and predicted by the presence or absence of a vowel at the beginning of the word following the indefinite determiner.

Project Development

The WordCore website www.roughmagic.net/wordcore provides a focal point for on-going development of the program. Individuals can sign up to become part of the development team, and they will be eligible for free beta versions of the software.

By using the Data Logging software available in the Vantage, team members will be encouraged to pool vocabulary generated by clients, which in turn will be used to modify the program.

*Russell T. Cross, MRCSLT
Prentke Romich Company
1022 Heyl Road, Wooster, Ohio 44691*

REFERENCES

- Badman, A.L., Baker, B.R., Banajee, M., Cross, R.T., Lehr, J.S., Maro, J. and Zucco, M. (1995). *Unity: A Minspeak Application Program*. Wooster, OH: Prentke Romich.
- Hofland, S. and Johansson, K. (1984). *Word frequencies in British and American English*. The Norwegian Computer Centre for the Humanities: Longman.
- Koester, H.H., & Levine, S.P. (1994a). Modeling the speed of text entry with a word prediction interface. *IEEE Transactions on Rehabilitation Engineering*, 2.3;177-187.
- Koester, H.H., & Levine, S.P. (1994b). Learning and performance of able-bodied individuals using scanning systems with and without word prediction. *Assistive Technology*, 6.1:42-53.
- Raban, B. (1987). *The spoken vocabulary of five-year old children*. Reading, England: The Reading and Language Information Centre.

Need funding in 2004 for an AAC project or event?

Apply for a Communication Matters Small Grants Award

Closing dates
31 January 2004 & 30 June 2004

Communication Matters welcomes all applications for small grants (applicants must be resident in the UK). Consideration will be given to applications for UK projects or activities that further the aims of *Communication Matters*.

Examples of the kind of project that may be awarded a grant include:

- The costs of organising an event for people who use AAC, or travel expenses to get to one.
- The costs of publishing an information leaflet.
- The costs of a social research project.

Aims of Communication Matters

- 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.

Closing Date

The applications will be reviewed by the Small Grants Committee and by an external reviewer, and the decision of the Committee will be ratified by all the Trustees.

Please ensure that we receive your fully completed application before either of the closing dates:
31 January 2004 and 30 June 2004.

For an application form, please contact
Communications Matters:

Tel & Fax: 0845 456 8211
admin@communicationmatters.org.uk

in Scotland! Different communication aids and symbol software programs were tried; 'low-tech' story bags with props and voice output aids were opened up for story sessions on the carpet, in small groups; children (and adults!) had fun experimenting with switch-operated toys. Single switch controlled PowerPoint and Flash/Windows Media Player applications data-projected Britney, Justin, S-Club 7, etc. at giant height on to the wall (with accompanying loud pop music) was a big attraction.

Parents of AAC users were glad to have the chance to discuss with specialists their own child's use of their device, and to see and play around with new devices. Parents of children who had newly been referred/assessed or recommended an AAC device were helped by seeing and comparing all the different types of aids, and discussing their pros and cons and how to teach and use them. Parents liked having a chance to see and discuss the full range of equipment available without the stress of 'an assessment'. Most parents seemed to go away feeling reassured that their child was using a suitable device and wasn't missing out. Many found it helpful to get an idea of the kind of device their young child might be heading for in the future. (And if anyone ended up saying, "Why didn't anyone tell me before about these things?" then maybe that was a good question!)

Sue and Dougie from the Drake Music Project had set up Soundbeams, bubble tubes, synthesisers, drum machines and other interesting gadgets. Weird sounds were soon creeping out of this room and along the corridor. They held three group sessions of 45 minutes across the day so most people that wanted to got a chance to participate. There were excited queues forming outside that room as the start time grew near. Many parents commented on how unexpectedly well their child concentrated for such a long period of time in those sessions.

.....
: "An excellent day out. Our children loved :
: everything – especially the music session. :
: Thank you all so much. " :
:

Nearby, Dave from FACCT had set up a room to display a huge collection of all-singing, all-dancing switch adapted toys and other gadgets (many his own designs and inventions). He showed parents how to adapt their own toys. Children were encouraged to try everything. He shared the room with Pamela and Dithe from TASSCC, with young Owen, who set up a busy hands-on switch operated craft workshop. They had a steady stream of youngsters keen to blow up balloons by switch control, and to use switch operated 'Zizzers', Twirl O Paint and battery operated stapler, to create their own artistic cards that they took home with them.

Much of the floorspace of our biggest room was taken over by Paul from CALL for rides on the CALL Smart Wheelchair. These were in very high demand, and caused giggles of delight and proud wide smiles at the achievement of independence and control. Stuart from CALL was poised with a digital camera, computer and printer, creating 'I went solo in the CALL Smart Wheelchair' certificates for all the children who had a go, which the riders were pleased to receive.

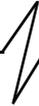


Poster displays describing the work and services provided by the various specialist centres lined one wall of this room. There was an always-on Internet connection available (with staff close by to supervise, support, instruct and untangle users if necessary).

The rest of this very large space was occupied by Sandra, Neel and Allan from CALL, Melanie from Inclusive and Sue from KEYCOMM who set up different computer stations all around the periphery, demonstrating and offering hands-on with computer software and different access methods. There was a huge variety of software on display – pretty much something for everyone! Many children enjoyed playing computer games with a touch screen – Touch Balloons was extremely popular, and onscreen finger painting with Doodle was another big hit. Finding out that there was a wide range of attractive computer software that could be controlled with a single switch was a revelation to many parents and a big attraction to many kids! Staff were on hand to explain about different switches and interfaces and how to connect and configure these.

Parents were interested to see, try and discuss key software that they had heard about from school, (e.g. Clicker, BoardMaker, PowerPoint) but had perhaps never seen working, or had never seen operated by a child / switch user etc. Being able to view multiple examples of resources made for other children gave them ideas about what could be done with it.

Some parents were muddled about which software did what and why (or what was the difference between different packages), and welcomed a demonstration and simple 1:1 tutorial, pointers to useful resources, and discussion about issues like whether their child should do the same thing at home as they



Liberator Advertisement



Boys gaming...

did at school (and if so, how can computer-based homework best be transferred between school and home and vice versa?) or whether it was better to vary, with different types of computer activities.

Next door the ‘next generation’, teenagers William Marjoribanks, Aric Jans and Christopher O’Neill, supervised a ‘chill-out’ room for older brothers and sisters, with videos, DVDs, Playstation, computer games and drawing materials.

At the epicentre of all this, Sarah and Samantha from CALL manned a reception area, welcoming visitors, providing information, directing people to wherever they wished to go and handing out leaflets, catalogues and forms for ‘treasure hunts’ and other competitions. Most importantly, they also awarded prizes to children who submitted completed treasure hunt forms.

.....
 : *“The whole concept of today was very* :
 : *interesting and well thought out. More* :
 : *days like this would be most welcome.”* :
 :

The Treasure Hunts were popular. For one, children just had to find all the symbols of ‘computer’ that were hidden around the rooms. For another, children had a sheet of digital photos of helpers and as they went around and ‘found’ each person, they had to ask them to sign the sheet. A good way to strike up conversations! Another type of ‘Hunt’ was to pick up a Step by Step or Sequencer and to follow the spoken instructions recorded into it, to track down the prize (‘Go out the door; turn left; go across the landing in front of the toilets; go down to the end of the corridor; go into the room with a computer picture on the door. Look for the man wearing the green badge; give him this machine and he will give you your prize.’) Prizes handed out for successfully completed treasure hunts were mostly ‘fun-sized’ bags of chocolate/sweets, with some crayons, felt tips, notebooks, etc. for older contestants.

The ‘café’ also proved a popular area, giving parents an opportunity to sit with their children, relaxing over lunch and sharing experiences with other families. Lunch was ‘self-service’, with packs of sandwiches, sausages, muffins, biscuits and fruit. Tea, coffee, milk water and fruit squash were also available. As always, one of the major benefits to a day such

as this is the opportunity for parents and children to meet, talk with (and learn from) others in a similar situation to themselves. There were cartoon videos for younger children in this area too, so parents could have a rest and keep an eye on their kids at the same time.

By the end of a long day a total of 91 adults and 93 children had visited the Centre, taken part in a wide range of activities, won (and eaten!) lots of wee prizes, had a highly enjoyable time and gone away, clutching catalogues, general information and the rest of their booty from the day. Many families had come along originally thinking they were just going to see computers and so it was good to be able to emphasise all the other aspects of technology, and to entertain people into the bargain. A tiring but very satisfying day.

Some Reflections

Perhaps we should not try to read too much into what was first and foremost a fun day. But a few reflections...

Firstly, it is clear that there is an enormous continuing (indeed ever-increasing) need for support for home computers, in families with children with special needs. Most education authorities will not provide ICT support on this basis, and although therapists do make home visits, individual therapists might not have the time or specialist expertise to tackle computing as well as AAC. As well as needing information, many parents want/ need specific in-depth training on key computer packages. How/where are parents to get this support? Doesn’t true ‘joined-up working’ need to take this area into account?

Secondly, although some parents are complete beginners and need guidance even at the purchase stage, we were struck by how many other parents are highly competent with computer technology (dare we say it – more so than many of the professionals we come across in schools). They are willing to buy resources themselves, but are simply not receiving enough information from school or professionals to allow them to identify appropriate hardware and software, or to understand how best to go about using it. (Indeed it sometimes seemed from what parents said as though many schools actively try to *discourage* families from getting involved in computer use for learning and communication, at home, and are reluctant to share resources. Why?)

It certainly seemed that some parents had very high, perhaps unrealistic, expectations of what technology might be able to do for their child. Only *more* information, advice and experience is going to clear up such misconceptions.

Although AAC was only one part of the technology involved, we think it was helpful that all the specialist AAC centres in Scotland were seen to be working together, in an open way, so that parents could feel confident that specialist information and expertise is shared and that there are close links between AAC and ICT in schools. (And for us, it’s a great opportunity to get together!)

Thirdly, we were impressed by how well-behaved all the children were! In spite of having close on a hundred kids wandering around throughout the day, many with attention problems, severe learning difficulties, and autistic spectrum



**Minspeak
(Prentke Romich International)
Advertisement**

disorder etc., it seemed that there were really NO serious upsets at all. We could only put this down to the fact that parental presence lent security while technology-linked activities were pitched at a level that did not confuse or threaten children, were interesting and varied enough to be motivating, and were presented in a non-directive 'opt-in/opt-out' basis. (Not to underestimate the importance of having plenty of skilled staff on hand to untangle technological snarl-ups of every description.)

.....
 : *"Well done to the AAC Crew!"* :
 : *Your enthusiasm never fails to amaze me."* :
 :
 :

For us, it felt great to be doing something that was really child/family-centred. In a place with wall to wall technology, families seemed grateful that it was all at their child's level; they did not need to worry constantly about their child 'breaking things' or being warned off by snooty staff. Some families had just come for a 'day out', and were pleased to find things that *all* their children could enjoy rather than having non-disabled peers get bored while attention was focused on the child with disabilities.

Lastly and most importantly - the day was TERRIFIC FUN!

.....
 : *"How can you improve perfection? It was* :
 : *pitched at the right level, not too technical,* :
 : *so that parents could understand it and fun* :
 : *experiences for the children."* :
 :
 :

Huge respect and thanks are due to all the members of staff and their families from CALL, KEYCOMM, FACCT, SCTCI and TASSCC, to Melanie Jones from Inclusive Technology and the team from the Drake Music Project for giving their time and pooling their imagination, energy, equipment and expertise on the day. We are also very grateful to SureStart Edinburgh for their financial support, to the ever-helpful catering staff and janitors at Moray House, and to the University of Edinburgh for use of the rooms.

Some Pointers for Organising a Fun Day

Some practical pointers for anyone else thinking of trying this kind of thing:

- An 'Open Day' format ensured that the numbers evened out across the day. Some families stayed a short time only, some stayed all day (11am-4pm) but the majority seemed to stay for about two or three hours.
- There was a wide spread; a few adults came on their own, most brought one child with disabilities, many brought one or two other siblings as well. More families of pre-school and Primary age children attended, than Secondary age children.
- Since we planned to take photos and video during the day (and to use these afterwards for training, in publications, website, etc.), it was important to get all parents (or older children themselves, if possible) to sign a permission form the moment they arrived (we gave special badges to chil-



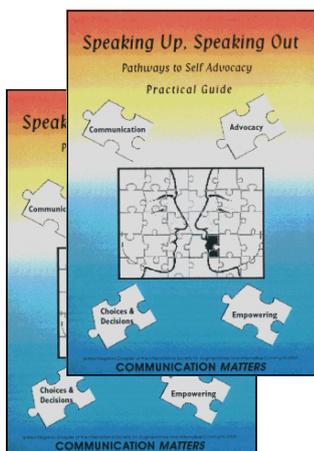
Instructing Dad in the art of playing Touch Balloon

- dren who were not to be photographed to help us spot them or weed them out at the editing stage).
- We had 25 helpers (mostly very experienced / skilled) and we needed them all!
- To accommodate all the equipment and activities without crowding, we really needed six big rooms (plus reception area and wheelchair accessible toilets, of course).
- Equipment-wise, we had about 20 computers in use, plus a comprehensive stock of software, communication aids, simple tech aids and switch operated toys and devices, plus the Drake team's kit. The CALL Centre provided a basic equipment stock, and on top of that each helper brought the additional equipment they needed for their own area of activity.
- To mail out all the fliers and cope with the bookings and enquiries, we needed a secretarial base and centres that could absorb the cost of secretarial time, copying and postage, etc.
- To provide staffing and equipment, we needed people who were prepared to volunteer their time and travel on a Saturday, and centres flexible enough to approve this event as an 'appropriate activity' and to offer 'time off in lieu', travel expenses (if claimed) and also allow the loan of equipment.
- The total cost of the lunches and all other expenses came to somewhere between £1,000 and £2,000 (we haven't finished totting it all up yet!). But a number of our visitors said on their evaluation sheets that they would have been prepared to pay for refreshments. Also, assuming AAC users are involved, this *may* be the kind of activity that qualifies for a small grant from Communication Matters or ACP:S?

Finally, we hear that TASSCC are hoping to host a similar day for families from the North East of Scotland in Aberdeen in November 2003 and will be looking for volunteers from other centres to come along and help out...

*Sally Millar, Joint Coordinator
 Allan Wilson, Information Officer
 CALL Centre, Paterson's Land, Holyrood Road
 Edinburgh EH8 8AQ
 Email: callcentre@ed.ac.uk*

Essential Publications from Communication Matters



Speaking Up and Speaking Out! Pathways to Self-Advocacy

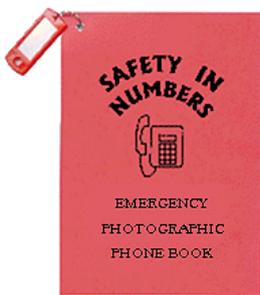
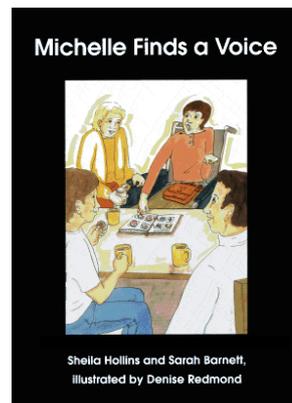
This pack is intended for carers, facilitators and others concerned with the advocacy needs of people with severe communication difficulties who need or use AAC. It is useful for staff development, especially for those working with adults. The pack comprises two books. One is a comprehensive and detailed 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 a young adult with disabilities who is unable to speak or communicate effectively. A number of events cause her to feel unhappy until she and her carers are helped to overcome the communication difficulties. Michelle's story is told through pictures alone to allow each reader to make his or her own interpretation. Published by Royal College of Psychiatrists.

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



Safety in Numbers: A Photographic Phonebook

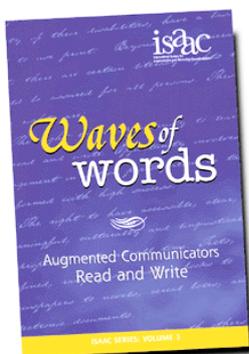
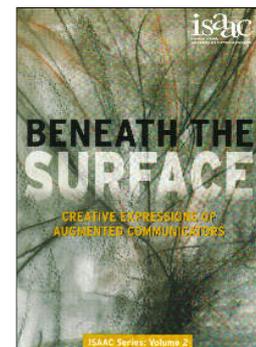
This photographic phone book is for people who find reading difficult. The pack includes an information page with key information about the person, several blank pages ready to add photographs or symbols, space for additional notes for an enabler, babysitter or other adult, a tag to make the book easy to hold as well as identifying the owner, and a page of symbols for common services printed on labels ready to stick in.

Price: £3.50 including p&p from **Communication Matters**

Beneath the Surface

In August 2000, the creative works of 51 authors and artists from around the world were published in one book, Beneath the Surface. What these writers and artists have in common is that they are unable to speak and thus rely on assistive technology to communicate. Published by ISAAC.

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



Waves of Words

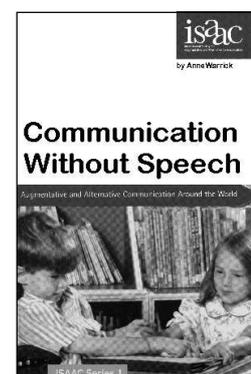
The challenges confronting individuals with severe communication disabilities are chronicled in Waves of Words: Augmented Communicators Read and Write. The focus is on the strategies that teachers, therapists and individuals who rely on augmentative communication from around the globe have used to produce ultimate success in the struggle to learn to read and write.

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

Communication Without Speech: AAC Around the World

This ISAAC book is a highly accessible introduction to AAC. 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.

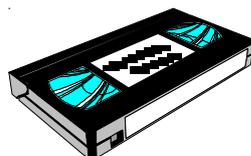
Price: £15 plus £1.50 p&p from **Communication Matters**



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: £12 to CM members (otherwise £17) including p&p **only available from ACE Centre (ring 01865 759800)**



When ordering from Communication Matters, make your cheque payable to **Communication Matters**, and send to:

COMMUNICATION MATTERS

c/o ACE Centre, 92 Windmill Road, Headington, Oxford OX3 7DR
CM Tel & Fax: 0845 456 8211 Email: admin@communicationmatters.org.uk
Website: www.communicationmatters.org.uk