In
This
Issue

COMMUNICATION MATTERS

Editorial

We hope that *Communication Matters* members have been enjoying the summer in spite of the poor weather. Here is your autumn reading material!

This issue contains a collection of interesting and articles across a wide spectrum of AAC related topics. Some were first presented as Workshops at the 1997 *Communication Matters* Symposium. Futerman and Hynd discuss the importance of social closeness to interaction. Murphy describes a new low tech tool for facilitating conversations. Mackenzie offers practical ideas for fun activities for AAC users. Clarke and Price present their CASTLE project and what AAC users think of different models of speech and language therapy. Williams, Keenan and Whittle report on a study of referrals, diagnosis, joint assessment, and recommendations and provision of equipment. Gubbay and Van Creveld vividly describe aspects of the life-changing experience of acquired loss of speech through MND. Meek and Moffat present educational applications of the Chailey Communication System. Jack discusses service provision issues in schools. There are also many other items of news and information.

We are always looking for new contributors. Please send us your thoughts and ideas in the form of articles, letters, news of user groups, information updates or reviews of new products and/or publications. Evaluations and reviews needn't be very long or formally written - readers are interested in 'the bottom line' (i.e. what happens when ordinary people try to use something in 'real life' conditions). We are also keen to perk up the journal with interesting photos or other graphics. Please send photos with details of who features, and permission to reprint them (the originals are always returned to the sender, eventually).

We look forward to seeing members and other friends at the *Communication Matters* National Symposium in Lancaster, 14-15 September, and to seeing how the new format of themed workshops turns out. In particular, we keenly await hearing the presentation of this year's winner of the CM Distinguished User Award, Jennie Selby from Cumbria. Finally, at the Symposium, you will have a chance to browse (and perhaps buy!) the new CM and ISAAC materials that have been developed. See Pages 3 and 4 for details of these.

Front cover: Janet Larcher, Chairperson of *Communication Matters*

Contents

Trustees' News

By the time you read this, the 1998 AGM and elections of Trustees will already be upon us and a number of new Trustees will be elected. The panel to the left shows those of the current Trustees and Officers who will be continuing in their positions. A number of Trustees have stood down from office this year:

- **Caroline Gray,** who has done many years of sterling work as Membership Secretary, link with ISAAC Secretariat, and general troubleshooter. Caroline has recently been appointed Director of the ACE Centre and also chairs the ISAAC Emerging AAC countries Committee, so she won't be sitting at home twiddling her thumbs!

- **Sally Millar,** after two terms of office and a great deal of invaluable work, is standing down to make way for 'new blood' on the team of Trustees, but will remain in close contact with the Trustees in her ongoing role as Journal Editor.

- **Tony Jones,** who resigned during the year due to pressure of other work.

The above are not intending to stand again for re-election. Many thanks for all of their hard work over the years – they will be sorely missed.

Anthony Robertson, Judy Robertson, and Peter Zein are standing down as they have been unable to attend any Trustees meetings this year because of other calls on their time (babies, illness, etc). They are eligible to stand for re-election.

Chairperson Janet Larcher is preparing to stand down, but may consider re-election in the short term in order to provide a period of 'handover' for a new 'Chairperson designate'.

CM Administration

Since April 1998 Patrick Poon, on a two days per week basis, has taken over all of the general administration of CM including: the role of Membership Secretary, handling all business, answering telephone enquiries, desktop publishing leaflets and advertisements, liaising with ISAAC International Secretariat, and carrying out a substantial part of the Symposium registration (together with Colin Clayton), as well as acting (unpaid) as Honorary Treasurer.

The Trustees believe that an administrator is necessary to provide an efficient and useful service to members but point out that funds need to be raised to cover the cost of this and also an increase in the 'capitation fee' payable to ISAAC International per member. The Trustees have therefore proposed an increase in subscriptions for 1999.

Nobody likes to increase subscription fees, but the Trustees would like to remind members that the cost of subscription to CM has not been raised since 1995 - not bad going, really! The good news is that the administration of CM is now much faster and more efficient than ever before.

Jenny Selby Wins the CM Distinguished AAC User Award
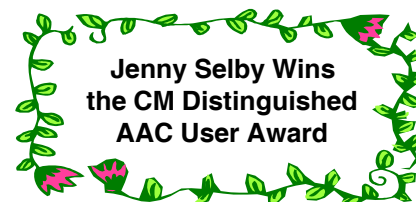
The winner of the *Communication Matters* Distinguished AAC User Award 1998 is Jennie Selby from Cumbria. We look forward to hearing Jennie's presentation at the CM Symposium at Lancaster on Tuesday 15 September 1998. Jennie uses the *Lifestyles* application, in Orac. For her award, Jennie will receive a cheque for £250 and, if she chooses to go, her registration fee paid at the next ISAAC International Conference. Many thanks to all of the AAC users who sent in entries for this award. All the entries were excellent. Do try again next year.

ISAAC International

The UK is honoured to be playing a very important role in ISAAC over the next few years. Prue Fuller, recently

retired Director of The ACE Centre, Oxford, takes up the office of President of ISAAC from January 1999 for two years. She is currently on the Executive Committee, working closely with Sarah Blackstone as President Designate. Our own CM Chairperson, Janet Larcher has been elected Chairperson of the international Board of Directors of ISAAC. Our UK representative on the Board is Janet Scott.

ISAAC priorities for 1999 include:

1. Moving towards leadership by AAC consumers.

2. Expansion of ISAAC membership.

3. Enhanced communication and collaboration between ISAAC Chapters.

4. Greater dissemination of information about AAC.

5. Development of AAC in emerging countries.

6. More consultation and collaboration with manufacturers/ suppliers of AAC equipment and software.

7. Ongoing increases in the effectiveness of the administration of ISAAC (through continued employment of an Executive Director).

The Eighth Biennial ISAAC International Conference in Dublin, Eire, has just drawn to a close. There were some very unfortunate hitches regarding accommodation and accessibility for wheelchair users, in spite of the best efforts of the beleaguered organisers. But overall, with over 750 delegates and speakers from more than 20 countries, the event was a great success. We are glad to report that there was a terrific turn-out from the UK, including numerous AAC users who gave impressive and well-received presentations. Speakers from the UK led plenary debates and many sessions throughout the conference were chaired by UK delegates. Many UK manufacturers/suppliers were in high profile at the Trade Exhibition.

The winner of the 1998 Words+ AAC User Award was **Meredith Allan,** from Victoria in Australia, who uses a LightWriter and a computer with predictive typing. She gave a thoughtful and thought provoking presentation about her experience as an AAC user. The winner of the Don Johnston Distinguished Lecturer Award was **David Koppenhaver** who reminded delegates that full conventional literacy should be a central goal within AAC intervention. Emergent literacy is not a satisfactory goal, although it is a good starting place for teaching literacy. We should be talking about 'Literacy *in* AAC', not 'Literacy *and* AAC' as though they were separate paths.

The next ISAAC International conference will take place in Washington DC in the year 2000 (N.B. *not* Baltimore as originally planned) and the following one, in 2002, will take place in Denmark. Start saving up now!

Communication Matters Publications and Materials

In the course of 1998, ISAAC and ISAAC UK (*Communication Matters*) have produced a range of materials relating to AAC. These are all available for purchase now. They will all be on view at the September 1998 Symposium and can be bought there (free of postage and packing costs) or ordered later from the sources detailed below.

Speaking Up and Speaking Out! Pathways to Self-Advocacy

Development of this pack, by a special task force of CM members, was funded by the Viscount Nuffield Auxiliary Fund. The pack looks at the advocacy needs of people with severe communication difficulties, who need or use AAC. It should be useful for staff development especially for those working with adults. The pack consists of two books. One is a comprehensive and detailed Handbook and 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 specific individuals with severe communication difficulties. The CM advocacy pack costs £30 (includes p&p). The book can be ordered from *Communication Matters* (see address on page 4); please enclose a cheque made payable to **Communication Matters** (invoices can be sent, if necessary).

Michelle Finds a Voice

This book was created by Sarah Barnett and Sheila Hollins, and published by the Royal College of Psychiatrists and St. George's Medical School, with financial support from CM. It is a story about a young adult with disabilities, Michelle, who is unhappy until she acquires a low tech communication aid. The story is depicted through the illustrations, there is no text (readers are encourage to find their own words for the story), although there is space for readers to add in symbols or text (and a suggested story line at the back of the book). *Michelle Finds a Voice* costs £10 plus p& p (£1.50 in the UK; add 40p for each additional copy). The book can be ordered from *Communication Matters* (see address on page 4); please enclose a cheque made payable to **Communication Matters** (invoices can be sent, if necessary).

With One Voice - ISAAC Video

Funded by the Viscount Nuffield Fund and produced in the UK by Caroline and James Gray, this is a 30 minute awareness raising video introducing the basic ideas and mechanisms of AAC. It is an excellent introduction to the field and would be great to show to parents, students from a variety of disciplines, and staff new to AAC.

The video shows scenes of aided and unaided, low and high tech AAC use and is truly international in flavour; it includes scenes from special classrooms in India. This video can be purchased at £10 for CM members (non-profit price) and £15 for non-members (both plus P &P). Funds raised from sales to non-members are passed to the ISAAC International Secretariat.

If it is a single purchase, the video should be ordered from the ACE Centre (same address as CM but please write clearly ISAAC VIDEO ORDER on the *outside* of the envelope and enclose a cheque made payable to **ACE Centre.** Or as part of a multiple order, it can be ordered through CM (see address on page 4) enclosing a cheque made payable to **Communication Matters.**

A Betacam master is available through the ISAAC Secretariat for speakers of different languages who wish to translate the voice-over: contact CM for details.

Letters to the Editor

Morphonics – Watch this space!

Morphonics is a new company formed by Rob Zloch and Neil Parry. Many of you will know us as the co-founders of Mardis and as the design and development team at Mardis for over 12 years. With the changing directions and priorities at Mardis we were recently made redundant and, after much consideration, we decided to stay in the AAC field and use our experience to produce a new range of communication aids (but don't ask for product literature yet! - we are unlikely to have any products available for the first year).

Our aim, and our motivation, is to produce innovative devices for clients in this field. This will not only mean using the latest technologies but also devising even easier access for users and facilitators so that our machines are as undaunting to use as possible. We will also need to offer a range of vocabulary and other activity packages that can be used with our devices. We are taking a fresh look at the needs of AAC users and are interested in other electronic communication routes besides the established, traditional ones. We would be happy to talk to anyone wishing to contact us on any matter concerned with AAC use (and to reacquaint ourselves with old friends who may not yet be aware of our new company).

Lastly, thanks to all those friends and colleagues in the field who have offered encouragement and advice over the last few weeks while discussing potential development paths. Your time and effort has been much appreciated.

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See What We Say

I would like to announce a new book written by Barbara Collier called *See What We Say*, a handbook of Vocabulary and Tips for adults who use augmentative and alternative communication. *See What We Say* is intended for people who have their augmentative and alternative communication systems (communication displays or devices) in place, who live in a community setting and who want to participate in community activities.

This book may assist them as well as their families, clinicians, life skills workers, support service providers to select words and phrases they might need to communicate in these settings. The book was supported and funded by The Trillium Foundation and all the proceeds go towards helping AAC users involved in vocational opportunities at Harmony Place Support Services.

'Communicating Matters' is a 45 minute videotape and accompanying training manual which aims to improve communication between personal attendants and consumers who require partner assistance in order to communicate effectively. The manual provides extensive handouts and assignments to reinforce active learning and practical applications. While the training package was designed with personal attendants in mind, it may also be useful for consumers, family members, community workers and health care professionals.

Please contact me for further details and ordering.

Nancy Haans, Program Manager
Harmony Place Support Services
132 Railside Road, North York, Ontario, Canada M3A 1A3
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Email: whaans@interhop.net

Communication Without Speech: Augmentative communication around the world - ISAAC Book

This is a brand new book written by Anne Warrick and published as No. 1 in the planned series of ISAAC publications. This attractive looking and highly readable little book is ideal for parents and for professionals new to AAC. It addresses the beginning AAC needs of people from multiple cultures who have limited resources. It concentrates on low tech communication approaches and covers such topics as 'opportunities and barriers'; 'choosing vocabulary'; 'making communication boards and books'. Case stories and examples are drawn from many countries including Poland, Ukraine, Canada, India and Zimbabwe. It is well illustrated. The ISAAC book costs £12 for CM members and £15 for non-members (both plus p&p). It can be ordered from *Communication Matters* (see address below); please enclose a cheque made payable to **Communication Matters** (invoices can be sent, if necessary).

The CM Journal - ISAAC Affiliated Publication

Finally, this journal, *Communication Matters*, has now been adopted officially as an 'Affiliated Publication' of ISAAC international. This means that as well as UK members receiving it free as part of their membership, other members of ISAAC worldwide will be able to order it through their own Chapter when they subscribe/renew their membership. So from 1999, we may be read much more widely (and we will need to think about whether to make adjustments in the style and presentation of the journal). Any views on this, or ideas?

CM's address and contact details for all Enquiries and Orders:

Communication Matters

c/o The ACE Centre, Waynflete Road Headington, Oxford OX3 8DD

CM Tel & Fax: 0870-606 5463

Email: cm@waacis.edex.co.uk

What's New?

AAC Device Review

A Review of 34 AAC devices available in the UK has been published by VOCA*tion.* The Review is divided into four sections: Light Tech, Miniature, Digitised, and Synthesised AAC devices.

Written by Gillian Rumble and Janet Larcher, the Review is available for £12 each plus p&p (£2 for up to 2 Reviews to the same address in the UK).

For further details, contact VOCA*tion,* West House, Berwick Road, Marlow SL7 3AR Tel: 01628 488911 Fax: 01628 485485 Email: voca@dia.pipex.com

WYNN Software
for People with Reading Problems

WYNN (What You Need Now) is a new reading program designed especially to meet the needs of individuals with reading difficulties, including those with dyslexia.

WYNN allows the user to view both electronic files, including web pages, and scanned pages while hearing the page simultaneously aloud to take advantage of bi-model reading strengths.

Using WYNN's intuitive colour-coded toolbars, users can change the way the page is presented on the screen to make reading easier and more pleasant.

The software was developed by Arkenstone Inc. with support from IBM, and costs from £299 excluding VAT and postage.

For more information, contact Jamie Munro, Don Johnston Special Needs Ltd, 18 Clarendon Court, Calver Road, Winwick Quay, Warrington WA2 8QP Tel: 01925 241642 Fax: 01925 241745 Email: www.donjohnston.com

Sunrise Medical to Distribute DynaVox Range

Sunrise Medical Ltd. based in the West Midlands, has taken over the distribution and support of DynaVox, DynaMyte and DSS Software products from Dynamic Abilities.

Sunrise Medical is one of the world's leading manufacturers of products for disabled and elderly people, with manufacturing plants in North & South America and Europe. In the UK, Sunrise Medical (formerly known as BEC) were the inventors of the world's first folding powered wheelchairs.

Alison James (Consultant Speech and Language Therapist), Mike McConnell (Product Specialist) and Paul Asher (Technical Support) have all joined Sunrise from Dynamic Abilities. All warranties previously with Dynamic Abilities will be honoured by Sunrise Medical.

For further information, contact David Morgan, Sunrise Medical Ltd, AAC Dept, High Street, Wollaston, West Midlands DY8 4PS Tel: 01384 446565 Fax: 01384 446568.

New CALL Centre Publications

Special Access Technology by Paul Nisbet and Patrick Poon

This is a comprehensive and in-depth training and reference package. The main book (267 A4 pages) contains:

♦ review and comparison of a range of special access technologies currently available
♦ assessment techniques for special access
♦ detailed descriptions of on-screen keyboard programs operated by switch-and-scan and pointing devices
♦ advice on choosing and adapting scanning and selection techniques

The software comprises:

♦ an interactive program on three floppy disks for PC or Mac, to demonstrate switch and scanning techniques and methods. Netscape (v3.01 or later) or Internet Explorer (v3.01 or later) is required to run this software. (The software is also available on the world wide web – link to http://call-centre.cogsci.ed.ac.uk/sat/home.htm)

Price: book £15 plus £2.50 p&p (UK); software (please state Mac or PC) £3 incl. VAT & p&p

Special Access to Computers - Video

This 25 minute video shows ways in which a pupil with special educational needs, who cannot use a standard keyboard and mouse, can access a computer in the classroom.

Price: video + booklet £18.50 plus £1 p&p (UK)

Symbol Software by Sally Millar and Janet Larcher

This book (200 A4 pages) is a resource to help with the identification of key issues and appropriate software to meet the needs of symbol users. 17 symbol programs for PC and Mac (covering the use of Bliss, Compic, DynaSyms, Makaton. PCS and Rebus), are reviewed in depth.

Price: book £14 plus £2.50 p&p (UK)

Augmentative Communication in Practice: An Introduction (2nd Edition)

This accessible but quite comprehensive book (91 A4 pages) is a new collection of selected chapters, all revised and updated, from all the various Augmentative Communication in Practice: Scotland books since 1991. It is suitable for readers with little or no previous knowledge of AAC.

Price: book £8 plus £1 p&p (UK)

All of the above can be ordered from: The CALL Centre, 4 Buccleuch Place, Edinburgh EH8 9W Tel: 0131 667 1438.

The Tana Talker

The Tana Talker is a low cost, easy to operate communication aid for people who have little ability to speak. This hand-held device weighs 350g and records up to 11 short messages (each up to 5 seconds), any of which can be played back by pressing an allocated button. There is also an alarm function. The Tana Talker costs £175 including batteries.

For further details, contact: Masterswitch (UK) Ltd, 8 Dorset Road, London N15 5AJ Tel: 0181 802 1423 Fax: 0181 800 6264.

QED
Advertisement

Balancing the Difference

Alison Futerman & Lorayne Hynd

We are speech and language therapists working at the Assistive Communication Service, which is part of Riverside Community Healthcare NHS Trust. This is a specialist centre for assessment of augmentative and alternative communication (AAC) needs. We have found that for most clients a formal, tangible and repeatable AAC system, such as an electronic aid or communication book is appropriate, but for some AAC can appear to offer little due to language and/or cognitive restraints. It is with this latter group that we intend to explore how AAC can offer this population an opportunity to expand their communication repertoire.

Reviewing the AAC literature we found that Janice Light (1988) described in detail four social purposes of interaction, these being:

1. **Needs and Wants -** regulating the behaviour of others
2. **Information Transfer -** giving novel information
3. **Social Closeness -** maintaining and/or establishing interpersonal relationships (e.g. commenting during a soap opera)
4. **Social Etiquette -** conforming to the social conventions of politeness.

A detailed examination revealed that the characteristics of social closeness bypass these clients' weaknesses and so potentially could be an area of communicative achievement. These characteristics are: interaction may be lengthy as the emphasis is on maintaining interaction; content is unimportant and predictable; the independence of the communicator is not important; the partner is usually familiar; there is tolerance for communication breakdown. These characteristics do not exist for communication for the other purposes, e.g. for information transfer, content is important, communication is not predictable, there is little tolerance for communication breakdown and the communicator has to be independent.

Light (1988) says:

"Most of our research and clinical attention...and most of the technical developments in the field have served to support the communication of needs and wants and...the exchange of information. We have assumed these needs to be of greatest importance and have neglected to consider the need to support and develop social closeness. It is time to question these assumptions...(as)...the communication of needs and wants may at times result in impediments to the goal of social closeness"

Therefore if we fail to consider social closeness, then we may be neglecting a person's only achievable communication goal, and so reinforce their communication weaknesses without building on strengths.

The importance of developing social closeness for those with communication impairment becomes more apparent by looking at the work of Kagan and Wolfensberger.

Acquired Disability Perspective

Kagan (1995) states that, *"the ability to engage in social conversation is key to revealing competence. When a person has difficulty in talking and understanding what is said, it is hard to 'see' the active mind; it is difficult to envisage the capacity to make life decisions; and it is difficult to regard the person as a social being"* (p17). This highlights the need to find some way in which the person can socially interact with others equally.

Kagan & Gailey (1993) state that, *"Aphasia affects both the ability and the opportunity to participate in conversation"*. By creating an environment which circumvents the individuals communication difficulties, one aims to provide the opportunity for participation.

Working on developing opportunities for interaction for the purpose of social closeness should to some extent help a person to approximate social conversation and so give them the opportunity to reveal their competence. Kagan (1995) discusses how speech & language therapists should work with communication partners, focusing on the nature of transaction (exchange of information, opinions and feelings), and interaction (social aspects of communication). She claims that traditionally therapists have worked exclusively on transaction, and that instead should aim to provide structured opportunities to reveal communication ability.

Learning Disability Perspective

Wolfensberger's (1972) principles of 'normalisation' (Social Role Valorisation), achieved through the five accomplishments, state that:

"the use of methods and settings which are valued and familiar, to offer each person life conditions and opportunities which are at least as good as those of the average citizen, and as much as possible to enhance and support each person's behaviour, status, and reputation"

A person with a communication problem may not have an equal opportunity to communicate. When interacting, turntaking may be dominated by the able partner. Activities which encourage communication for the purpose of social closeness can create an opportunity where both partners have equal communicative status. This can result in achieving a more successful and comfortable interaction which should perpetuate and enhance communication.

From Theory to Practice – How to Facilitate Social Closeness

Although some people may not be able to achieve social communication as spontaneously as they would if they were verbal or a competent AAC user, the purpose of social closeness can be approximated by setting up an environment which facilitates communication.

The use of mainstream participatory games such as card games, Jenga, Buckaroo, can create an environment that fosters social closeness. However, careful thought must be put into game selection. A game in this sense is defined as an activity which requires more than one person; is stimulating and motivating for all parties; and demands skills that all parties share equally. This implies that any communication needed to play a game can easily be represented on a communication chart and that this chart is used by all players.

We have found that when playing a game with our clients, social conversation was enjoyed without the verbal person hogging the conversation. Innate in the process of playing a game is a restricted context, a rapid shift of turns, and a shared referent. It is because of these aspects that communication becomes easier, there is room for banter, sarcasm, competitiveness, etc., without the need for verbal communication. However, some clients may need assistance to achieve this, such as through use of a communication chart. When both partners use a communication chart specifically designed for the game, the communication burden on the verbal partner decreases and allows both parties to function on an equal footing.

To date no formal research has been carried out. However, informal observations through use of video, and participants comments have indicated that the process of playing a game can help people establish an interpersonal relationship. It can help people increase their confidence and skill in communicating with one another, thus perhaps allowing the non verbal person to reveal competence that is hidden due to the communication difficulty.

We envisage that communication for the purpose of social closeness is not a therapy but becomes a way of spending time 'chatting' with people with a severe communication impairment without this impairment always being made apparent. The strength of this becomes clear when you spend time one-to-one with someone with a severe communication impairment and no formal communication system. The verbal partner will find it difficult not to hog the conversation to alleviate the long silences. While playing a game the communicative burden is shifted and communication becomes a natural two way process without the communication impairment affecting the quality of the interaction.

Games are also useful to encourage peer interaction. At a day centre for people with learning disabilities, games were introduced during a period of leisure time. Following this the deputy manager stated that, "It was fantastic to see the interaction - especially with those people who don't usually interact".

Case Study

P. S. is a 54 year old man with moderate learning disabilities. He uses mainly one word utterances to communicate, but this may not be intelligible to people who do not know him well. P.S. will initiate communication, but conversation is difficult to maintain as he may only nod or say yes/no to a question.

Situation A

Therapist: Hi, how are you? [+sign]
P.S.: Hello [Holds out hand in greeting]

Therapist: Where have you been today?
P.S.: [Smiles and holds onto therapist's hand, looks briefly at therapist but then around the room]
Therapist: Have you been out?
P.S.: [Pats therapist's hand, looking around the room]...

This interaction lasted approximately one to two minutes.

Situation B

A game called 'Timber' has been set up with symbol/picture chart of instructions. The following interactions from P.S. were observed:

- P.S. patted a peer on the back (to congratulate him).

- Pointed to a symbol on the chart to regulate a peer.

- Gave the dice to a peer - to indicate his turn.

- Followed the lead of someone else - clapped to indicate well done to a peer.

- Put his hand over his eyes in anticipation of tower falling.

- Made eye contact with peers.

- Accepted dice from a peer and took his turn.

- Waited and watched while others had their turn.

This interaction lasted for approximately 20 minutes until it was time for lunch.

The above situations illustrate the postive effects on interaction that a game can create. It is the therapist's role to discuss with our clients and their potential communication partners how they communicate for the purpose of social closeness and to give them ideas of ways to approximate this within the restraints of the communication difficulty.

A training video to be used with clients, carers, students, staff teams and other professionals may be purchased from the ACS. The video highlights the concept of social closeness and gives ideas of how to develop an environment to foster this.

It can be beneficial for a person and their carers to take time out of their normal routine to reflect and place importance on the above issues. This may be done by referring a person to the ACS. In this instance assessment would focus on raising the profile of a persons communication strengths and exploring ways in which communication opportunity and repertoire can be expanded.

Alison Futerman & Lorayne Hynd
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Fulham Palace Road, London W6 8RF

REFERENCES

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Wolfensberger (1972) In Van der Gaag, A. & Dormandy, K. *Communication and Adults with Learning Disabilities.* (1993) Whurr Publishers London

Helping People with Severe Communication Difficulties to Express their Views: A low-tech tool

Joan Murphy

AAC users may often find that their AAC systems do not contain the range of vocabulary needed to discuss abstract concepts or issues which they do not often address in everyday conversations. This can be a particular problem in the context of interviews – for example those conducted by the AAC research team in a project looking at AAC users' interaction with their peers in a residential setting. In order to address this problem, the team developed a framework using pictures from the computer program Boardmaker™ as an interview tool.

Three sets of pictures were developed as follows:
1. To illustrate the issues which the researchers wanted to include in the interview (e.g. communication at meal times; why AAC users tend to ignore their peers).
2. To depict different emotions in order to allow AAC users to indicate their general feeling about each issue addressed. (e.g. angry, bored, very happy).
3. To represent possible positive and negative influences on each issue (e.g. number of people, nature of conversation topic, reactions of others).

Each picture chosen by the interviewee is arranged on a textured mat and attached by Velcro™ to build up a visual representation of how they feel about each issue.

The following illustrations show examples from the research project of the 'mats' in use to obtain an AAC user's views on why the residents where he lives tend to ignore each other.

The negative reasons he gave were:
- the topic of conversation is often boring
- other residents often have negative feelings about communication aids
- residents rarely offer to help each other
- it is hard for other residents to interpret a low-tech system
- there are often too many people about
- the seating arrangements and positioning of people in wheelchairs makes it hard to communicate with an AAC system

The positive things which he thought could improve the situation were:
- using pre-stored phrases
- being given more time

He felt that the responsibility for changing things belonged to himself as well as to staff and other residents. Feedback from the project indicated this interview tool significantly enhanced AAC users' ability to express their opinions.

At the Communication Matters Symposium workshop the framework was demonstrated and participants had an opportunity to experiment with it. The issue discussed at the workshop was, *"What do feel about your lunch break at work or at your day centre?"* The use of the mats generated some lively discus-
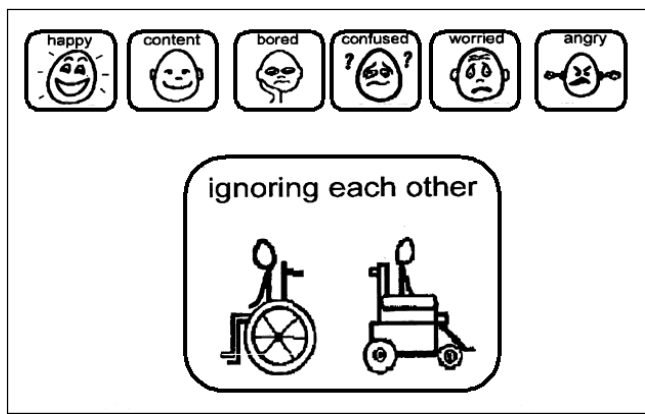
Mat A The AAC user was asked about the **issue** of residents ignoring each other. The emotions pictures allowed him to indicate how he felt about this. He chose the **worried** picture.
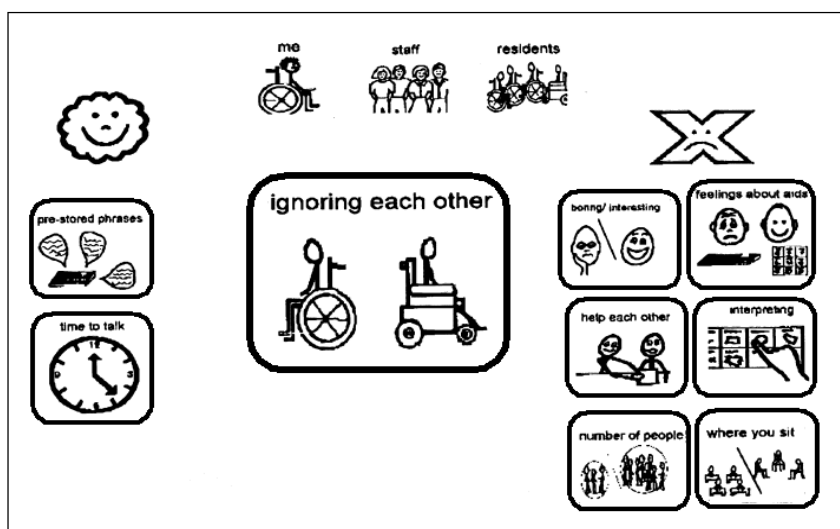
Mat B This is the final Mat with pictures selected by the AAC user. It shows his views about why residents ignore each other and what he thought could be done to improve the situation.

sion and feedback indicated that participants found the method motivating, stimulating and fun and some people felt that they would definitely try to improve their lunch times as a result! One participant who used augmentative communication commented *"I have great difficulty expressing my views – with this no bother!"* Encouragement was received from the participants to develop the mats further and a package has now been produced, titled *'Talking Mats'* which includes a booklet explaining the method and an accompanying video showing how three people with severe communication difficulties used the mats.

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Access to Four Colours = 13 Activities (at least!)

For Beginner Alternative Communication Users of All Ages

Jane MacKenzie

This article contains some *basic* ideas which can be used with Alternative Communication Users at *almost any level of complexity.* The only limitation is the imagination of whoever decides the vocabulary to be used!

The Master board

You need a large Master board divided into four equal parts and coloured red, yellow, green and blue as shown below. The board should be displayed where it can be seen clearly.

RED	YELLOW
GREEN	BLUE

A fifth central area could be included (as in the diagram below) to enable the User to show "I don't know" or "nothing." Objects are not placed on this colour during the activities.

RED	YELLOW
GREEN	BLUE

You also need to have **one or more** of the following:

1. Single sheets of each colour should be displayed round the room for those who eye point.

2. A colour board with all four (or five) colours should be Blu-Tacked to individual wheelchair trays.

3. One or more Voice Output Communication Aids, correctly positioned for use and the means of accessing them checked for any problems.

Then you are ready to...

GO FOR IT…POWER TO THE USER!

Ideas for Thirteen Activities

Some of these ideas work best in a one-to-one situation, while those marked with an asterisk * can be used in a group.

The helper puts objects, pictures, symbols or words on the large Master board (not on the individual's board); with very young children start by putting objects on the child's board.

1. Where is it?

A. Put an age appropriate object on each colour. "The teddy / beer glass is on the colour…" or "What colour is the teddy / beer glass on?"

B. Put balloons of same colour as each square on board. User chooses which one to be blown up and let go. For best results put noise makers in the balloons!

2. Sound Lotto

Use commercially available Sound Lottos – for example, animal sounds or make your own (TV themes, household noises, etc.). Stick a pictorial, symbolic or written answer on each colour. (HINT: number the pictures so you know which order they come on the tape!)
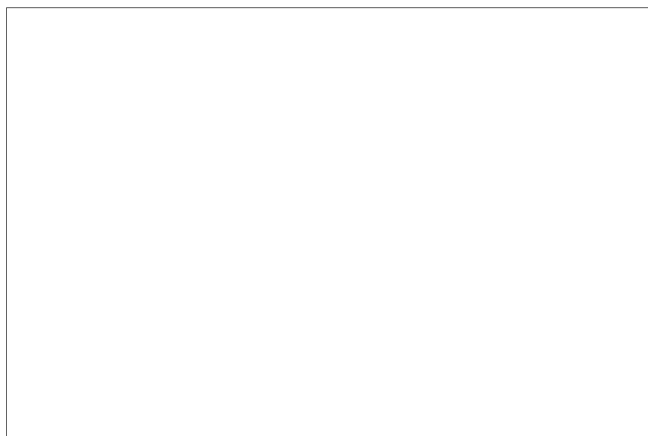
Sound Lotto with self control of Lotto tape using a CALL Mains Switcher - Alexander Hassett aged 9½

3. Mastermind*

Stage an age appropriate general knowledge quiz. Use magazine pictures, small objects, photos, line drawings, etc. for answers.

4. Name Chain*

Everyone is given a red, green, blue, or yellow coloured sticker. Someone indicates a colour (e.g. red). The nearest person with a red sticker has to introduce themselves/ be introduced, choose another colour and is then out. The nearest person with that colour follows, and so on. Everyone gets caught in the end!

### 5. Grub Galore!

A. Put a sweet, raisin,chocolate polka dot, biscuit fragment, etc. on *each* colour. What colour would they like to eat?

B. Put something nice on two colours and something not particularly nice (e.g. bread, cocoa powder, flour, custard powder, pickled cabbage, slice of gherkin) on two other colours!

C. Put desirable item on just one colour.

6. Building Site

You will need lots of coloured bricks of the four colours.

A. User directs choice of bricks for someone else to build a tower until it falls down.

B. Put a 'knock it down' symbol on one colour, so user controls the destruction of the tower.

C. Four people each with a pile of all of one colour of bricks. User chooses who can build the tallest tower. Should lead to lots of rivalry! *
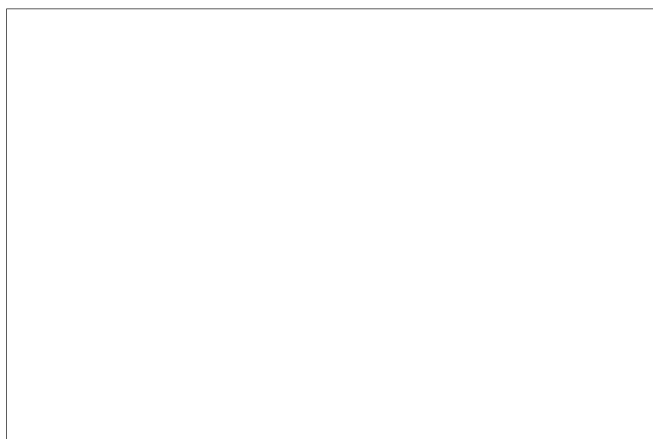
Building Towers - Nicholas Simmons aged 5½

7. Dressing Up

Put rings, necklaces, bracelets, ear rings, hair slides, make up etc. on the squares, User has to tell helper what to put on.

8. Forfeits*

Put written or pictorial forfeits on each colour. User chooses a colour for each person in the group.

9. Bookworms

Put a book on each colour. User chooses which one to be read.

10. Rogues Gallery

A. Put family/friends/class photos on each colour. User has to find photo of X.

B. Put a picture of a famous person, film star or story character on each colour. User shows the colour of the person the helper/group has to name.

C. Put photos of family on each colour.

User chooses who can go next in a game, or who has to go to bed first, or who has to do the washing up, or who has to play a game with the User, etc.

11. Face the Music*

A. Put symbols of four nursery rhymes or pop songs on each colour. User chooses what the group has to sing.

B. Use symbols of musical instruments. User chooses which instruments go to each person.

12. Give Us a Clue*

Cut out pictures from The TV or Radio Times. Put one on each colour. User has to select the programme for someone to mime. User could also be responsible for the yes/no answers.

13. Top of the Pops

A. Put four tapes, or four CDs on each colour.

B. Put numbers on each colour so User can choose which track to listen to.

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Back into the broom cupboard?

Some findings from discussion with users of augmentative and alternative communication systems

Mike Clarke & Katie Price

1. Introduction: The CASTLE Project

The authors are currently involved in a research project entitled *Evaluation of Speech and Language Therapy for Children using Communication Aids* – CASTLE Project (Communication Aids and Speech Therapy in the Learning Environment). This study has a central aim of documenting and evaluating the role of school-based speech and language therapists in developing effective use of Augmentative and Alternative Communication (AAC) systems for children with physical impairments.

One aspect of this investigation has been to explore communication aid users' opinions and personal experiences of speech and language therapy support in school. During the 1997 *Communication Matters ISAAC UK Symposium* at Lancaster University members of the CASTLE project were able to meet with a group of young adults who had been communication aid users for some years.

The opinions expressed by members of this group question the wisdom of some commonly accepted models of best practice for working with AAC users. Insights presented may have wider implications for working with other client groups in schools.

2. Models of Service Delivery

Speech and language therapists (SLTs) are practised at structuring services in response to the demands of clients with a broad range of needs. Within paediatric services, children may receive intensive or regular support on an individual basis, or in groups. Alternatively, therapists may adopt an indirect, consultative role working through families and/or other professionals. Speech and language therapy may be delivered in school, home or clinic settings, and the time for each episode of care will vary.

The style of case management is determined by characteristics of the client, including the severity of disorder and its prognosis. Efficacy studies and other research findings, where available, are also influential in planning models of service provision, for example; the Hanen Early Language Parent Programme, (Manolson 1985). Additionally, insights through theoretical models may influence clinician's decisions. The emergence of pragmatics as a specific linguistic domain and the publication of models for specific pragmatic assessment and clinical intervention (Prutting & Kirchner 1983, Schulman 1985) have been critical in focusing therapists' energies on the facilitation of social interaction skills.

3. Service delivery and Augmentative and Alternative Communication (AAC)

In the field of Augmentative and Alternative Communication, models of service provision have been influenced by the model of communication proposed by Janice Light (1989). Light has categorised core skills essential for the development of communicative competence in AAC systems:

- **linguistic** skills - syntactic and referential aspects of communication including learning the meanings of pictures and symbols

- **operational** skills - technical skills required to operate the communication system (e.g. learning the layout of symbols and symbol accessing techniques)

- **social** skills - knowledge, judgment and skills in social rules of communication

- **strategic** skills - compensatory skills and strategies to allow effective communication when the limitations of the communication system restrict the user

Whilst therapists recognise the need to work in all four areas, contemporary models of service provision suggest a strong bias towards training functional communication skills in an interactive environment. Much of this work takes place in **group** settings. Therapists organising AAC group work are likely to be stressing the value of developing **social** and **strategic** skills. This typically involves targeting such skills as topic introduction and maintenance, turn-taking, social greetings, and techniques for explaining system use or dealing with misunderstandings. Less evident, perhaps, during such group sessions, will be goals relating to the **linguistic** and **operational** skills outlined above.

In addition, changing educational practice has placed emphasis on the inclusion of children with special needs into mainstream schooling. For children using AAC, it is possible that even greater focus was placed on the need for communication skills and systems which would provide them with the means to access the National Curriculum and to develop peer relationships.

The focus, then, has been on pragmatic based intervention, and on therapy that targets the social, interactive aspects of communication: often this will seem most easily delivered to AAC system users in groups. By 1992 Beukleman and Miranda summarised observed changes in service delivery as follows: "it is now well established in the AAC literature that much, if not most, of the focus of intervention should take place in natural contexts such as classrooms, homes, community settings, and work places."

4. User Perspectives

The CASTLE Project will look at the different ways speech and language therapy services are made available to children and young people using AAC systems. As part of this investigation, the authors chaired a discussion on the models of service delivery experienced by a group of young people using AAC equipment. Eight young adult AAC users were

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asked open questions about the support and intervention they had received whilst at school. They were all voice output communication aid users, with a range of machines, vocabulary programmes and access methods. The discussion was transcribed 'on-line' and examination of the discussion points revealed a number of different themes.

A summary of the discussion is presented here with some further comments on the implications for AAC practice:

- Members of the forum had strong feelings about how therapists and communication aid users should work together, with users opinions about their own needs being taken into account. There was repeated emphasis on the importance of *individual working*, with acknowledgment, and some resentment, of the restrictions on speech and language therapists' *time*.

- *"I think the old thing, being open to change and having time to give which I think is harder now."*

- *"I'd like therapist to see me everyday for half an hour."*

Communication aid users delivered a strong message concerning service provision:

> *"This idea about not taking children out of the room is a get-out."*
> *"Therapists not having time to give."*
> *"I think groups are boring because everyone works different(ly)."*

Communication aid users wanted the focus of therapy to be away from social learning and towards individual's needs to master their devices, to learn the "nuts and bolts" of selecting vocabulary and forming grammatical, interpretable sentences:

> *"Learning where the words are stored."*
> *"Making sentences."*
> *"Teaching strategies for using the machine."*
> *"(learning) how to build up sentences for chat."*
> *"Myself I think sentences because some people can't make sentences OK."*
> *"Short cuts, abbreviations."*

5. Discussion

Clinicians have selected service delivery models for children learning aided communication systems. It has not been possible to base decisions on established models or to draw from findings of efficacy studies; the relationship between outcomes and intervention is poorly researched for children using AAC equipment. In consequence, models of working have been constructed from the following:

- theoretical models of AAC skills development (Light, 1989)

- predominant and current linguistic "themes" (pragmatics) which have added an expectation for natural context-based working in classrooms, and an increased awareness of the significance of social aspects of language use

- changing educational practice, resulting in the integration of non-speaking children with their verbal peers

Generally speaking, it seems that we have developed skilled **group** working practices in an attempt to replicate "natural" contexts. This assumption is summarised by Musselwhite and St.Louis: "a dichotomy should not be assumed; group interaction should not be deemed more 'natural' and one-to-one instruction 'unnatural' " (1988 p.26).

It is worth noting an additional effect of group-working: anecdotal evidence suggests that clinicians choosing to conduct group-based therapy experienced additional, perhaps unforeseen, benefits. That is, regular group work enables therapists to sustain relatively high levels of direct child contact with increasingly unmanageable caseloads. It has been claimed that group work offers an effective way of working: "freeing more time to work with children with more severe needs whilst providing therapy for all" (Bell and Saunders 1970). This claim might well be sustainable, if it were possible to demonstrate long-term changes made during the period of group-work intervention. Onslow (1988) has suggested, however, that group work is only effective for carefully selected groups of children.

The assumptions of group-work benefit have been reinforced by the fact that, as yet, clinicians have no established framework for working in classrooms with **individual** children using AAC systems. SLT's who are investigating such techniques work to observe, monitor and re-shape tasks and activities to ensure full participation for the child using aided communication. In addition, the role of the SLT in the classroom would then also involve modeling, explaining and monitoring this facilitation for other staff, especially those staff most closely involved with the child.

Increasingly, in Health Service provision it is suggested that the choice of an appropriate service delivery model should incorporate the opinions of the **clients** of that service. (Miller & Roux, 1997). This may not be a feature of accepted AAC practice. Clients' perspectives are often documented to inform/illustrate outcomes, but decisions regarding service provision are not generally made in response to clients' preferences.

Our discussions with older AAC users have highlighted, however, that the approach they would most favour does not incorporate classroom-based working; be that group or one-to-one. The opinion is quite clear that the best way to learn an aided system is through direct and intensive work, away from the classroom, working on operational and linguistic skills.

It was also clear, as these comments illustrate, that the AAC users in this group felt they had valuable contributions to make in planning their own communication skills development:

> *"Listen to us."*
> *"Ask."*

Of communication groups: *"By the time everyone has said hello it's time to go."*

Of barriers to communication:

> *"Not been taught how to use machine."*
> *"Listen to people and don't think just because been to university know everything."*

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The CASTLE Project:
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EASIAIDS
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Funding Communication Aids
A New Way Forward

Emlyn Williams, Janet Keenan & Helen Whittle

For three years, the Aintree Centre for Electronic Assistive Technology has overseen the prescription and the supply of environmental control systems (ECS) throughout North West England. Serving a population of some 6.6 million people, the Centre maintains 563 systems (85 per million of population). Systems are provided only for those who are severely disabled, i.e. so disabled as to be unable to manage standard switching systems and needing to use a scanning system by means of a single switch. In the opinion of specialist medical assessors it must be likely that an ECS will enhance their quality of life or reduce the burden imposed upon carers. [1]

Multiple sclerosis	30%
Cerebral palsy	12%
Muscular dystrophy	12%
Traumatic tetraplegia	10%
Motor neurone disease	7%
Rheumatoid arthritis	5%
Cervical myelopathy	4%

Table 1. Clinical diagnosis of ECS users (563 = 100%)

Many ECS users experience communication difficulties and it therefore seemed proper that monies dedicated for their usage should be channelled into the provision of communication aids for them whenever such equipment was indicated.

A pilot study was set up in collaboration with the ACE ACCESS Centre at Oldham. Any of the eight specialist medical assessors in North West England could refer individuals with communication difficulties who were:

1. Eligible for the prescription of an ECS
2. Not in full-time education

In order to build on experience with a limited range of equipment, it was agreed that whenever possible, prescription would be limited to one of the communication aids in the Lightwriter range, the Messagemate range and specialist computer software.

During the six months of the study nine individuals were referred for formal communication aid assessment by the ACE ACCESS Centre. Referring to Table 2, in seven instances communication aids were provided in accord with the ACE ACCESS Centre recommendation, four being funded by Aintree and three (shown with asterisk *) being funded by family or charitable bodies. In two instances (8 & 9) Aintree was not prepared to underwrite the whole of the ACE AC-CESS Centre recommendation. In each case it felt that the equipment suggested was too complex and too fragile to withstand the day by day damage that it could expect from users and carers.

Diagnosis	Recommedation	Provision
1. Multiple sclerosis	Lightwriter	Lightwriter*
2. Motor neurone disease	Lightwriter	Lightwriter*
3. Multiple sclerosis	Messagemate	Messagemate
4. Spinocerebellar atrophy	Messagemate	Messagemate
5. Traumatic tetraplegia	PC + software	PC + software*
6. Cerebral anxoia	Powerstation PC	Powerstation PC
7. Multiple sclerosis	Alphasmart Pro	Alphasmart Pro*
8. Brain stem infarction	Chailey system + Messagemate	Messagemate
9. Cortical atrophy	Orac + Messagemate	Messagemate

Table 2. Recommendation and Provision of Equipment
(* funded by family or charitable bodies)

This study, which is on-going, has proven to be very valuable because:

- It enabled a severely disabled group of individuals to gain access to communication aids which might not otherwise have been available to them.

- It demonstrated that the supply of communication aids need not be prohibitively expensive.

- It highlighted the importance of joint assessment procedures with clinical disciplines working together to the benefit of system users.

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Janet Keenan, Manchester Royal Infirmary
Helen Whittle, ACE ACCESS Centre, Oldham

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International Society for
Augmentative and Alternative Communication

Lightwriter
(Toby Churchill)
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A Pilgrim's Progress

Denise Gubbay & Lindy van Creveld

The first intimation I got that there was something wrong with my speech was about three years before it was diagnosed. I was teaching myself Italian. I had returned to it after a long lapse working overseas. I found I couldn't roll my Rs as I had been wont to do. This made me look closely for other peculiarities. I found I couldn't say my whole name over the telephone when introducing myself to strangers. Over the next weeks, I noticed many other words and phrases that were slurred I did not tell anyone for several reasons. Firstly, I believed that ignoring conditions often enabled them to slip away, unnoticed. Another reason was that my close friend and partner, whom I loved dearly, was dying of cancer. I knew she would worry painfully if she got even a hint of this. I suppose another reason was that I did not want to make myself self conscious because that would make the condition worse. In short, I did nothing. I lived in a kind of limbo, attending to my friend and substituting words and phrases, for those I had difficulty articulating. I continued like this for about a year, fighting off panic. Once when my friend visited a specialist because **her** voice had weakened, I wanted to shout, "Me too. Please look at me."

> When I finally realised I was losing the ability to speak at all my mind froze. It WASN'T going to happen to me. It COULD NOT happen to me.

Of course, I didn't. I helped my friend with her speech therapy, secretly trying out the exercises myself but she didn't notice. In fact nobody did.

I first met D when I was asked to assess a good friend of hers who was having difficulty with her speech due to her cancer having affected one of her vocal cords. In this context, my impressions of D, were of an assertive, articulate, no-nonsense woman who was deeply caring and overridingly positive. Some months later, a referral arrived in the post, and, as is usually the case, I sent out an appointment for 10 days time. I did not, initially put name to face, until D rang up, asking if it were possible for her to be seen sooner. It turns out that she had, for many months, experienced deterioration of speech, and more particularly voice, but had not sought help as she was more concerned with the health and welfare of her friend. So when she arrived for the first appointment, she was not only in the acute stages of grief, but had high levels of anxiety about her own condition which had built up over the months.

D had sought a number of medical opinions including ENT and Neurological. The history and evidence at that stage was suggestive of 'pseudobulbar palsy' resulting from two lesions (strokes) and therefore, a relatively stable and static condition. I felt there was an overlay of "functional voice loss" relating to her emotional state which may account for the day to day variability she was experiencing. We embarked on a course of therapy. Over the months, a number of 'warning bells' began to sound. D's presentation was not consistent with her medical diagnosis- there was a slow but perceptible deterioration in her ability to make clear sounds and to control her voice. I knew that this was not due to lack of effort on her part and was aware of her desperation to find explanations, answers and a positive outcome. I too, felt lost — a therapist working in an acute hospital where the "medical model" reigns supreme, trying to make sense of what I heard and saw in this patient. D decided to seek alternative treatment and I did not see her for the next three months.

When I finally realised I was losing the ability to speak at all my mind froze. It WASN'T going to happen to me. It COULD NOT happen to me. I would wake up one morning to find that it HAD NOT happened. I left the Hospital because my therapist did not believe in magic. I have always thought that a combination of hard work, hope and magic generally could cure any ailment, particularly one that had, as yet, no name. My speech WOULD be restored to me.

During those days, I compensated wildly to try to hide the slurring of my words from other people and during the evenings, I walked about my flat reading my favourite poems aloud to myself I made a list of words which seemed to me to be particularly distorted and practised them. And I cried bitter tears of grief aloneness and despair at the futility of my existence without speech.

When I use the word **aloneness,** I was not alone in the strict sense of the word; there were people round me, trying to help, but they were outside my ring of consciousness; I could hear them; I could feel them but their voices were distant, overlapped by the voices inside my head. Physical contact in the form of hugs, I found particularly painful and alienating.

What did people know about what I really felt. What did they care? They all had their own lives to lead. Their words of comfort were merely a sign to them, that they were doing something. Their words had nothing to do with me. And so I was alone.

I thought many times of ending it all. The thought that I would never talk again, never read poetry aloud again, never sing again, never again discuss heatedly the burning issues of the day, never project my personality through word and smile again, was more than I could bear. And I felt so useless. I would never be able to influence people or events again. I had no identity. I was merely the object of pity. I was NOTHING any more.

After I had tried various kinds of 'alternative' treatments, I returned to the Hospital again and to the therapist.

When D returned to me, she came with the news that she had sought a second neurological opinion which had raised the possibility of MND. The role of SLT in the face of a diagnosis of a progressive condition must include a number of aspects. We need to establish what the person has been told, and what she understands about the condition; we must make a detailed assessment of oral function, speech and swallowing, and make tentative predictions about the likely future needs of the person, and plans to meet those needs. D's speech had deterio-

rated markedly in the three months I hadn't seen her, and I knew there was no time to waste in addressing the matter of 'alternative' communication.

The SLT Department at RH has a range of communication aids which are loaned to patients on a long term basis. We also have access to the Assistive Communication Service at CXH, for those patients with more complex needs. I knew D was one such patient, and that I lacked the expertise to recommend the most appropriate aid in a way that would encourage her to make the best use of it. I had had several experiences of failure in this aspect of my work; patients would, rather reluctantly, approach one of the keyboard-type aids which I would try rather dismally to demonstrate. I might be able to persuade them to take it home and give it a try; more often than not, the Aid would be returned to me within a few weeks. These people were then left to retreat into a world of isolation with only enough communication for their most basic needs, and the smart sophisticated technology would be left gathering dust on the shelf.

> *At first the Lightwriter intrigued me. I couldn't wait to see how my grandchildren related to it.*

I was therefore relieved when an appointment arrived promptly for her and I to attend the ACS.

*T*hrough my therapist, an appointment was made for me at the Assistive Communication Service. In a few days time, I received confirmation of the appointment from the department itself I was filled with trepidation. What was going to happen to me? I was relieved when I had to cancel the date due to a prior commitment.

*As far as I could judge from the appointment letter, this meeting would be an assessment of what I **could** and **could not** do. I was fearful and this feeling turned to anger. **They** were going to assess **me**. I thought, "If they think they are going to assess my needs, they will have another think coming. It is I, who will assess what they have to offer in the light of my perception of my needs."*

Then I noticed that there would be several people present at this session so that it would not be easy for me, without speech, to make much impression. I thought a lot about it. I knew I must break through the barrier of being 'just another patient' and make them see me as a person with SKILLS as well as NEEDS. I had to take control of the meeting. To this end I prepared a short written summary of why I needed the best device they had to offer.

I will admit that all the people at this session were kindness itself. They greeted my written summary with genuine approval and were most attentive to my attempts to explain myself further. They showed me several devices but after I had seen the SL 35 Lightwriter with DecTalk, my mind was made up. This was the most versatile machine. I could see myself using it. All attempts at demonstrating any other device were met with a flat "No". I knew what I wanted.

The SLT's at this meeting are expert. They are fluent in the use of the different aids and they presented them as versatile and positive solutions to the problem of deteriorating speech. They did not have to recommend one. D chose the aid she wanted.

Funding of communication aids is something of a lottery; and the usual route is to approach as many agencies as possible —

Neurologists and GPs, Social Services, Local business and charities — and hope that funding is forthcoming without too much delay. The patient can be protected' from this to a degree, but it does create additional stresses and waste precious time. The SLT Department at HR therefore make strenuous efforts to buy the necessary aids from the equipment budget, and on this occasion, we were able to upgrade one of our existing Lightwriters to the requirements specified by the SLT's at the ACS. A. came from the ACT to D's home to demonstrate the basics of how to operate the Dectalk. She then set up a series of phone appointments so that D could practise RESPONDING to calls coming in and INITIATING those calls she needed to make.

And now the real challenge. The next few weeks saw spirits soar and plummet and the potential and inadequacies of the Lightwriter became apparent.

*A*t first the Lightwriter intrigued me. I couldn't wait to see how my grandchildren related to it. Of course, they were excited and eager to try it out. But when I was alone with it, it became a symbol of my incapacity and I hated it. It reminded me of the world I had lost and, at times, I felt like hurling it against the wall.

*But I used it; at first cautiously and functionally and at home. I was embarrassed by it. I wondered what people thought of me and it. ME AND IT. WE were inextricably bound together forever. That idea appalled me. This strange device was actually my voice. This realisation and others were to flood my mind for what appeared to me to be an eternity. Actually, the transition period was a brief one. I had to move from the **past** to the **future** in a few short days. I could now not speak at all.*

*And then gradually, I began to see the Lightwriter as my only chance to survive. I began to experiment with it. One day, I took it down to the corner shop and put it down on the counter. I not only conducted my purchases with it, I actually gave a demonstration. **I realised then, that the only way I could sell it to myself was to involve other people.***

*But I still had a long way to go. People used to ask me if I had **accepted** my plight yet. This used to make me very angry. There were so many things to come to terms with. There was the lack of spontaneity: I could not now express myself spontaneously and for a person for whom spontaneity in thought, word and action were hallmarks of her personality, this was hard. To accept that, would mean that I had to develop a whole new personality. I still felt **me** and had no wish to feel otherwise so I wanted to erupt whenever I heard that vacuous question.*

I know that I have not and will not, accept that I will never speak again. It is precisely this non acceptance that keeps me strong and fighting. Many professionals don 't know this. Their measure of the viability point in each patient is the degree to which they can accept their condition. By accepting, I think one dies, metaphorically speaking. I have had to adjust, yes. To make a successful adjustment, is a voluntary, creative and positive act. To accept, is involuntary and negative; and I think it must inevitably, kill off the human spirit. Perhaps the break through point occurs when one can distinguish between the two A wise and meaningful use of terminology by all con-

cerned, would help the sufferer. But I will speak of that later.

It was a journey towards myself that I needed to make and I could plot where I was on the journey to adjustment by, my dreams. I will quote one here because it shows the agony of the transitional phase.

I dreamt that I woke one morning and found I could speak again. As I called my friend, feelings of gladness and contained excitement were sweeping through me. Yet all the time I was realising I was asleep and that what I was experiencing was a dream. It was as if there were two of me: one talking, laughing and planning and the other waiting to wake up.

I cannot describe how I felt the following day and for days afterwards. I had been through the whole emotional cycle in a few short moments; the dawning realisation that I was 'whole', again, the slow exultant thrill, the violent excitement, the sharing, then the creeping nagging doubts, the deep sense of foreboding, the dreadful knowledge, and finally the deep despair.

At the time of that dream I thought I had been **managing** myself rather well. An experience like that dream, saw the condition **managing** me. Feelings of utter despair turn me into a dual personality. Temporarily, I lose part of myself I see myself as if from the outside, in negative terms, using just such language that I know people on the outside of me, use to describe my symptoms. I cease to see the distinction between myself and my symptoms. I become my symptoms.

My very negativity made me turn away from the Lightwriter and inwards towards myself. This period lasted for days. Still strong within me were the images of my **old** self. Part of me knew that I had to hang onto those, because if anything was the real me, that was, albeit sans voice. But for a while, I was in a kind of hinterland, betwixt two realities, neither of which I could fully recognise.

But, in my organic way, I surfaced once more and took a long hard look at my lifeline, the Lightwriter and took it up again.

As D became more confident at using the machine, it became evident to me that she was drawing on a wealth of past experience — her work in teaching and analysing Communication has equipped her with an understanding of the multifaceted and complex nature of communication. One of the key factors in successful use of AAC is the adjustments that need to be made by the 'communication partner'. D knew this and took on the responsibility of guiding, not only her friends and family but me too!

A person using a Lightwriter is totally reliant on **words** to get the message over. Add to this, the fact that in the English language a lot of the meaning is carried through **stress** and **intonation,** we begin to see how difficult it is use the Lightwriter to its full potential.

Another important thing to remember is that the use of this ingenious device is only as good as the other party (not dependent on it) will allow it to be. Goodwill and good friends are essential. I have now become much more confident, am no

longer embarrassed and I **can** communicate. I have found that although my conversations with people are now less animated than formerly, they are more profound.

I have arrived at a point, I can accept. I know I can go forward in my life. I know I can still achieve but I would never have reached this point, had I not had a therapist who understood what I was going through.

Anyone, like me, who has suffered the loss of an important faculty like speech, suffers from side effects which are more serious than the condition itself The main side effect is the loss of identity. A person like me who has worked in verbal communication all her working life, **feels** it but **understands** it as well. Others, without my background will feel it just as sharply but will not understand that they have a RIGHT to fight against being dysfunctional. Consequently, they will make no demands of the system in case they are being thought of as a 'nuisance'.

> *I can only say about my experience that I have had the kind of support I needed...The support I received was truly enlightened, tailored always to my needs as a **person.***

I can only say about my experience that I have had the kind of support I needed. I also felt, at times, a 'nuisance' but I was never allowed to get away with harbouring such thoughts. The support I received was truly enlightened, tailored always to my needs as a **person.** My condition was never the **focal** point of our meetings. And for this, I was truly grateful. Why would I want to dwell on my inability to speak when my identity was slowly diminishing?

Now that I feel stronger and able to use the Lightwriter without feeling that I am a lesser person, I realise how valuable such a support service is.

I have mentioned the service I received and through the Lightwriter I have been encouraged to talk as much as possible within a given context. I have made a few points of criticism and have been asked to incorporate these into this article.

Sometimes, the language, therapists use with their patients, is less than helpful. It is language that describes **symptoms.** It is alright for therapists to use such language when talking amongst themselves, but to a depressed patient, who will be depressed however stiff the upper lip, it is unthinking and insensitive. It makes the person, who is struggling hard to maintain some semblance of dignity and identity, feel that to the outside world, she is nothing but the sum of her symptoms. And where those symptoms are ugly and distressing, what is left? The term 'drool' is a case in point. Instead of, "I see you are having trouble with your saliva. That's because...which would be helpful and educative, I got the query, "Do you drool?" That word is intensely evocative. It painted a picture in my mind, of a truth certainly, but one I could not afford to remember.

Another phrase that comes up as a shorthand label is "Stroke victim" instead of "a person who has had a stroke." There is a world of difference between the two: the second is an impartial fact and as such, acceptable; the first is a nonsense. No one can ascribe to another, the qualities of a 'victim. Only the sufferer herself can decide whether she has been victimised by her condition. Ironically it is the very people who use this terminology, who are in the best position to help prevent the person becoming a victim.

Macaw
(Toby Churchill)
Advertisement

I also have a problem with the phrase "alternative speech". I sometimes FORGET that I am dependent on a machine for my social contacts. I don 't wish to be reminded.

I could be accused of 'nit picking'. Well I will take that chance. Had the Service not been as humane and excellent as it was, I would never have mentioned these shortcomings

*The whole process of **adjusting** rather than **accepting** is something that the Speech and Language therapists could well play a part in. To reiterate: to **accept** is to **weaken** oneself; to **adjust** is to find or rediscover, one's **strengths** and operate with those. To concentrate on weaknesses and not to explore strengths, is a serious omission.*

The reason that I have the energy I have is due to the fact, that my experience with therapists has been such a positive one. Let me say to them, one last thing:

"Thank you. You have given me back my life."

Denise Gubbay & Lindy van Creveld
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Du Cane Road, London W12 OHS

Lindy van Creveld is Denise's speech and language therapist; excerpts of this article are written by her. Any correspondence should be addressed to Denise and sent via Lindy van Creveld to the above address.

Shirley McNaughton Recommends...

In the past month, I have enjoyed reading two autobiographies of AAC users: **More Than A Watchmaker** by Rick Hohn, and **My Life Has Been A Gift From God** by Lynda Jacko. As I read, I was watching for information relating to technology, literacy and graphics – my special areas of interest. In both books, I found it difficult to find any references to learning to read or to the acquisition of technology. And both authors were born during an era when AAC graphics were not considered. Of much more importance to them were the people and spirituality in their lives.

We've come a long way in developing technology, and we've progressed in our knowledge of graphics and literacy for AAC users. I could not help but wonder what the autobiographies of AAC users growing up in the seventies, eighties and nineties will have to say about these topics. I hope the people and spirituality in their lives will still be dominant and that we will become better at helping technology serve as a valued tool for them.

More Than A Watchmaker by Rick Hohn, 1125 Cottontail Rd., Vista, CA 92083. Email <Rickstalk@Juno.com>
My Life Has Been A Gift From God by Lynda Jacko, available from Sharing to Learn, Suite 215, 3-304 Stone Rd. West, Guelph, Ont. Canada N1G 4W4

The Barry Box Family
from George B Ritchie

Affordable Communication Aids ◆ Easily Programmed ◆ Portable

The Barry Box was developed to meet the communication needs of my grandson Barry. The three other units were introduced to meet needs raised by speech therapists and teachers for other children.

All are stand-alone, lightweight and portable units, and easily programmed using your own voice.

The word keys on the barry box and the extended play box are normal cash register type keys, with removable clear tops to display the word symbols.

The 1 to 4 word box is supplied with 6 large key tops, 4 for single words and 2 for use when two key positions use the same word. Pockets on the key tops hold the word symbols.

Sensory feedback is given to the user as all keys move when pressed.

The Barry Box 48 keys giving a voice to a word sign symbol. 48 or 64 word versions both have a 8 second message facility. £375 & £400

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The 1 to 4 Scanning Box An auditory scanning unit giving the user a prompt word, a switch selectable main word, with separate volume control and speakers for each word. Number of words, scan time and scan speed are selectable. £250

George B Ritchie

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Tel & Fax 01908 313624

The Chailey Communication System

Practical Applications Within a School Environment

Lisbeth Meek & Valerie Moffat

The Chailey Communication System (CCS) was introduced in the summer of 1991 at Chailey Heritage, which is a centre in East Sussex providing education, assessment, medical, and therapy services for children and young adults with complex physical disabilities.

The CCS was structured for students who were severely physically and visually disabled and who therefore had to rely on a purely auditory approach to communication This system was developed over the next three years during which time it became apparent that other students, who had difficulty in maintaining postural stability in order to see a communication chart or access a visual display unit, might benefit as well. This structure gave the students a framework for a wider vocabulary which could be personalised, extended, and easily updated. Teachers and therapists also found that the CCS had the potential for being used as an assessment tool, a basis for language teaching and a vehicle for the national curriculum.

The CCS vocabulary was compiled in conjunction with the Child Protection Working Group and other agencies, such as, Social Services and the Police Force and allows for concepts to be taught at the appropriate age by providing experience using the vocabulary in practical, real-life situations.

The introduction of the National Curriculum necessitated a wider and yet very specific vocabulary for class based topic work. It also recommends that there should be a method of record keeping that is common across the school, providing up-to-date information on individual pupils; highlighting achievements and allowing for regular reviewing and planning. The CCS provides a framework to access and expand vocabulary as needed and allows for regular updating and record keeping with regard to vocabulary acquisition.

A Comprehensive Communication System

The CCS is a comprehensive communication system which grows with the developing child and can be expanded or reduced according to the child's physical ability, language level or interests. It has been designed to incorporate any alternative system or combination of systems that a child may already be using i.e. picture, symbol or word.

The CCS was based on replicating the quickest and most natural method of communication commonly used by those who have little or no speech and their parents/carers i.e. the use of closed questions requiring a "yes or no" response. It, therefore, uses the structuring of 'Twenty Questions" so that in its simplest form, the user relies on only three skills to operate the system:

- **hearing and/or vision**
- **comprehension of language**
- **ability to indicate 'yes'**

The system comprises a large master lexicon of approximately 3,000 words, which has been selected to cover personal, social and educational needs. Students, carers and teachers all work from this master dictionary of words and/or symbols but each student's dictionary is tailored to suit his developmental and interest level.

Rebus symbols were chosen for use in the CCS for three reasons:

- Rebus symbols were easily recognisable, especially for young children entering nursery or mainstream school with a peer group who had not yet developed literacy skills

- Software was being developed by *Widgit and Learning with Rebuses* for educational programmes using Rebus symbols, enabling the use of symbols for communication to be reinforced in the classroom

- Rebus symbols are freely photocopiable

The Structure

It must be emphasised that the Chailey Communication System is an approach to structuring vocabulary for easy access. A 'topic' as opposed to a grammatical layout is used so that the student who cannot read or list alphabetically is provided with a framework to find a word quickly and easily.

The system uses levels to enable the quickest method of accessing a word or phrase:

1. The top level is called category i.e. a core vocabulary with sixteen headings starting with *me, people, places, mealtimes, body, clothes, transport, etc*. which provides access to further vocabulary.

2. The second level (topics) allows access to further specific vocabulary or key words.

3. The third level (key words) targets vocabulary within the "topic" area

Here are two examples illustrating the use of the three levels:

Category level	Topic level	Key words level
Meal Times	Drinks	tea coffee milk

Category level	Topic level	Key words level
People	School	teacher therapist friend

The top two levels (Category & Topic) are 'accessing' levels to enable the student to target a key word or phrase. This method of branching allows the user to generate an infinite number of words as more levels can be used to provide more

detail. For example a botanist could continue to expand the topic "flower" to incorporate names of flowers and parts of flowers.

Information Technology Applications

The use of the CCS is reinforced within the classroom using a variety of technology including the Archimedes computer, and P.C's in conjunction with 'Widgit' software 'Writing with Symbols' and 'Clicker Plus'; and portable communication aids, such as the Cameleon II computer available from Cambridge Adaptive Communication. All these are accessible to switch users.

At Chailey Heritage School the communication system has been adapted for use on the Archimedes computers using Clicker Plus grids, and is available as an alternate form of access to the traditional dictionary. This has enabled non-verbal pupils to talk to each other without the intervention of a facilitator, giving auditory feedback to the advantage of pupils who are unable to see or read.

Introduction to Individual Pupils

Personalise and update

The dictionary needs to be personalised and updated quickly to provide optimum communication opportunities. Words and phrases can be added to the dictionary at any time. For example the Category "PEOPLE" will need relevant names of family; friends etc. to be listed alongside the key word. If a new member of staff arrives the name can be written immediately by the appropriate key word. Conversely if a pet dies, the name does not have to be removed, and an explanation can be written by the side, as the student may still wish to talk about the deceased friend. Any additional vocabulary can be added anywhere throughout the dictionary and in more than one place wherever it is relevant to the user. For instance a word like "hot" is listed in five different categories - ME, MEAL TIMES, BODY, DESCRIPTIONS and WORLD, depending on the context, the user's preference and ease of access.

Teaching strategies

While it is important to remember that the Chailey Communication System is exactly that - a communication system - enabling the user to express a need, convey a message, or share an idea, the system can be used in a variety of other ways to facilitate access to the curriculum, in all teaching and social situations.

It can be used to establish a level of language comprehension and expression; to identify gaps m language development; to deal with specific topic/subject areas; and to teach grammatical concepts. The system can be used with pictures, symbols, and words, and in any language, making it universally accessible to non-readers and/or foreign language speakers, younger siblings, peer groups at school and in clubs and even on holiday.

The CCS is taught alongside activities to promote normal language experiences and concept development. The dictionary can be reduced or expanded to meet the student's developmental level and the structuring of vocabulary pro-

vides a consistent framework in which language comprehension can evolve by repetition and rehearsal. If the student is unable to point directly to the display the ability to indicate "yes" is necessary in order to access the system. Conversely the CCS has been used successfully to develop a reliable "yes", as questions asked consistently and at an appropriate level enabled the structure to be learnt so that vocabulary being presented could be anticipated. The system enables the student quickly to express a need, convey a message or share an idea without using a syntactically correct sentence; but for use with written programmes or later when using voice or printed output the dictionary does allow for grammatical use of language and spelling. The CCS can be used with other language programmes, such as The Derbyshire Language Scheme.

For older pupils working on a category or topic as part of a cross-curricular theme has been shown to be a successful method of approach. It is useful also to timetable specific language sessions with pupils grouped according to their cognitive ability, communication needs, methods of access or age, to target areas of the CCS where it has been shown that there are gaps in knowledge or categorisation skills.

The CCS enables pupils to make real choices rather than always being given a limited range of options. It is therefore important to have a full comprehensive vocabulary available from the outset even if a user is not using all of it initially. While the base line of comprehension will determine the range of choices initially, the identification of this base line will highlight gaps in the pupils experience and knowledge of vocabulary. Teaching strategies can the target areas that need expansion. Repetition and consistency of delivery are paramount to a user anticipating and accessing the word s/he really wants to say.

Transition from symbol to text

The fastest and most efficient way to communicate for the literate population in an acceptable and easily understood form is through traditional orthography or the printed word. For those children with speech and language difficulties, including those who are integrated into mainstream schools, it is becoming increasingly important to have an augmentative communication system that is readily understood by their peers and that will keep pace with their learning to read and spell.

The average child is ready to read at approximately 5 years 9 months and will be unable to spell accurately to communicates all s/he wants to say until much later. The child using the CCS symbol dictionary is exposed to the written word from a young age, as the word is always printed above the symbol. Thus when the child or listening partner points to a symbol the word is automatically highlighted and reinforces the gradual transition from symbols to text for those children who are able to acquire literacy skills.

Writing programs are now available that enable pupils to write using symbols with the reinforcement of the written word as the symbol is printed, or vice versa. The child will need to learn other skills such as alphabetical listing in order to access a large sight vocabulary, and this is provided for through Category 16 which can be expanded as required.

Use of the system as an integrated school programme

The CCS can be used to develop a variety of additional skills including initiation of conversation, listening, turn taking, development of memory and understanding of concepts of time. This can be achieved through whole group situations, one to one or working in pairs with a facilitator interpreting and relaying questions and answers. Working in pairs has been found to increase peer awareness and turn taking skills in particular.

The National Curriculum (NCC 1992) necessitated a wider and yet very specific vocabulary for class based topic work. The comprehensive vocabulary included in the CCS and the facility to add extra vocabulary as and when necessary enables the recommendations of the NCC to be implemented. The system also facilitates assessment and recording.

Pupils are able to address all areas of the curriculum and vocabulary can be added as appropriate to facilitate a subject area. Therefore a topic covering N.C. Geography can be accessed through Category 'World', topic 'Country'; relevant animals can be added into the category 'Animals' and vocabulary can be accessed and knowledge assessed using the CCS as a vehicle for delivery, and reinforcement of symbols/pictures/words.

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Supporting Apple Mac Switch Users in an Educational Context

Heather Jack

Many people with special needs cannot access mass-market educational software designed for input by keyboard & mouse; switch users in particular seem in danger of being left behind. However, some specialist suppliers have designed and marketed products that allow switch access to standard software. This software provides an 'authoring' program for building scans for the specific needs of different users, and a bank of ready-made scans that may be used as templates. What are the issues raised by the need to create and adapt/personalise these special solutions, and to support users in schools?

The Role of the Development Officer in IT and Special Needs

Curriculum Development Officers have traditionally been engaged with the market for educational materials, through being commissioned to develop new course books and other educational resources. In IT and Special Needs, however, things seem to work in reverse. Development Officers may find themselves market-led, rather than market-leaders, chasing the rainbow of commercial product development, which may or may not - serve the needs of their user groups. Evaluating & matching products to needs becomes an important part of their role.

'Needs' and 'solutions' evolve in response to circumstances. Educational changes such as the move to integration have generated new needs as teachers struggle to find ways of opening up the mainstream curriculum to pupils with complex difficulties, and seek instruments to measure the progress of those who are unable to provide evidence on any standard scale. This is often the scenario within which the Development Officer is called for consultation.

Consultation and Collaboration

Collaboration must begin with establishing the brief: what exactly does the teacher want technology to achieve with the individual pupil with whom they are working? Teachers, as well as parents and others involved, vary widely in their awareness of what they might expect from the currently available technology.

Compromise

We often have to aim for a compromise in relation to the level of independence that can realistically be achieved. This may mean providing solutions which offer *part,* rather than *full* independence to the user, e.g. those that:

- allow for a measure of access and active participation

- by the individual with support from a partner or group to navigate the system

- allow access to parts of a program, even if not all

Time, and resources for development

Chief among the constraints that apply to the field of special needs development is that of *time:*

- time to *assess* the needs of the user
- time for *liaison* between support and development staff
- time to *investigate* the market for potential solutions
- time to put in place *necessary equipment and software*
- time to *develop* customised resources
- time to *pilot and refine* individual solutions
- time to *edit and prepare* solutions for distribution & user access
- time to *create support materials*
- time to *train and support* staff and users
- time to *reassess and adapt* materials as needs change and grow

It is also crucial to realise that where support of individual users is concerned, any time will not do - the time-frame is prescribed by the syllabus for their group. For example, if the class is currently studying caterpillars, or numbers 1 to 5, development which only delivers materials by the time the topic has moved on, will not help the pupil or teacher achieve any measure of integration into the mainstream curriculum. An intensive programme of development over a short period may be more productive than a regular but limited allocation of time.

Teachers would add that the time involved in developing resources for the SEN pupil, whether in mainstream or special class, *cannot be theirs.* Teachers have a remit to cater for the needs of *all* members of their teaching group; quite properly, the major part of the teacher's curricular development work should be for benefit of the class as a whole. Beyond this, if teachers are given, or can find time, to liaise with the Development Officer to discuss content for special resources, undertake training in the use of special programs which they will have to support, regularly share information with other support staff, and provide feedback to the Development Officer, they will already be working beyond the limits of a normal workload. The

> *If the class is currently studying caterpillars, or numbers 1 to 5, development which only delivers materials by the time the topic has moved on, will not help the pupil with special needs or the teacher.*
>
> *An intensive programme of development over a short period may be more productive than a regular but limited allocation of time.*

more technical aspects of developing new resources demand the dedicated time of a Development Officer or team.

Resources may also be an issue. One of the drawbacks of the more sophisticated special needs software is that programs are usually costly and funding may not be easy to secure, especially:

- where success is not a foregone conclusion, and needs may not be assessed as priority
- where software will be used by a group rather than an individual user, and funding arrangements depend on 'named user' awards
- where there will be a need for access to programs by support staff for development and training, in addition to access by the user, possibly at home as well as at school

Cost and Copyright

The problem of cost needs to be addressed by software suppliers:

- Can they break out of the vicious circle into which SEN software seems locked, the small size of the market dictating high cost to the single user?
- Might it not pay to cut prices, giving access to more users, and recouping investment from a larger number of customers each paying less?
- Could lower priced 'driver' programs be designed to allow users to run programs without the capability to modify them?

Tight control of copyright and licensing agreements can make development work more difficult than it need be. This applies not only to authoring software, but also to ancillary materials such as graphics libraries or texts to which copyright applies. Do we perhaps need a mandate equivalent to that which regulates the design of access to new buildings, to ensure that producers of conventional educational materials *must* be prepared to provide some means of access for all individuals within a purchasing establishment, as far as technically possible, with concessions on electronic reproduction for use with individuals with special educational needs?

It has to be said that publishers do not always appear sympathetic to requests for concessions to normal copyright rules, apparently not understanding that timescale is crucial. That an electronic graphics library which will be issued 'some time next year' will do little to support a child who cannot make use of the photocopiable paper materials purchased on behalf of his peers, and who needs some means of demonstrating his achievement in learning *now*. As a result, a great deal of development time may be spent generating custom graphics for individual programs. Though this confers the freedom to circulate resources freely as required, it is a time-consuming process, and never as satisfactory in the end result as artwork designed in association with the original product.

The Special Needs Potential of Standard Educational Software

Standard, generic products will always be more affordable and universally available than anything conceived specifically for special needs, so it is worth investigating the alternative access potential of some of the widely used educational programs designed for point & click access.

A simple piece of software such as R J Cooper's *CrossScanner* may be sufficient to allow access to any button or hotspot on screen, assuming that the user is capable of identifying the required spot, planning the route to reach it, and timing clicks for selection appropriately. This, however, may be a big assumption, especially for young and inexperienced users. For many with perceptual or motor planning difficulties, it could prove frustrating or even unusable.

A more targeted means of selection can be provided using the special Macintosh access package *Ke:nx/Discover,* which comes with some scans providing access to a range of programs such as *Thinkin' Things, Grandma and Me,* etc. Inevitably these are compromise solutions, given the slowness of scan & switch applied to programs not conceived with this means of access in mind. Nevertheless, for a determined and alert user, motivated to use the same software as classroom peers, even limited *Ke:nx/Discover* access is decidedly better than no access at all. Simply having control of the program is a motivating factor in itself. For the future, however, with the explosion of electronically published resources, it seems clear that the commercial special access software is unlikely to keep pace with new software coming on the market. This is where the authoring facility of the *Ke:nx/Discover* package may come into its own.

Time taken to provide scan access to a ready-made program is largely a function of the number and complexity of different scans that will be required to navigate through the sequence. Easiest of all to adapt are those programs based on standard 'buttons' placed in a uniform position on each screen...a plea here to software creators to think of this as they design their screen layouts! A good example of this is the *Oxford Reading Tree Talking Books* series, to which scan access can very easily be provided, layout remaining constant throughout each page, and each book of the series, progressing through the books on a straightforward linear path.

Most difficult of all are programs designed with each page animated by randomly placed 'hot spots', with progression determined by successive choices leading into alternative programmed 'loops', and numerous intermittent screens for choosing user settings etc. In this case, it may be appropriate to provide only limited access to the core pages of the program, leaving user settings and changes of activity to be selected by a support partner using point & click.

It is important to realise that this kind of adaptation is a time-consuming process, and the time taken must be 'costed-in' to the budget for support of individual users. A saving feature is that the popular appeal and educational value of many of these software programs has made them 'classics' in early years classrooms everywhere IT is used, and therefore there may be a return on the investment of time with many children who are not full-time switch users but who are able to benefit from special solutions developed, as well as those who have no other options.

Authoring Switch Access Solutions from Scratch

While the educational software we have been talking about offers the huge advantages of commercial development and

design, providing the 'all-singing all-dancing' programs which only professional studios can generate, it is also worth looking at some of the creative software which is increasingly becoming standard in mainstream primary and secondary schools - programs such as *Kidpix Studio* or *Hyperstudio* - as a means of creating more modest resources with specific interests in mind. In a growing number of schools which are fortunate to have machines with the necessary RAM and storage space, as well as enthusiastic staff who have had access to relevant inservice training, these programs based on the card stack principle have underpinned a great deal of innovative work in multi-media production.

The potential is there to generate multi-media resources, designed for point & click, but with scan & switch access in mind from the start. It comes with the advantage that the design of cards in a stack could be determined by the ultimate requirements of scan & switch, ensuring that layouts are clear and predictable and therefore accessible with the minimum number, and functionally simplest, scans.

Multimedia for All

If the term 'multi-media' sounds alarming to technophobes, it is worth remembering that even in the basic *ClarisWorks* program on the Macintosh, a simple click to advance slide show like a conference presentation sequence can be created with minimum time and skill. Using familiar images, with or without 'QuickTime movies' created in *Kidpix* or *Hyperstudio*, useful materials can be created for the beginner switch user, working at the basic cause & effect level.

Using generic software rather than expensive and exclusive packages broadens access to resources in schools which have appropriate 'driver' software installed on most machines. In some cases it might allow classes to participate on a project basis in the creation of a resource for themselves and their switch-using class-mates to use.

Speaking Dynamically: The potential of communication software

Where individuals have significant speech and language impairments that would qualify them for the necessary funding for special support, the supply of more expensive custom software for their use may not be an issue. In this case, it is worth looking into the potential of communication programs such as *Speaking Dynamically*. Originally designed to generate dynamic communication boards for users who might find a fixed board system too difficult to manage, this program actually offers wider application to general curricular and educational needs; however, unlike *Ke:nx/Discover,* it is designed to be self-contained rather than providing access to other software on the Mac.

Speaking Dynamically is simple to work with. Switching from **Design** to **Use** modes is instant, allowing boards to be quickly and easily tried out as a sequence is built up, and even before they are saved. A number of optional features, such as audible or text preview, and message and picture displays, can be exploited to create resources for individuals with varying needs and levels of literacy, and for a range of educational purposes, including learning and assessment as well as communication.

Methods of Distributing Special Solutions Around Schools

Multi-media products, especially those incorporating extended quantities of recorded sound, can be extremely 'greedy' in terms of computer storage space, very rapidly growing beyond the confines of a floppy disc and requiring to be stored and distributed by other means. Transfer can be effected by means of a Zip Drive, which takes discs holding 100 Mb of stored material. The ideal would be to have a disc drive at both user and developer ends of the process, so that only discs would require to be exchanged; otherwise, the development officer would have to make a visit with the purpose of downloading files to the host machine.

Another method of transfer is via CD-ROM, an expensive option where a very customer-specific resource is concerned, the cost of producing a single disc being vastly in excess of price of mass-pressings from a master copy. However, viewed in the context of the high costs of support of SEN pupils, particularly those integrated into mainstream schools, it may actually represent a saving in the cost of travel and staff time. As a bonus, the CD format would save space in the computer memory, with programs being easily downloaded for use, and removed when no longer needed. There are a few obvious disadvantages to using CD-ROMs:

- A CD player, perhaps not everywhere available, would be a prerequisite for initial access to the materials.

- It would be crucial to check that all the developed resources to be stored on the CD were thoroughly tried and tested before the disc was made, entailing a major development time commitment.

- Delays in building up a sufficient bank of materials to fill the disc might run counter to the needs and timetable of the user.

It is worth remembering that all problems of cost and distribution based on a single user, are immediately slashed when other users - with or without SEN - are included. It thus makes sense to produce resources which are accessible in many ways rather than just by scan & switch, and have the broadest application to curricular targets for the mass of mainstream pupils as well as those with special needs. In the long term, as the bank of 'bespoke' materials grows, users will increasingly benefit from the possibility of finding a ready-made program which can be taken off the shelf to meet their needs, without all the delays and frustrations experienced when it was first produced. (Developers must also take comfort from the fact that as networking between computer systems becomes the norm, difficulties of distributing software products will disappear at the touch of a button!)

Training and Troubleshooting

Implementing new equipment or software programs inevitably involves training. This is an on-going, rather than a one-off commitment. As pupils move up through schools, teachers or carers leave and are replaced, new equipment and programs come on the market, or fresh curricular targets come into focus, basic training may need to be repeated, and existing

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New Books Review

Assistive Technology: An Interdisciplinary Approach

Beverly K Rain & Dawn Leger (ed.)
1997 352 pp ISBN 0-443-07552-2 £32.00
Published by Churchill Livingstone

This excellent book, identifying practical ways of working with clients who require 'low' (non-electronic devices) and/or 'high' (devices which involve electronic or electric components) technology, will assist therapists through the maze of assessing, advising and providing this equipment and thus avoid the commonly used trial and error method. The basis of this book is the Bain Assistive Technology System (BATS). The BATS posits that effective delivery of assistive technology must involve a synergistic relationship between four integrated and interdependent components: the person; the task(s); the technological device(s); and the environments in which the person needs to accomplish the task(s). After elaborating on this system and emphasising that it requires the collaborative effort between many different professionals, the various contributors (22 in all) practically explain it's use with the breadth of assistive devices, including: communication equipment, environmental control units, computers and powered mobility. For those who like assessment/evaluation forms, and are looking for ways to change and improve their own methods of documenting assessment information, various examples are provided throughout the book. The section on Technology Interface with Careers was superficial and requires expanding, particularly if it is to appeal to readers outside North America. This is a very useful and practical book which demystifies the technological field for those who are technophobic and provides a firm foundation for those already working with clients who require assistive technology. It does not fall into the trap of comparing equipment which will soon be obsolete or unavailable. Rather it provides a solid framework of how to provide an effective service and practical tips on what to consider. As a bonus there is also a list of other relevant books and journals in the appendices for those who want to investigate assistive technology further. Therapists and departments involved in assistive technology should buy this book.

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skills consolidated and extended. This would ensure that work put into developing resources is not wasted.

There is really no hard dividing line between training and support. A new user will only be able to take in 'so much' in an induction programme, and will need regular follow-up sessions to sort out problems that may arise when they attempt to put skills into practice. Follow-up may be organised on a planned basis, but more often than not will involve unscheduled calls to the 'helpline', to sort out a crisis NOW or sooner! As all who are connected with education will know, it is important that, if at all possible, help for any teacher supporting technology should be available *at the critical time*. Staff in schools, unlike those in the business world, do not have ready access to the phone, so few teachers can call a supplier in another part of the country in order to explain a problem and attempt to find a solution. Nor can they necessarily be released from class to answer when someone returns their call at an unscheduled moment. The much-vaunted E-mail is still only a pipe-dream for most. The Development Officer therefore has a role in dealing both directly and indirectly with problems that arise in implementing new programs.

Feedback from users

Sharing feedback on how programs work out in practice is an essential part both of support, and further development. Developments may fail to live up to hopes, for a variety of reasons. It is vital, both on grounds of customer satisfaction and cost-effectiveness, to investigate why:

- Is there a problem with the equipment, the software or both?
- Was the initial brief imperfectly explained or understood?

- Was the solution flawed in some way, that may easily be remediable, or was it totally misconceived?
- Do staff need further training or familiarisation with the program - or in basic computer skills?
- Does the user need some more focused or specialist help in learning to scan & switch effectively?
- Have the user's needs been wrongly assessed, or have they changed?
- Has the timescale of development failed to match curricular needs?
- Is there a lack of commitment to the program among staff through stress, lack of technical expertise and confidence, or underlying pedagogic disagreements?
- Are there logistical problems in delivery that need to be taken up with management who control time and resources?
- Are there problems with basic software that should be pursued with the supplier of the program?

To extract the maximum from resources devised for users with special needs, and specially authored solutions, ongoing communication between all parties concerned, including the developer/supplier, is essential.

Heather Jack MA MEd
Senior Teacher, Development Officer IT & Special Needs

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St Giles Centre	*St Bernard's Centre*
40 Broomhouse Crescent	*Dean Park Street*
Edinburgh EH11 3UB	*Edinburgh EH4 1JS*

This paper was presented at the Communication Matters CM'97 National Symposium, September 1997, Lancaster.

Diary Dates

C ALL Centre

Training Courses

- **Voice Recognition Systems**
  This seminar will review the capabilities of some of the current systems for PCs and how they meet the needs of different types of users.
  1 October, Full day, £45

- **Supportive Writing Software**
  This seminar will provide an introduction to spellcheckers, talking wordprocessors and word prediction systems.
  3 November, Full day, £45

- **Symbol Software**
  This 'hands-on' day is for people who work with adults or children using symbols for communication or to support literacy.
  (To be confirmed) **19 November,** Full day, £35

- **Special Access Technology**
  This seminar is aimed at teachers and others working with those who cannot use a standard keyboard or mouse for writing and other computer-based activities.
  10 December, Full day, £45

- **Personal Communication Passports**
  The day will focus on the principles of Passports and how they are made for individual clients. The day is aimed at staff working in Social Work and voluntary organisation's day and residential care, but all others are welcome.
  28 January 1999, Full day, £35

For details, contact:
**The CALL Centre, University of Edinburgh
4 Buccleuch Place, Edinburgh EH8 9LW
Tel. 0131 667 1438**

Commmunication Aids Suppliers Demonstration Day

**20 October 1998
Nuffield Orthopaedic Hospital, Oxford**

For details, contact:
**Jackie Reeves
Tel. 01865 227601**

COMMUNiCATE

Integrating Technologies

for Communication, Wheelchair and Environmental Control

**24 September 1998
Newcastle-upon-Tyne**

A one-day course exploring theoretical and functional considerations of Integrated Systems, and the opportunity to learn about state-of-the-art equipment and the possibilities this offers.

For details, contact:
**Jean McPherson, Communicate
Tel. 0191 219 5640/1**

AFASIC

**30th Anniversary Conference
for Parents and Professionals**

Unlocking Speech and Language

**14 November 1998
Aston University, Birmingham**
For details, contact:
Carol Lingwood, Tel. 01273 381009

Perspectives on AAC with Adults

Eighth Annual Study Day
presented by
Augmentative Communication in Practice: Scotland

**30 October 1998
Broadwood Conference Centre, Cumbernauld**

This Study Day is intended to provide information on current techniques and communication technology solutions used with adults with severe communication difficulties. Programme includes:

- **AAC: The Ongoing Perspective**
- **AAC: Issues for Users, Families and Partners**
- **Group Intervention with AAC Users**
- **Issues in the Delivery of FE Services to People with Brain Injury**

For details, contact:
**Deborah Jans, Keycomm
Tel. 0131 443 6775**