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### **Talking Mats: Speech and language research in practice**

*Even experienced communication aid users can struggle to express complex views. Joan Murphy describes the impact a low tech tool developed to address this has had on the lives of people with severe communication difficulties.*

In 1996 the Alternative and Augmentative Communication (AAC) research team at the University of Stirling received a grant from the Gannochy Trust to examine peer interaction of adult AAC users in a residential setting. Following the first part of the research, involving detailed observations of the nine users who volunteered to participate, we wished to obtain the clients' views and perceptions about our findings. Although many were experienced communication aid users, we were aware they might still have difficulty expressing their views about some of the complex issues we wished to ask them about, either because they did not have the explicit vocabulary in their devices or perhaps because they had not had to think about these matters previously.

The 22 issues we wished to discuss (Resource 1) included

- residents ignoring each other
- communication at mealtimes
- reluctance to use communication aids
- talking to staff rather than other residents
- the use of pre-stored phrases in AAC
- privacy

Having just acquired Boardmaker™ software (Resource 2), we decided to try to produce a range of picture symbols representing these issues. It was important they could be presented in a clear, interactive and accessible way as we wanted the AAC users to be able to consider the points in question and express their views in their own time in an unambiguous way. The framework we came up with proved so successful that many people have encouraged me to develop it for a range of clients. This has resulted in the production of a booklet and video package, *Talking Mats* (Resource 3).

#### **True representation**

The basic idea consists of three sets of picture symbols presented to the person with the communication difficulty by attaching the pictures to textured mats. The client can then select them, move them around and change them until s/he is happy the composite picture on the final mat truly represents what is meant. The three picture sets are

1. Issues
2. Emotions
3. Influences.

The issue/s to be discussed can be anything from a simple choice about daily living to a complex matter relating to life events. The range of emotions allows the client to describe his/her feelings about each issue; the number and subtlety will depend on ability and age. The influences include a range of factors which might have either a positive or negative effect on the issue being discussed.

#### **Flexible framework**

The framework is very flexible as it is up to the people using the *Talking Mats* to decide which issue/s, emotions and influences to include. Once identified, they can be created using whichever pictorial representation is most suitable. Boardmaker™ picture communication symbols are attractive, flexible and easily modified but any picture symbols familiar to the client could be used provided they are clear and illustrate the issues being discussed. The mats I used are textured doormats which can be bought in any hardware shop. They were chosen because pictures with Velcro™ tabs on the back can be attached to them and moved around. This means people can literally build up a picture of their views which they can then consider, change and confirm in their own time. For people with a physical disability this design removes the effort needed to finger point, operate a switch or access a keyboard - the participant can simply

eye point and the communication partner can do the selecting and moving of the picture symbols.

*Talking Mats* do not replace someone's communication aid/AAC device. All the people who have used the mats have done so in conjunction with both their existing AAC devices (where they have them) and non verbal methods of communication such as facial expression and gesture.

### **Wide use**

Originally for adults with cerebral palsy using high tech communication aids, the mats have since been employed by a variety of people, both children and adults with a wide range of communication difficulties, in one to one situations and in groups. The case examples (1 - 3) illustrate how they have been used with three different people who are shown in the video accompanying the booklet.

*Talking Mats* have also been used with a number of other people in slightly different ways, for example with people with learning difficulties by presenting fewer picture symbols at one time. The act of physically moving the picture symbols on the mats seems to help people organise their thoughts in a logical way and allows them to take time to consider and alter them if they wish. One man with severe learning difficulties used the mats to talk about his weekly routine. He described clearly, by carefully choosing and positioning the pictures on the mats, how he likes gardening best, but does not enjoy the radio which is continually played in the day centre he attends.

At present I am using *Talking Mats* with a man who has 'locked in syndrome'. He uses a low tech communication book with eye pointing but finds the same picture symbols with the mats allow him to produce a more concrete representation of what he is feeling. His wife and I have pinned a mat to his wall so that, when he explains his feelings, his choice of pictures can be left on the wall mat and staff different shifts can see at a glance what he is feeling. Because it is visual and attractive the staff take more notice and know it is his view, not just someone else's interpretation.

A number of people have expressed an interest in using the *Talking Mats* with other client groups including children with language disorders, children and adults with learning disabilities, patients on acute wards, patients in a long stay hospital and people with degenerative illnesses.

The *Talking Mats* framework is being incorporated into a project triggered by the Children in Scotland Act. This requires that the children be consulted in decisions affecting them, and the project's aim is to develop training materials to enable staff who work with children to involve them in making decisions about their own lives and the services they use. This project is funded by 'Children in Scotland' and further information can be obtained from Jane Griffiths, tel: 0131 667 4496.

*Talking Mats* therefore appear to have the potential to help many people with communication difficulties in many situations. I am exploring the idea of using them to develop a tool for assessing people's views in relation to their quality of life. I would welcome comments from anyone about ways they have used the *Talking Mats* or any ideas for further development.

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Note: In this article, AAC stands for augmentative and alternative communication and describes any method of communication which supplements impaired speech or handwriting, such as a symbol book or electronic aid.

### **Resources**

1. A description of all the issues discussed and the results of the interviews have been written up in the booklet *Improving Augmented Communication Within An Organisation*, available from the AAC Research, University of Stirling, price £10.
2. *The Picture Communication Symbols* (PCS) are © 1981-1997 Mayer Johnson Co., P0 Box 1579, Solana Beach, CA 92075, USA, and are used with permission.
3. The *Talking Mats* package is available from the AAC Research, University of Stirling, price £23.
4. The *Lightwriter* is available from Toby Churchill Ltd, 20 Panton Street, Cambridge CB2 1 HP tel. 01223 567 117. It is priced at £380 (plus VAT if applicable).

5. The *AlphaTalker* is available from Liberator Ltd., Whitegates, Swinstead NG33 4PA, price £1275 (+VAT if applicable).

## QUESTIONS

- What do *Talking Mats* provide AAC users with that their devices do not?
- In practice, how do *Talking Mats* change carers' perceptions and actions?
- Which client groups are *Talking Mats* most suitable for?

## ANSWERS

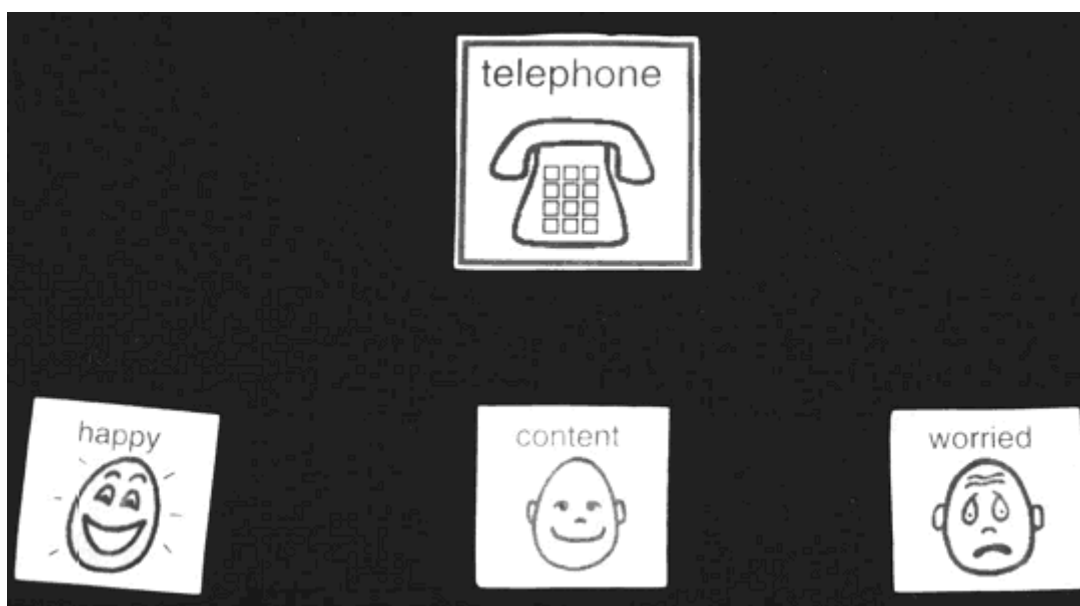
- AAC users are given the opportunity to consider, express and change their views and feelings about complex issues.
- When carers see how clients really feel about very specific situations they are more motivated to respond appropriately and make changes where possible.
- Although initially intended for AAC users, *Talking Mats* can be adapted for anyone who needs to address complex issues.

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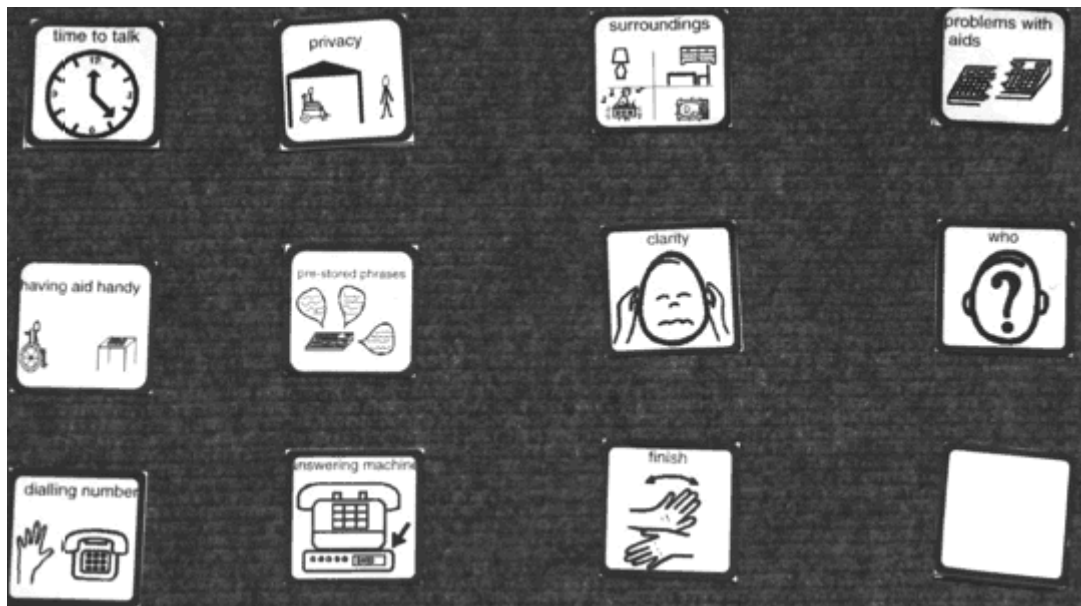
### Case 1 - Frances

Frances has cerebral palsy and uses a whole range of communication methods, including her communication aid, voice, eyes and facial expression. As her speech and language therapist I wanted to know what she felt about using the telephone and how best I could help her. Because I knew her residential situation I was able to make up a range of pictures which might be relevant to her. The *Talking Mats* helped her explain what she thinks about using the telephone - what she finds helpful and what difficulties she has. Although Frances is an experienced AAC user, it takes her a lot of time and effort to express complex thoughts.

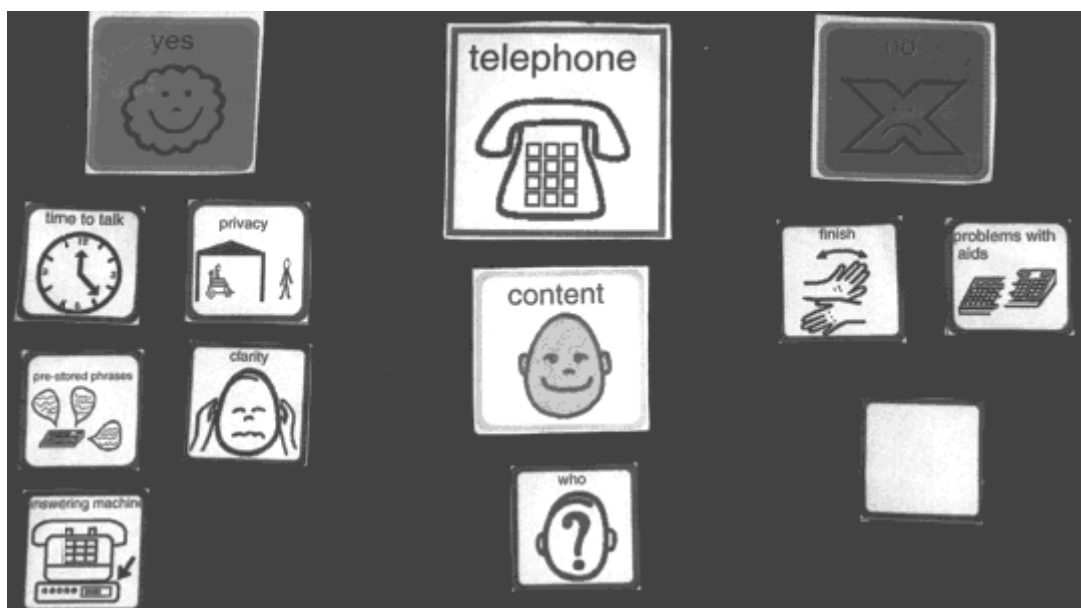
The first mat allowed Frances to indicate broadly what she felt about using the issue being discussed - the telephone - by eye pointing to the most appropriate emotion picture. Frances indicated that she was fairly content using the telephone but that she still had a few problems.



These are the range of influences which were presented on the second mat.



This is the final mat which Frances gradually built up by eye pointing to the influences she considered important and whether they were positive or negative.



The things which Frances found positive and helpful when using the telephone were

- having enough time
- having privacy
- using pre-stored phrases
- having altered the voice to achieve maximum clarity on the phone
- using the answering machine.

The difficulties for her were

- how to end the conversation
- problems when her communication aid breaks down.

She also added it is difficult when the person she is calling does not realise she is using a communication

aid and does not give her enough time to explain this. She felt great satisfaction in seeing her views gradually taking shape and being clearly illustrated on the final mat.

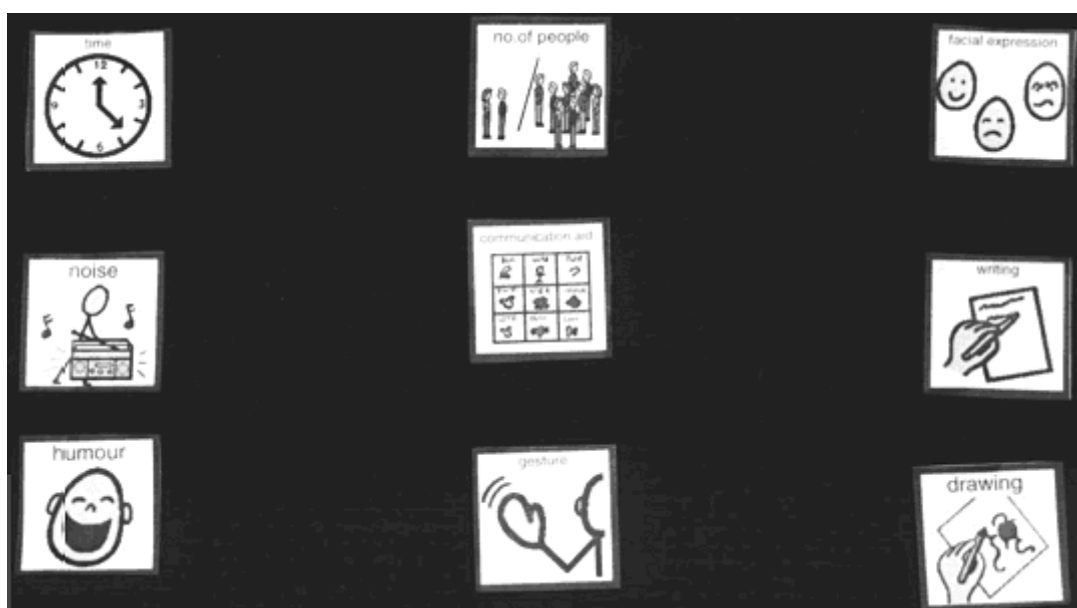
These views were used to plan further work with Frances. She is now a member of a small group of *Lightwriter* users who are working on communication strategies including telephone use. She also attends College where one of her courses looks at telephone skills.

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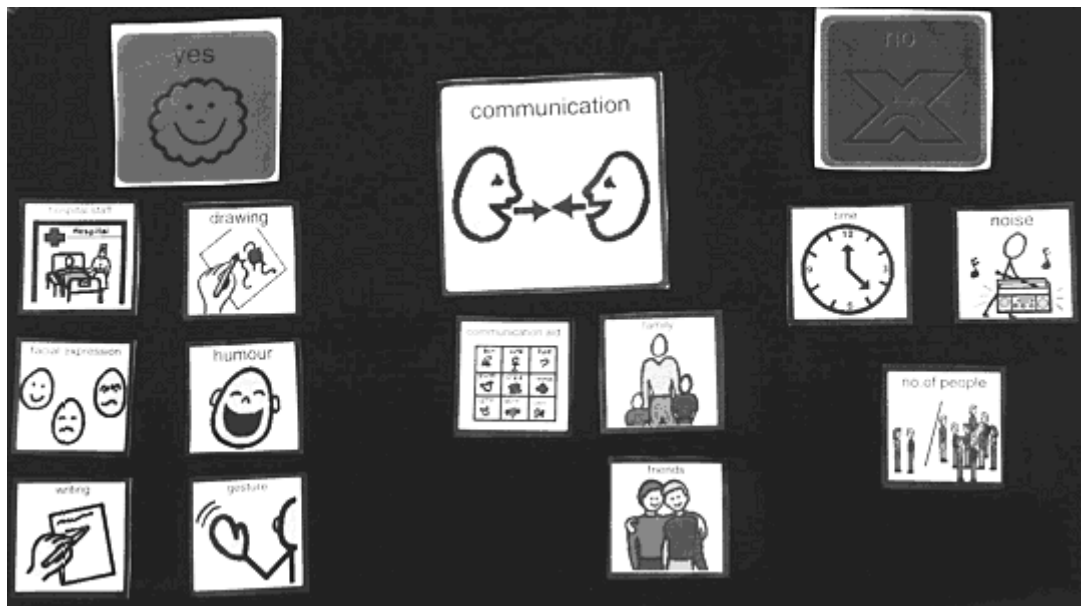
### Case 2 - Betty

Betty had had a stroke which resulted in severe expressive dysphasia. As she was about to be discharged from hospital she was anxious about communicating once she went home. The *Talking Mats* were used to help Betty explain what she felt about her communication with hospital staff, family and friends. She also described what factors helped and hindered her communication.

These are the influences presented to Betty to help her say what she felt about her communication.



This final mat shows that Betty felt her communication with hospital staff was OK but that she had more difficulty with family and friends.



The factors which she felt helped her were using

- drawing
- facial expression
- humour
- writing
- gesture.

The things which made communication more difficult for her were

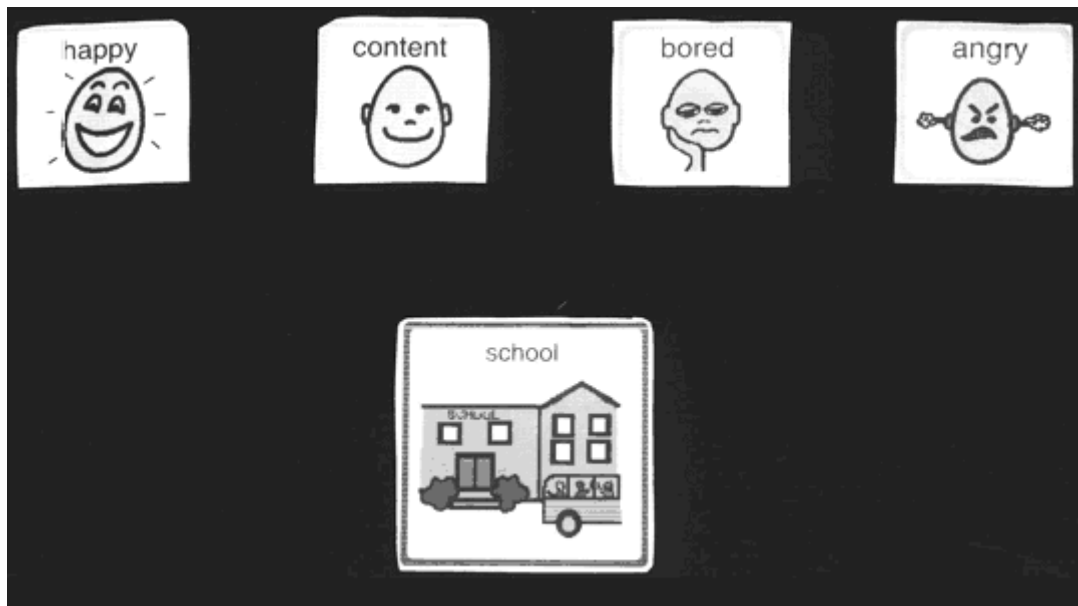
- people not giving her enough time
- too much noise
- too many people at once.

She felt a bit unsure about using her *low tech communication book* at home. Using the *Talking Mats* clearly helped Betty think about her communication and express her views. These views were used in various ways - to make suggestions to those who communicated with Betty, to help her communicate more functionally and to help her speech and language therapist plan her therapy. The mats helped therapy and ward staff to be aware that she had definite views despite her severe dysphasia. As a result they took more care with the noise levels in the ward and took account of her different reactions to different people.

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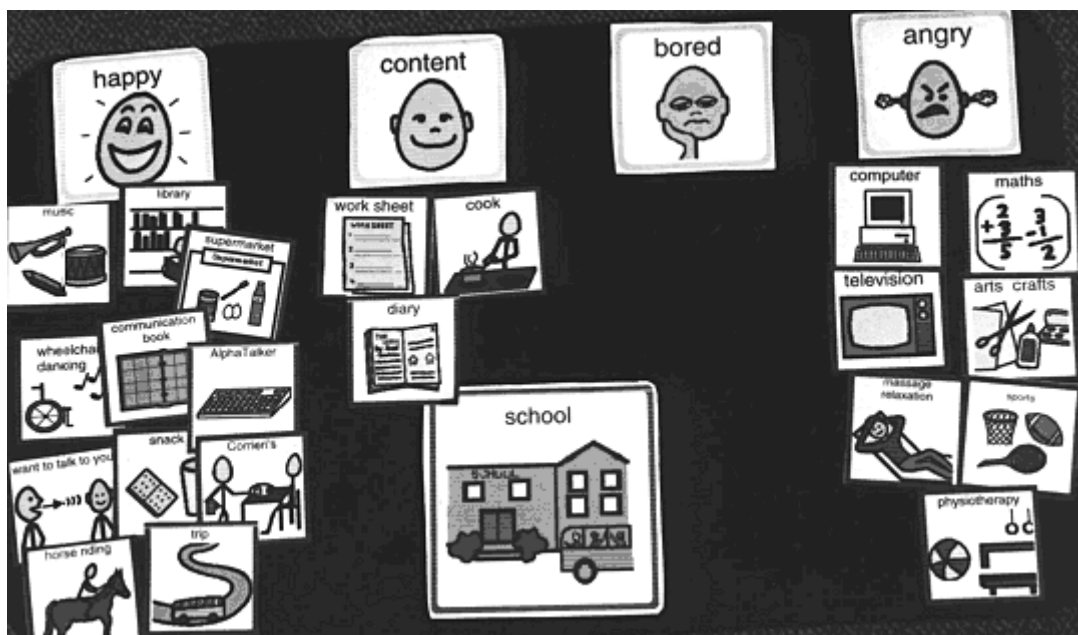
### Case 3 - Jamie

Jamie is a teenager who has cerebral palsy and normally uses a low tech symbol book. Jamie has no useful speech and is unable to use his hands for pointing. He eye points to the left for 'yes' and to the right for 'no'. Jamie's teacher and school helpers gave me a list of all his school activities which I transferred into 'Boardmaker' pictures.



Jamie's mat was pinned to the wall directly in front of him so he could eye point to the four *emotion* pictures to tell me which of his school activities he liked best, which were OK, which were boring and which ones he really hated. The activity pictures were shown to Jamie one at a time allowing him time to indicate what he felt about each one. Jamie is normally easily distracted but he enjoyed using the mats, concentrated well and considered each response carefully.

Jamie confirmed this final mat really did express his feelings about school and he was delighted to show it to his teacher.



It was very helpful to let his teacher and his mum see the whole video of Jamie using the mats and Jamie himself has also looked at it - over and over again! There were several offshoots. After watching the video Jamie, his teacher and his mum were all more aware of his desire and ability to communicate and the need to stretch him. Subsequently his low tech communication book has had several new pages added and he is using it with a wider range of people. His speech and language therapist and teacher are also looking at a more advanced high tech system as they feel the *AlphaTalker* does not contain enough vocabulary for him. The computer work in class has been changed to be more motivating and, although he still gets physiotherapy, he no longer gets massage!