



# PECS appeal

## Read this

if your clients

- lack motivation and opportunities to communicate
- need structured but flexible support
- rarely initiate interaction

**D**avid is a 27 year old man with a learning disability and autism. When I first started working with him, he was living with his mother and three siblings who were providing all his care. He was not accessing any services and had few opportunities to make choices in his life or to interact with people outside his family network. David's mother appeared to have a strong influence over the whole family and was very much of the opinion that David would one day overcome his autism and 'learn to speak'.

I had just attended a two day Picture Exchange Communication System (PECS) course following a recommendation from a colleague. Psychologist Andrew Bondi and speech and language therapist Lori Frost developed PECS over 10 years ago. It is a structured behavioural programme first used with children with autism but now used with adults and people with other functional communication difficulties. PECS acknowledges that a person may not be motivated to communicate by social rewards alone, and teaches them to communicate by exchanging a symbol for a 'tangible reward' that is motivating for them. I decided to find out if this six stage programme could help David.

Assessment found that David had an understanding of three key words or more. He had difficulty understanding complex sentences, some 'wh' questions and emotions, but responded well to visual information such as pictures/symbols and written material. David was verbal but at the time of assessment only used single words or two word utterances. His speech was mumbled and he used little eye contact or gesture. David had an understanding of turn taking and would answer questions, usually with 'yes' or by saying single words. He was frequently echolalic. David had good numeracy and literacy skills and was able to read and write. He would spend time copying and writing out large pieces of text without necessarily understanding the meaning of what he was writing. David initiated very little communication, but would occasionally write a single word on a piece of paper and give it to someone to look at. He appeared to have little motivation to communicate; one reason may have been that all his basic needs were being met and he had little opportunity to make choices.

## Opportunities in the community

David's mother wanted immediate one-to-one speech and language therapy input for him. I explained that no input would be offered until David could start accessing some day services. The reasoning behind this was to ensure there would be a key person to carry out work with David outside his speech and language therapy appointments and to give David opportunities in the community to practise any skills learnt in the sessions. Funding for specialist outreach support was agreed and a one-to-one worker from a specialist autism service joined David for three days each week. The aim of this support was to help David access community services. Speech and language therapy input was then offered in the form of fortnightly sessions with David and his support worker. Following her mother's wishes, David's sister accompanied him to all sessions and therefore became involved in the speech and language therapy input also. I chose the PECS approach with the aim of developing David's ability to initiate communication as well as his spontaneous speech and eye contact.

## STAGE 1 Identifying a reinforcer

The first step of PECS is to identify a 'reinforcer', something that the person finds motivating such as a biscuit or ball. A symbol (photograph, picture or line drawing) of the reinforcer is obtained. The person is asked to sit opposite a 'communication partner' and a 'physical prompter' is seated behind them. The reinforcer is put in front of the person, just out of their reach. As the person reaches for the reinforcer, the physical prompter puts the symbol into their hand and supports them to put it into the open palm of the communication partner. As soon as the symbol is handed over, the communication partner rewards the person by giving them the reinforcing item. They also give verbal reinforcement and praise by saying for example, "Oh, you want a biscuit. Good!" or by verbalising what the person would have said: "I want a biscuit. Good!" (If the person imitates what you say, then verbalising what they would have said can

help with problems related to pronoun reversal at this stage.) Some communication partners also respond by labelling the item, as in "Biscuit. Good!" The person must be given the reinforcer immediately after they hand over the symbol. Once the reinforcer is received they can then eat the item if it is food, or hold it if it is an object such as a ball. If "biscuit" is being used as a reinforcer then small pieces can be given rather than whole biscuits. The prompts are gradually reduced so that eventually no physical prompter or open hand prompt by the communication partner is needed.

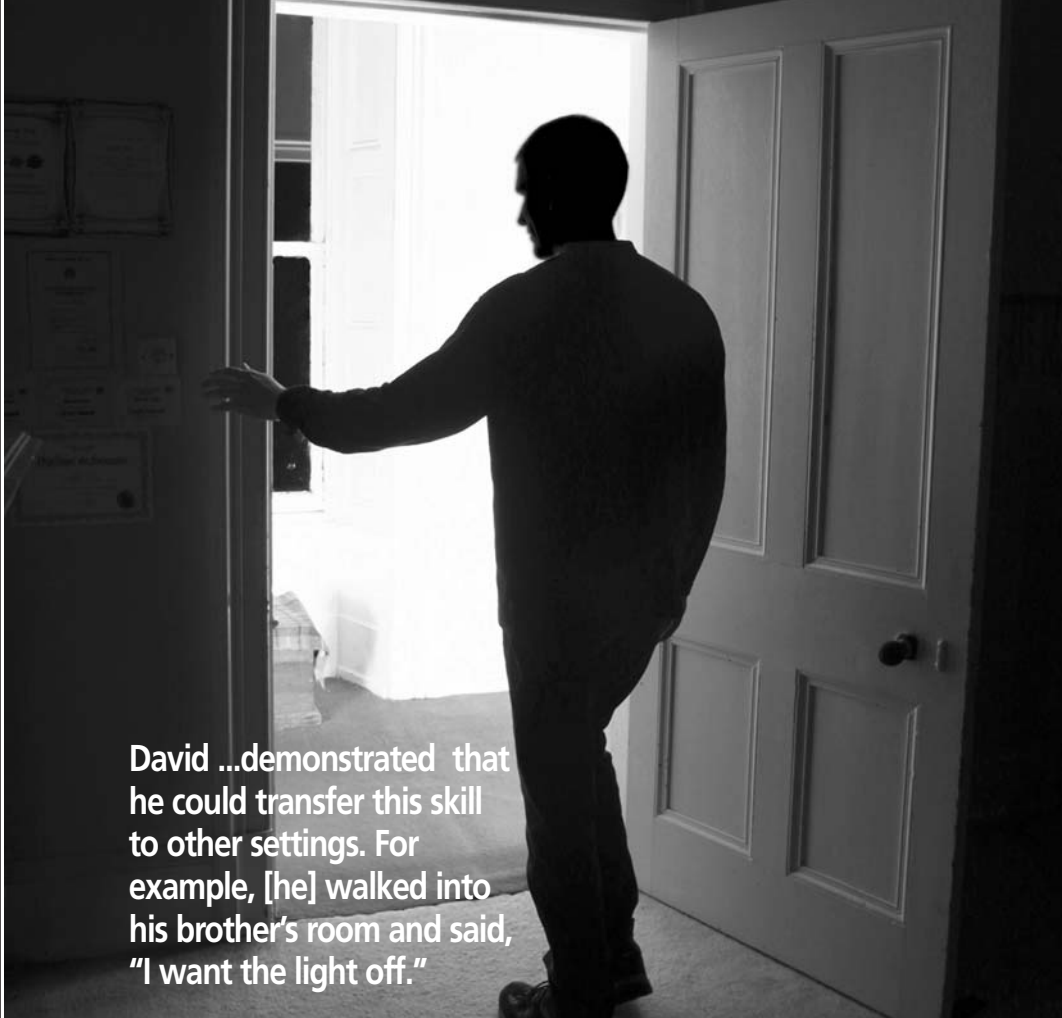
PECS acknowledges that a person may not be motivated to communicate by social rewards alone

David was introduced to stage 1. At the beginning symbols were used as recommended by PECS and the written word was printed underneath as we knew David was able to read the word. The first reinforcer used was a food item. Initially a physical prompter was needed to support David to reach for the reinforcer but this was gradually reduced until the

physical prompter was no longer needed. The verbal reinforcement given was, "I want a biscuit. Good!" This was chosen due to David's echolalia so that if he imitated the words then problems related to pronoun reversal would be avoided. David was very quick to learn what to do and after a short time started to say the name of the reinforcer while he was exchanging the symbol for it.

## STAGE 2 Spontaneity and range

Stage two involves increasing the 'spontaneity' and 'range'. The distance between the person and communication partner is gradually increased by moving the communication partner away a little at a time so eventually the person has to get up out of their chair and walk over to the communication partner to get their attention. Also the symbol is gradually moved away so the person has to move to get the symbol and give it to the communication partner. The physical prompter may be required initially and the amount of support needed reduced as before. PECS recommends at least 30 opportunities for exchanges to take place during functional activities each day. Ideally



David ...demonstrated that he could transfer this skill to other settings. For example, [he] walked into his brother's room and said, "I want the light off."

The six stage Picture Exchange Communication System recognises that a person may need more than social rewards to motivate them to communicate. Finding a lack of literature on the use of PECS with adults with a learning disability, Sally Poole starts the ball rolling with a study of 27 year old David's progress.

Stage 4 was introduced to David. A sentence strip was created using written words rather than symbols. The sandwich making activity was repeated but this time using whole sentences. David was able to say the whole sentence when exchanging for each item and demonstrated that he could transfer this skill to other settings. For example, in McDonalds he spontaneously said, "I want apple pie" and on another occasion walked into his brother's room and said, "I want the light off".

the exchanges should be carried out by different communication partners. David completed stage 2 without any difficulty.

### STAGE 3 Introducing the concept of choice

Stage three involves introducing the concept of choice. Two items are offered, a reinforcer and non-preferred item with the corresponding symbols. If the person picks up the correct symbol for the reinforcer, then they get the item. If they choose the wrong symbol, they get the non-preferred one. An error correction process is then carried out where the correct symbol for the reinforcer is shown and the person is given another opportunity to choose the right symbol and obtain the reinforcer.

Initially there were some difficulties introducing stage 3 with David. He was shown two types of food, one he liked and one we knew he didn't. When offered the symbols representing these, David chose the symbol of the reinforcer first and received the food that he liked - but then chose the symbol of the non-preferred item and proceeded to eat that food too. He continued to choose alternate symbols. David did not seem to understand that he was being offered a choice and was confused about which symbol he should go for, not necessarily taking the one that he preferred. At this point we decided to deviate from the programme slightly and create a more natural environment to practise in.

We devised a group activity making sandwiches. This involved getting all the items needed to make a sandwich - bread, butter, knife, plate, fill-

ings and so on - and symbols for each item. The symbols were put in front of David and there were three other people in the room. Everyone took turns to pick up a symbol and pass it to one person who acted as the 'shopkeeper' and was in charge of giving out the food. Each person gave the symbol of the item they wanted to the shopkeeper and were immediately rewarded by being given the item and verbal reinforcement as before. David was quick to learn what to do and picked up only the symbols of the items he wanted and handed them to the shopkeeper, clearly indicating his choice from the items available.

This activity proved to be successful. Having practised this several times, we decided to try using just the word rather than the symbol and the word - and David did not have any difficulty with this.

### STAGE 4 Introducing sentences

When a person is able to exchange about 20 different symbols, the idea of using a whole sentence is introduced. The person is taught to make a request using a whole sentence. A sentence strip is created. At the beginning are symbols representing "I want....." and a space is left at the end where another symbol can be added to complete the sentence. As the person reaches for the reinforcer, the physical prompter supports them to attach the symbol of the reinforcer to the end of the strip to complete the sentence and hand over the complete sentence strip to the communication partner. The communication partner says "I want..... a biscuit" because they are reinforcing what the sentence says to the person.

in McDonalds he spontaneously said "I want apple pie"

### STAGE 5 Responding to questions

In Stage 5, the person is taught to respond to a question such as "What do you want?". They are taught to respond using a whole sentence as before: "I want.....". The same technique is used as in stage 4 and the person is supported to complete the sentence strip and hand it to the communication partner. We carried out this stage with David using the sandwich making activity and he was able to respond to a question using a whole sentence.

### STAGE 6 More sentences

Stage 6 involves introducing a different sentence, "I can see...." For most people this is less motivating than "I want..." as there is no reward at the end. We practised this as a group activity, looking at magazines and taking it in turns to point to something and say, "I see...." adding the name of the item to the end of the sentence (for example, "I see..... a blue sock".) David was able to do this during the session but was not observed to use the sentence spontaneously.

At the end of stage 6 we agreed the key worker would take responsibility for continuing to use PECS with David and supporting him to use the sentences he had learnt in the sessions. We made some miniature sentences for David including "I want....." and "I see.....". These were put on a key ring that he could keep in his pocket and refer to as a visual aid

### Communicating spontaneously

At the end of the programme, David was using more eye contact than he had done before starting, and seemed more aware that he needed to direct a request to another person to communicate successfully. He started communicating spontaneously using more than a one-word utterance, for example ▶

# REVIEWS

◀ saying, "I want the light off". David started using more speech and initiating communication through speech rather than writing things down on paper. He also began to answer questions with an appropriate answer rather than being echolalic or saying 'yes'. His sister reported that David seemed more aware of other people - for example, he would offer his food to share with her - and that he appeared to have developed confidence in communicating with new people. It is likely that this was due to a combination of using PECS and the increase in opportunities available to him. David seemed more motivated to communicate than previously. As well as this he seemed pleased when he received praise from his family following his attempts to use speech.

One of the benefits of using PECS is that it is a structured programme with discrete goals at each stage. This is helpful for families and carers, as they are able to see progress as the person moves through the stages. The stages can, however, be adapted for individuals, as we did for David at stage 3 to make it more like a 'real life' situation.

David is one of the more able clients that I have worked with. Despite this, this programme took over a year to complete. It is likely that someone with a greater degree of learning disability will take longer to reach each stage and may never be able to move beyond the first or second stage. In addition success with this programme, as with many others, is highly dependent on it being carried out regularly. The programme resulted in some positive effects in terms of David's communication, however maintenance and development of skills is dependent on someone taking responsibility for continuing the work once speech and language therapy is no longer involved.

One year since closing my involvement, David's sister is still encouraging him to use PECS, David has started receiving one-to-one input from a different

organisation and we are awaiting a new referral from them around how to support David to develop his use of PECS. It would be interesting to hear from other people who have used PECS with adults with learning disabilities and for more information to be published in this area.

*Sally Poole is a speech and language therapist working in a community healthcare team for adults with learning disabilities.*

## Reflections

- Do I ensure that clients are receiving sufficient backup from other services before offering them therapy?
- Do I follow tried and tested formats in a way which responds to individual need?
- Do I consider writing up my implementation of a particular approach with a client?

## Resources

For further information about PECS (including courses) please contact:  
Office: 17 Prince Albert Street, Brighton, BN1 1HF  
Telephone: (01273) 609555  
Website: [www.pecs-uk.com](http://www.pecs-uk.com)  
E-mail: [sbaker@pecs-uk.com](mailto:sbaker@pecs-uk.com)

## MUSIC

### GO WITH THE FLOW

#### Approaches to Communication Through Music

Ed Margaret Corke

David Fulton Publishers

ISBN 1 85346 843 6

£15.00

This book suggests using music in imaginative ways to 'go with the flow' of clients with severe and profound learning difficulties and is inspired by the Intensive Interaction approach.

The text clearly describes a framework to develop social communication skills with good guidelines for facilitators and a helpful trouble-shooting section. There are few case examples although there are suggested songs to start you off. The emphasis is to use these activities flexibly.

Some therapists could be inspired to use this approach in groups but may need confidence and musical knowledge to use it most effectively.

*Suzanne Thurling is a speech and language therapist at Galtres school, a secondary school for pupils with severe and profound learning difficulties in York.*

## ANATOMY & PHYSIOLOGY

### LOSES ITS WAY

#### Basic Medical Science for Speech and Language Therapy Students

M. Atkinson & S. McHanwell

Whurr

ISBN 1 86156 238 1

£29.50

This book was written to fill a gap which existed. The authors, after previous success with a dentistry book, have attempted to produce an anatomy and physiology book aimed solely at speech and language therapists. The result is well ordered and covers each area in a depth according to its relevance. The interspersing of topics such as the aphasias and agnosias give an added dimension.

This book is, however, not without problems. The text often loses its way during lengthy and complicated descriptions of anatomical structures which could have been easily illustrated using a diagram. If read in conjunction with an anatomical atlas and a glossary of terms, this is a useful addition to any collection of anatomy and physiology books. It is not, however, the definitive guide that the authors may have set out to produce.

*Linda Morrison is studying for a BSc in Speech Pathology and Therapy at Queen Margaret University College, Edinburgh.*

## MULTIPLE DISABILITIES

### EASY TO FOLLOW

#### Basic Abilities - A Whole Approach; A Developmental Guide for Children with Multiple Disabilities

Sophie Levitt

Souvenir Press Ltd

ISBN 0285631713

£12.99

This book for carers of a young child with multiple disabilities is written in a friendly manner and frequently refers to working in partnership with therapists and teachers.

Chapters on daily life activities include eating and drinking, dressing and play. Carers select an activity and there are ideas for targeting abilities within each activity. Abilities include using hands, listening and understanding. A developmental framework is followed and carers can record their child's progress.

I found the introductions lengthy and repetitive but the practical chapters with illustrations are easy to follow. I have looked at the book with colleagues from other therapies. We would share bits of it with some families to complement what we already give.

*Hazel Anderson is a senior speech and language therapist working in a Child Development Centre, Sure Start and NAS EarlyBird Programme in Doncaster.*

## LANGUAGE DEVELOPMENT

### ACTIVITIES PROVED POPULAR

#### Helping children to build self-esteem - a photocopiable activities book

Deborah Plummer

Jessica Kingsley Publishers

ISBN 1 85302 927 0

£15.95

This book offers a combination of imagework and social use of language exercises to build self-esteem. It mainly targets children at key stages 1 and 2 who stutter, have mild language impairments, underachieve or have poor social skills.

Through photocopiable activities with instructions, groups or individuals join a treasure hunt to fill their chests with precious things such as self-knowledge, awareness of others, conversational and problem solving skills.

The activities are nicely sequenced and progress in small, logical steps. Helen selected the most appropriate activities with a range of dysfluent children but sees the advantages of covering all the material.

The tasks require a well developed imagination and would be most successful in groups. Sometimes the printed pictures seemed a little simple for the challenging, imaginative tasks but generally the activities proved popular and provoked interesting thoughts and ideas.

*Judy King and Helen Lennox are speech and language therapists with Selby and York Primary Care Trust.*