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"He doesn't use his Talker much!"

by Olwen Jones

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

Introduction

During the past academic year (1999–2000), several teaching, learning and care support members of staff at St Rose's School were commenting, quite spontaneously and independently, on the improvement they had noted in the communication skills of three pupils at the school. The gist of the comments were, "He doesn't use his Talker much but I can understand what he's saying much better!" The remarks were taken as an opportunity to review and reflect on the processes and the experiences that led to the comments being made.

The three pupils attend St Rose's School in Stroud, Gloucestershire. The school is non-maintained and has approximately 75 pupils, between the ages of 2 and 19 years on roll, all of whom have varying degrees of physical disability and associated learning disability. The school also offers residential facilities for just over half the students and there is a large team of staff employed to meet the students' needs. There are two whole time speech and language therapists employed by the school.

The three students are Philip aged 15, Andrew who is 12 and Robbie 6. They are all enthusiastic communicators and see themselves primarily as oral speakers but the intelligibility of what they wish to say is impaired by their developmental verbal dyspraxia.

The definition of the term 'developmental verbal dyspraxia' continues to cause debate. Other terms for the condition seen in research literature and textbooks are childhood apraxia/dyspraxia, developmental apraxia/dyspraxia or verbal apraxia/dyspraxia. There is a general agreement that the presenting aspect of developmental verbal dyspraxia constitutes a "disturbance in motor planning or programming of sequential movement for volitional speech production" (Yorkston, 1999)¹, without obvious neuro-muscular involvement. However, there is a view that this is too simplistic a definition as it ignores the condition's complex link with language, the development of which is frequently delayed, impaired or disordered in manner. A specific language disorder cannot be ruled out and the picture may be complicated further by cognitive as well as behavioural and emotional issues. The behavioural issues may or may not have arisen as a result of an inability to develop effective communication within the parameters of accepted norms. Therefore, children who have developmental verbal dyspraxia highlight the need to be given a holistic and developmental perspective to their speech and language therapy. "The last... barrier to developing our knowledge of developmental verbal dyspraxia is the lack of a developmental perspective. The unfolding nature of the problem has been ignored." (Stackhouse, 1992)²

Unfolding the past and revealing the present

All three boys have been late in achieving the conventionally recognised milestones of childhood. The older two boys can now walk unaided although Philip benefits from wearing leg splints. Philip's clinical picture is that of spastic diplegia with

some involvement of his left arm. Andrew does not have a specific diagnosis but has a wide gait and tends to walk on his toes, with a quick, bouncy stride. His arms are often raised at the elbows for stability and he periodically flaps his hands at high speed. Robbie walks with an ataxic gait and there is evidence of tremor in both his arms as well as his legs. He uses a rollator but can move unaided within a classroom pausing to stabilise himself on the furniture if he feels it necessary.

All were 'quiet' babies and babbling was restricted in nature so that none of the boys experienced the usual range of phonological play and feedback. Philip and Andrew had particularly poor attention and listening skills in their early years whereas Robbie tended towards passivity.

Philip came to St Rose's as a weekly boarder at the age of 11 following his primary education at Claremont School in Bristol. At Claremont, Philip and his family had received excellent support in learning and using Signed English and this was Philip's strongest method of communication when he arrived at St Rose's. Philip has a great desire to interact and relate to both adults and peers but his comprehension of spoken language is severely impaired as he has very poor auditory processing skills. He continues to rely heavily on visual cues from natural gesture, body language, formal signing, the environmental context and routine activities but his ability to cope with change is gradually improving. He usually understands a question such as "Show me your bag?" without signing, but "Where's your blue bag?" at a slightly higher linguistic level, would need to be signed so that Philip experiences a successful outcome. Philip's grasp of basic concepts has taken a long time to develop and he becomes confused by the challenge of acquiring abstract information.

Andrew began his attendance at St Rose's integrated nursery class when he was 2.4 years old. He continued his education as a day pupil through the infant/junior department of the school and is currently a senior pupil and a weekly boarder, who particularly enjoys the after school activities.

Robbie was 2.6 years when he began to attend the nursery and he is now in the school's infant department. Although Andrew and Robbie's time at the nursery did not overlap, both boys were introduced to Makaton³ sign language but despite encouragement and opportunity, neither displayed an enthusiasm for practical signing although they were happy to watch others speak and do the actions. Both disliked using their hands for painting, sticking etc which was taken as an indication of tactile defensiveness but both were great explorers of anything mechanical or electronic!

Andrew and Philip have struggled with the need to increase their attention to a task and both have gradually matured in this aspect of their development but considerable over-learning and recapping continues to be essential. Andrew has found abstract concepts easier to understand although his overall comprehension is well below that expected for his chronological age.

Robbie's comprehension was initially difficult to assess, as he was reluctant to co-operate in either informal or structured activities for a long time. However, by the age of 4.4 years, his language comprehension was considered to be only slightly below the average ability expected for his age.

As Philip's expressive language began to emerge it became apparent that he had a significant semantic difficulty. By now, Philip is able to create phrases and basic sentences using conventional syntax but he frequently reverts to using a stereotypical format e.g. at the start of an interaction he may say and sign, "Dad work car white." This has become a way in which Philip establishes rapport and once he has shared this information, he is usually happy for the topic to be changed although he may persevere and choose to procrastinate!

Andrew's expressive language has followed a conventional but protracted development so that he can now formulate and use his language to reason and resolve basic issues as in this recent conversation about a proposed visit to a local library.

Andrew: "Are we going out today, Olwen?"

Olwen: "I think this depends on the weather Andrew."

Andrew: "It going to pour down. We can go in your car. Take an umbrella."

The adult was effectively 'stitched up' and the outing took place!

Robbie's needs were anticipated at home so that he had little cause to extend himself verbally. However, Robbie gradually realised that he was not readily understood even within the supportive and encouraging environment of the school nursery. There was a dramatic improvement in Robbie's attitude after a particularly frank talk about his communication difficulties, at only 3.9 years of age, when he showed great relief at having his difficulty openly acknowledged. From that point, he began to explore and develop normal syntax so that by the age of 6 he, too, can manipulate his language to his own ends. He was recently observed entering into negotiation with his teacher as to whether he needed to do his maths or not!

Therapeutic Approaches

All the boys, their families and school staff experienced varying degrees of frustration at not being able to communicate easily and fluently and when intelligibility is compromised, there is an understandable pressure on the speech and language therapists involved with the children to 'do something.' Underpinning all three pupils' therapy was the need to encourage language comprehension and this was carried out through a variety of approaches e.g. play, the use of structured and modelled verbal language, sign with speech.

Working directly on changing articulation is a method that is often employed to improve developmental verbal dyspraxia. There are many assessment and therapeutic packages available to support this approach and most packages use visual cues to remind the user how to reproduce the target sound. Repetition is used to create and reinforce the kinaesthetic and auditory awareness. Both Philip and Andrew had short periods of articulation therapy when they were 8 years old. This form of therapy was limited in its success as it may have been introduced too early in relation to the 'unfolding nature of the problem,' namely the severity of the cognitive, language and

behavioural issues that emerged. Whilst the articulation therapy raised the children's focus on oral movement and associated sound, in Andrew it also exacerbated his tendency towards over-repetition of inappropriate behaviour. To this day, if Andrew sees sunspots on a floor, he finds difficulty in inhibiting his desire to jump from one to the other saying, "pah, pee, paw", a reference to the game that was introduced to make an articulation exercise fun.

Symbols were used to create low tech communication books. At Claremont, Philip was successfully introduced to Rebus and Makaton symbols³ and there were times when he used the book functionally. Andrew's book was based on Makaton and although he was actively involved with choosing his symbols, Andrew lost interest in his book despite all attempts to keep it topical.

Involving AAC

At Claremont, Philip was introduced to the Voice Output Communication Aid (VOCA), Orac⁴, which was programmed with an increasing number of messages linked to Rebus symbols, to support his reading development. As Philip showed potential in sequencing the symbols on the Orac, the school's resource Liberator⁵ was lent for periods of time within the school. He was introduced to the programme, 'Language, Learning and Living,'⁶ (LLL), which uses the Minspeak⁵ system of syntactic compaction. Following advice from his speech and language therapist, Philip's education authority agreed to purchase a DeltaTalker⁶ as this VOCA was considered to be robust, yet light enough, to be carried by Philip himself and the Liberator Company had a good record of service as well as a loan scheme. It also offered spell mode. The 32 symbol programme, 'Stepping Stones'⁷ was chosen in preference to LLL because of its lighter cognitive load, and Philip's knowledge of his overlay has increased slowly but steadily. As Philip finds word order very difficult to recall, the 'Writing With Symbols 2000' (WWS 2000) software has been used to give good language models which Philip has emulated on his Talker. Philip's memory of the Minspeak codes has been helped by the use of Picture Communication Symbols (PCS)⁷ in the 'Boardmaker'⁷ software.

Andrew had also shown a passing interest in the Oracs that were being used in the nursery and at a later stage he was lent one programmed to support the class reading scheme. Andrew's development was confusing, as each time it was thought that a VOCA should be used to support his emergent language, he would demonstrate a small burst of expressive improvement in his language structure and intelligibility. The picture was further confused by Andrew's fascination with technology, his tendency to over hit the keys and play with the VOCA rather than to use it purposefully. Some of Andrew's behavioural patterns e.g. repetitive hand flapping, stereotype utterances, has eventually led to the view that he should be considered to be on the autistic spectrum.

The spur to purchase a VOCA came from a discussion with Andrew's mother who wanted Andrew to be able to communicate more effectively in social situations. An AlphaTalker⁵ was duly purchased through charitable funding and proved useful socially, as a message carrier between school and home, and it became a functional tool to support class routines e.g. the daily weather report. Following this positive experience, a

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request was made to the LEA for funding for a DeltaTalker, using LLL, on the basis of its potential contribution to Andrew's future education. A further advantage was the availability of synthetic voice so that Andrew could 'own' a voice on the device rather than rely solely on his mother's digitised voice, which had been used on the AlphaTalker.

It became apparent that Robbie was going to be more cognitively able than the other two and an Orac was customised for Robbie's use when he was 3.9 years of age. He rapidly progressed to a 128 symbol overlay and was very comfortable with the PCS symbols produced from the BoardMaker programme. He was quickly able to use the VOCA functionally to name members of his family and to direct his choices of activities, to the delight of all concerned. Robbie needed a lighter device and Robbie's family decided to raise the money for a DeltaTalker themselves. They received tremendous local charity support and the device was purchased within 3 months.

As well as encouraging all three students to communicate as best as they could, using speech, signing, natural gesture and eye pointing, the school's staff were asked to help implement the VOCAs. They were asked:

- to practise and reinforce specific skills so that the student gained confidence and knowledge of Minspeak in:
 - i. specific situations e.g. named lessons, assemblies
 - ii. recreational situations e.g. play times, outings to shops
- to be aware of the potential of the device in relation to emergent literacy. (Digitised speech was used to record the phonemes of the alphabet for use with the 'Reading Reflex'⁸ method of encouraging literacy.)
- to give feedback to the SLT on how the student was or was not using the device.

The SLT would customise the VOCA and tutor the device on an individual basis with the student, the staff and the families.

Outcomes

Not all the parents have wished to be regularly involved with their child's AAC device once the first excitement of the arrival of the device is over. Although they were fully consulted, had a demonstration of the device before it arrived, discussion about its value and role in the development of their child's communication strategies, the families have not been able to commit the time to learn the 'new language' codes of the programmes. There is a parallel here between commercial language packages that offer enticing titles like 'Learn a New Foreign Language in 3 months'. Its only when the package has been purchased that the reality dawns that there is a need to commit a significant amount of time per day to achieve that tantalising linguistic competency in 3 months. Very few people have the time, energy or freedom to devote themselves to such a level of learning.

The school's staff expressed a sincere interest and desire to understand the programmes on the DeltaTalkers, and the formal goals and set exercises have to be achievable both for the staff and the pupils to experience a successful outcome. All the students have needed and benefited from time to explore and discover what's in their devices, at their own pace, as well as working at their formal speech and language therapy sessions. Philip and Andrew continue to enjoy cruising through

their Talkers during their free time. The school's staff has been particularly tolerant and helpful in this respect; tolerance of play facilitated the user's knowledge, competence and confidence in the device. Ultimately, this has led to the ability to use the Talker appropriately and making positive communication contributions to lessons. (The students' Talkers have customised vocabularies tailored to reflect their national curriculum based lessons).

Philip has had his own VOCA for 4 years now and carries it with him most of the time. He has used it purposefully, both socially and in lessons, and he's found it a very effective tool for interrupting, gossiping, directing and drawing positive attention to himself. He initiates conversation by speaking and is now sufficiently aware that if he is not understood, he can repair the situation by supporting his speech through sign and the use of his Talker. The Talker is aiding Philip's independence.

Because of his raised communicative awareness, Philip has spontaneously begun to ask for help to articulate more clearly and his attempts and success is being rewarded by further positive feedback, both from the readily accessible models in his Talker, and from adults who are finding it easier to try to help Philip now that they can understand him better. Philip has found the spell facility useful on his Talker e.g. if a person's name is not in Minspeak, he will usually succeed at calling up the first letter of that name in Spell Mode, with an attribute, using Minspeak. When the person has been identified, the name can be installed in Minspeak. New staff, in particular, are pleased to be called by name and this raises Philip's status and their perception of the student.

Philip has epilepsy and although this is generally well managed by medication, there are times when the medication is not fully effective as Philip is currently going through a period of physical growth. Consequently he is at risk of interrupted thought and memory patterns. The Talker's contents are a tangible record of the language that is most important to Philip and it therefore offers him a method of linguistic recall and security following an epileptic episode.

Andrew began to have some positive communicative experiences from using his AlphaTalker but they increased steadily when he acquired the more sophisticated DeltaTalker. In the following year's annual review, it was noted that his co-operation and overall behaviour had improved significantly since the introduction of the Talker. Some of Andrew's success in using his Talker has come from his own experimentation and the facility to repeat and revise. He has been keen to mix both Minspeak and spell mode particularly when he has not known the Minspeak code for a word. He's used his Talker to copy write from books and has marvelled that he can see 'his' words on the LCD display in his device. He's particularly enjoyed the facility to link the DeltaTalker to the WWS 2000 software and to be able to print out and 'read' a piece of symbolised text that he has authored.

As Andrew's intelligibility and the ease with which he is able to communicate has grown within the broad routine of the school, he has felt less inclined to carry the DeltaTalker from class to class. At first this was of great concern as it was felt that communicative opportunities were at risk of not being promoted. However, the staff has reported that they understand

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the majority of Andrew's contributions to their lessons as well as most of the social interactions that occur during the school day although there is a consensus that success depends on contextual situations. For Andrew and the staff, this has been a period of consolidation, a case of "roaming around the known!" (Burkhart)⁹ Andrew's self-esteem has grown and he is gradually becoming calmer and accepting of a more formal approach to therapy based on a customised version of 'The Liberator Lesson Plans.'⁵

Robbie's progress has been surprisingly quick. His expressive language structures have increased in length, content and variety as has the intelligibility of his speech. Although he has not mastered Minspeak in detail, his use of the DeltaTalker for specific activities in the class greatly enhanced his verbal self-confidence. The adage of 'success breeds success' is particularly true for Robbie who has the cognitive ability to listen, learn and practise with his supporters and also on his own. Robbie's reading is developing well and the use of the digitised phonemes has enabled him to improve his pronunciation as well as to learn to blend the sounds together as part of the 'Reading Reflex'¹⁰ strategy. "Evidence of a strong relationship between phonological processes and reading is provided by the fact that deficient phonological processing is the hallmark of poor readers." (Foley, 1999)¹⁰

Conclusion

Choosing a therapeutic path and predicting the outcome of therapy is always a challenge and the picture that a child with developmental verbal dyspraxia presents is far from straightforward. As partially verbal communicators, there is the tantalising hope that their speech will gradually develop without technological intervention but can one afford the time to wait for this to happen and will opportunities be lost by doing so? Having experienced the positive cascade effect of using AAC with Philip and then Andrew, the decision to introduce Robbie to AAC at an earlier age was much easier to make.

Acquiring funding to purchase AAC devices is not easy and there is an understandable pressure to justify their purchase. Could these three students have improved their communication skills to the level of competency that they have reached, without the expense of a VOCA? This is impossible to answer objectively as there are no control subjects but can one afford not to look at this route in order to maximise a child's development? As Stephen Calculator says "... a more realistic proposition would suggest that any outcome of AAC is combined, transient, cumulative effects, arises from several co-occurring variables, any one or combination of which can exert a differential impact on an individual's success with AAC at any given moment." (Calculator, 1999)¹¹

The VOCAs have been an invaluable and essential tool in the students' current and future communicative success. Philip will continue to benefit from new vocabulary being programmed into his DeltaTalker and he will take pride in his achievement at being able to imitate and pronounce words more accurately. Having experienced success, Andrew will be encouraged to realise that he can learn more Minspeak codes, so that he will find the Talker useful to promote further success in a wider communicative circle. Both Andrew and Robbie will find their devices useful to aid their phonological awareness in relation to literacy and writing skills. Of the three

students, Robbie is likely to be included in a local mainstream school where he will be able to enjoy the freedom of natural speech with new friends.

Once the device is purchased, there is a period when all concerned feel an unstated pressure to justify its purchase by using it everywhere, all of the time and feeling guilty if they don't! Over different periods of time, a natural balance has evolved reflecting the different level of secure verbal communicative success and growing self-esteem that the boys have experienced. Philip, Andrew and Robbie have shown that they are able to choose when they use their devices to their own benefit and not just to please the funding authorities, the teachers or the therapists! Philip values his Talker daily as a natural and functional extension of his communicative repertoire. Three years on, Andrew no longer feels he needs to carry the device during the school day to talk to his peers or familiar adults and Robbie recently announced quite clearly, "I don't need my Talker anymore!"

The reason why "He doesn't use his Talker much!" is that the Talkers are doing their job to promote the students' natural speech to the level where it becomes an effective communicative tool in preference to an electronic device. A case of customer/consumer satisfaction!

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Rolling Drama and AAC Users

by Ann Gresswell

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

What is Rolling Drama?

Rolling drama sessions are where an adult (e.g. a teacher, speech and language therapist, classroom assistant) sets a scene or scenario. This may be an everyday situation, e.g. shopping, or something out of the ordinary, e.g. a trip to the moon. What happens within the session is under the control of those taking part in the drama, so is not preordained or organised by the adults and anything may happen (and often does!). However, some preparation is needed, especially ensuring that speech output devices, communication books and charts are available and updated with new vocabulary, as it is needed.

It is not performance drama; everyone in the room must participate, so there are no observers. (An exception has been made for the Communication Matters presentation, as we did have someone in to work the video camera in order to be able to illustrate the talk!)

The drama can be stopped and restarted, allowing one to discuss an issue out of role, to jump ahead in time, or for people to take on different roles. How this is managed is discussed later in this paper.

Why is rolling drama useful when working with pupils using AAC?

Rolling drama is a session that gives opportunities for pupils using AAC to develop their communication and to give them control. It is also a time in which adults can model the use of language. Rolling drama can be used to support specific curriculum work.

An area that I would like to develop further is to see how successful rolling drama sessions could be in teaching staff how to work with pupils using AAC.

Developing Communication

If the drama sessions are going to be taken forward by the pupils, they need to have the tools to communicate and participate. This means they need to have with them their communication charts, books, speech output devices as appropriate. Additional charts/pages may need to be made in advance to supplement these and signing books may need to be available for new words to be looked up in case they are needed. Some easy to program devices such as BigMacks, One-Steps or MessageMates can also be useful to have around to put in messages that are suddenly needed in a session. For example, in one session a lamp was broken and one child wanted to phone the electrician. This message was put on a BigMack so he could pretend to be phoning.

Within the drama sessions, pupils can be given the opportunity to tell others what to do (this is often a difficult thing for early users of AAC to do). This situation may need to be set up by an adult. For example, in a session, 'going on a camping

expedition', when talking out of the drama situation, I asked a specific pupil to be in charge of what tasks the other people should do when we restarted the drama.

Drama can be (and should always be) a very motivating session. Incorporating choosing in these situations can be a very successful way of giving the experience of choice-making to a pupil who is at this early stage of communicating. This might be just making a choice between playing with a ball or in a sand-tray. In the situation I am thinking of, Joe chose a ball and then he had to make a choice of who to throw the ball to. Within this session, a window got broken – luckily all of this was 'pretend'!

Within the drama sessions pupils have the opportunity to be imaginative. In one session, 'a trip to the moon', a pupil using a Cameleon told us he could see a chocolate mountain (well it made a change from cheese!). Even though some of the youngsters in the class were not able to communicate at this more sophisticated level, they joined in the eating of the mountain and could tell us how they felt with their 'feelings' page. We ate rather a lot of the mountain and were all sick!

In the past, pupils in all schools were not allowed to speak until they were spoken to. This meant pupils were asked questions and then had to answer. Now a variety of communications are expected from speaking children, for example they are expected to be able to describe events and experiences and join in discussions. Pupils using AAC are also entitled to this range of opportunities. Ways need to be found so that they are not just involved in question and answer sessions. Rolling drama sessions are one of those situations where pupils are often spontaneously communicative. Depending on the group, adults may have to make comments to elicit this spontaneous communication. In one of the sessions I was involved with, a horse had been found. When it was tied up, I said, 'I hope it is tied up tightly!' a few seconds later one of the youngster, through gesture and some signing, indicated that the horse had got free. His own idea, with just a little help from me!

Giving Pupils Control

It can be seen from some of the examples above that these sessions are a great opportunity to give pupils greater control, including making things happen, telling others what to do and making decisions. For example, for decision making - in the session pretending to be on a camping expedition, those participating had to decide what clothes and food they had to pack.

Opportunities for Adults to Model the Use of Language

The sessions give the adults, who are participating along with the pupils, the chance to model the use of language. This will be through speech but also by using the AAC that the pupils are using. This might be signing, pointing to the pictures/symbols

on charts or in communication books that the pupils are using or by having symbols displayed on a Velcro board or a communication vest. Modeling of AAC is important so that pupils see this is a way of communicating and it gives value to using AAC.

Teaching Staff How to Work With Pupils Using AAC

During some of the drama sessions I have led, I have worked with staff who were not so familiar with using AAC and I have seen the possible potential to use these sessions as a method of training staff.

It is often quicker for staff to give choices to non-speaking pupils which require a 'yes'/'no' answer. Staff have to guess what a pupil wants to say and phrase an appropriate question. This limits true communication. Through the drama sessions the potential of AAC and the limitations of 'yes/no' answers can be demonstrated. An example of this is when we were packing for a camping expedition. Staff could easily have asked Aron if he wanted to pack the food and he could have answered 'yes' or 'no' and then further closed questions could have been asked to find out what he wanted to take. However, Aron asked for his communication book and by eye-pointing indicated that he wanted the weather page and then chose 'windy'. He wanted to talk about what the weather was going to be like and tell everybody else so they packed the appropriate clothing. This really made him feel he was in control.

The sessions also give the staff a chance to become familiar with signs; charts; books and speech output devices and communicate with the pupils who are using these, as well as modeling their use when they wish to communicate something.

Supporting Curriculum Work

The most obvious area of curriculum work that is addressed in these drama sessions is communication (equivalent of 'speaking and listening' in English National Curriculum terms).

The National Curriculum (Handbook for primary teachers in England) Key Stages 1 and 2 and Key Stages 3 and 4 states in 'Use of language across the curriculum' that:

"In speaking, pupils should be taught to use language precisely and cogently" and "Pupils should be taught to listen to others, and to respond and build on their ideas and views constructively" (p.38 in Key Stages 1 & 2 and p.40 in Key Stages 3 & 4)

There are also, within each of the Key Stages, sections referring to drama. The use of language is specifically mentioned in Key Stage 1 in the drama section:

"use language...to explore and convey situations, characters and emotions"

However, other curriculum areas can also be addressed. Opportunities for reading and writing can also be found within the drama sessions. The postman (even the school secretary can be persuaded to join the drama sessions and pretend to be the postman!) arriving with letters gives the pupils the chance to read their letters (with symbols if appropriate). These can be inviting them to a meeting to prepare for an expedition to the Antarctic or to the moon or to...? Writing in role, for example,

writing a diary at the end of the (pretend) day can also be motivating for pupils who are not so keen on writing – perhaps they feel freer to write when they are pretending to be someone else? Out of role, the pupils can then be given a chance to read back what they have written if they wish.

I have also used drama sessions to support curriculum work in geography and history. We have pretended to visit different countries and in our history session had studied canals and brought this more to life by acting out working on a canal barge. This 'canal' session ended up with stopping at the pub which the pupils had seen on our visit to a real canal!

Some of the situations that arise can lead to work in other curriculum areas. In one of the sessions where we had found evidence of a very large animal loose on our Island (was it a monster, a dinosaur or what?) it was decided to build a trap to capture it – so in our design technology sessions we made a model trap.

One area I have often been asked about is working with pupils with profound and multiple learning difficulties who are following a sensory curriculum. I have worked with pupils with these difficulties within a group of children with varying levels of disability.

The curriculum for pupils with profound and multiple learning difficulties is usually developed to stimulate the senses of touch, taste, vision, hearing and smell. In the drama sessions a number of emotions are evoked, including excitement, surprise, happiness and sadness. I believe that the sense of emotion is another important sense that should be remembered when working with these pupils. Drama is a great medium for them to be part of and perhaps become aware of the feelings of those around them and perhaps feel these emotions themselves.

Structuring Sessions

Although what happens during the drama is not planned, the session does need to be prepared, to have a starting point and to have rules. The adults and pupils also need to have an understanding about the stopping and starting of the drama during the session.

Preparation

The pupils will need their communication books, charts and speech output devices accessible (as they always should be). Additional charts may also be needed and will need preparing in advance. Simple speech output devices such as BigMacks, One-Steps or MessageMates should be available, as well as a signing book to look up any new signs that may be required, if signing is used by any of the pupils.

Discussion may be needed regarding the subject of the drama. Whether this is necessary will depend on the pupils' previous experiences. This discussion may be through a subject lesson, for example the canal session explained above (see section on 'Supporting Curriculum Work') or it may be part of the drama session, but out of role. In preparation for a camping expedition, a real tent, rucksack, sleeping-bag etc were brought in for the children to look at, feel, talk about etc. These items were not used in the drama as real objects are used only rarely. Real objects tend to narrow down the drama as the pupils often focus on this object and the situation tends not to develop.

Starting the Session

If the drama is continuing from a previous week we run through what happened and decide if the drama is to continue from that point or to jump forward in time. We can also decide if people are going to change roles or take on new ones. If there are new people joining the group the rules (see below) have to be run through.

I always use a set routine just before actually starting the drama. Once the pupils know this routine it raises their expectations in readiness for starting the drama. This usually consists of going round each individual, pupil and adult, and asking if they are ready to pretend. With the last group I worked with, there was a pupil with visual difficulties so I let him feel the scarf I wear during the drama (see below for why I use this) as part of this preparation time. All the other pupils then wanted to feel it so this also became part of the ritual.

Rules

There are a limited number of rules. These include, as already mentioned, not using real objects and not having observers. Additionally, everyone has to agree to pretend to be adults and if someone 'sees' something everyone has to pretend that it exists.

Everyone pretending to be an adult means that within the drama all are on a par and ideas are equally important, whether they are actually a pupil's or a 'real' adult's! It has never occurred in drama sessions that I have been involved with, that someone has needed to pretend to be a child, possibly due to the themes chosen. My feeling is that a child in the drama might not help the development of the drama as stereotypical behaviour might occur, for example telling a child off, being silly etc.

The most important rule is regarding the stopping of the drama. One needs something to indicate when the drama is taking place (all, teachers/speech and language therapists/learning support assistants and pupils, are working together pretending to be adults) or when the drama has been stopped (the adults taking on their usual roles of teacher etc). For this, I use a scarf. When I am wearing the scarf we are pretending, when I take off the scarf the drama stops and I am the teacher again. This device is very valuable for five main reasons.

1. It allows one to stop the drama so that people can take on different roles, for example, in one session a pupil said, through his communication book, that he had seen a bus. At this point I took off my scarf and out of role we decided who was going to be driving the bus and then with the scarf back on the drama continued.
2. The drama can be stopped and moved forward in time, for example, having gone to sleep in a tent the drama can be stopped and taken forward in time to the morning. Another example would be having prepared for a journey to the Antarctic, one could then take it forward to being there, if the journey was not wanted as a focus. Finding the balance between allowing the drama to continue at its own pace and stopping it and jumping it forward to keep the momentum and involvement of all, needs to be handled with sensitivity.
3. If one has run out of time, the drama can be stopped and can then be continued the following week.
4. At any point the drama can be stopped so that things can be explained if it is thought some pupils do not understand. For example, if a more cognitively able child says with their speech output device that they have seen 'a walrus' one

might need to clarify this to other pupils. Having resources to hand for this sort of eventuality is ideal but pupils come up with the unexpected so the drama might have to stop and a visit be made to the school library! Again, whether to stop the drama or not has to be handled sensitively as one maybe can help the pupils understand unknown things through the drama and stopping it is not needed.

5. Finally, being able to stop the drama at any point gives the teacher/speech and language therapist/learning support assistant who is leading the session the ultimate control and this might be needed. Rarely have I had to stop the drama because I needed to control the situation. I have needed to do this when a pupil was not behaving appropriately, not really joining in and giggling. A stop, and asking if we want to continue, has been sufficient to sort this situation out. I have also stopped the drama when a situation was arising that I was not comfortable with. In this situation, we were camping and someone spotted a stranger. One of the pupils, a speaking pupil, said she had got a knife and was going to kill the stranger. I needed time to think! I stopped the drama and then out of role we discussed as a group whether this was the way to deal with the situation and, with agreement, it was decided it was not!

Scenarios

This may be an everyday situation or something out of the ordinary. Ones I have found best are where I have organised that something out of the ordinary has the possibility of happening. Some ideas are given below:

- A magic bag – anything can be found in this bag (this is a very useful idea for introducing the idea of pretending, and can be used as a starting point with a new group of pupils and adults)
- Trips on buses, boats etc
- Shopping
- Holidays
- An island - this can be extended so one morning a large footprint is found (I made the footprint from plaster-of-Paris)
- Camping - this can be extended so the group becomes stranded by a flood
- Historical settings, e.g. canal boat
- A crying person (this person pretends he/she is a clown and has lost his/her job)
- Trips to Antarctic, the moon, etc.
- Finding a very large egg

Conclusion

I have used rolling dramas with a wide variety of pupils and have found it a stimulating and enriching experience for both pupils and adults. In fact, as drama should be, the sessions can sometimes be magical! One of my best memories is when one pupil, who had aggressive behaviour, and rarely participated with the other pupils in the class, said, using his communication book, that a taxi had come and we all had to get in the taxi and we went to visit his mum.

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isaac

Wonderful Communication

Fantasy and Fairytales are the themes of the
ISAAC 2002 International Conference
 to be held in Odense, Denmark 10-15 August 2002

isaac

nce upon a time, there was a group of people - about 10 per cent of the world's population - who had disabilities. About 25 per cent of them were unable to communicate because of the disabilities.

Then the good fairy waved her wand, and suddenly most of them could speak, read and write.

That more and more people can function at a much higher level in their everyday lives despite having severe impairments is really a fairytale come true. And where could it be more relevant to discuss this, and the many possibilities that the future will bring, than in Odense in the heart of Denmark - the hometown of the famous Danish author of fairytales, Hans Christian Andersen.

The ISAAC 2002 International Conference will feature an exciting, professional and scientific program, including a number of activities for AAC users. There will be entertainment and fantastic events as well as a large exhibition.

It's 'Wonderful Communication' when children with communication impairments now have the opportunity to play and go to school instead of living isolated.

It's 'Wonderful Communication' when youths with communication impairments are able to get an education, and adults can be a part of the work force.

It's 'Wonderful Communication' when the right to influence one's own life via communication becomes a reality.

It isn't only in fairytales that the ugly duckling becomes a beautiful swan.

A greater focus on the needs of users of AAC means that individuals with disabilities will experience very few situations in which they feel disabled.

Then we will no longer talk about "Karen who can't speak" or "Peter who can't write". Because they can, in their own way.

Now that's a real fairytale.

The conference committee looks forward to giving you a warm welcome at ISAAC 2002, which will be held in a modern, accessible centre near the home of H.C. Andersen.

For further information about ISAAC 2002:

www.isaac2002.dk

EASLAIDS Advertisement

Motivation and Acceptance Issues in the Provision of Assistive Technology to Adults with Severe Acquired Neuro-disability

by Inge Berrie and Gary Derwent

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

Introduction

Compass, the Electronic Assistive Technology (EAT) service at the Royal Hospital for Neuro-disability, deals with clients admitted to the hospital's several rehabilitation wards as well as with clients referred from the community or from other units. Implementation of Assistive Technology is carried out by ward based therapists who work in collaboration with the Compass team. The Compass team consists of specialist members from Speech and Language Therapy, Occupational Therapy and Rehabilitation Engineering and can also involve specialist members from Psychology and Physiotherapy if necessary.

The Compass team have dealt with many clients with locked in syndrome (LIS) and have gained experience in improving motivation and acceptance of technology by these clients. This paper is not intended to be an exhaustive list of factors to consider, but to present some situations encountered by the team over the years. Three case studies are illustrated, all clients with locked in syndrome who were each seen by the team over a long period while they were undergoing rehabilitation at the hospital. Each had very similar presentation on admission but were discharged with different systems. All used several types of technology integrated to work with single switches.

Locked-In Syndrome

Clients with Locked in Syndrome have generally suffered a brain stem stroke and can be described as being quadriplegic where voluntary movements are limited to vertical ocular movements and possibly eyeblinks (Plum and Posner, 1966). They are anarthric, have normal or near normal cognition and some form of visual impairment (Culp & Ladtkow, 1992). The motor skills of some people with LIS do recover to a limited extent. Thumb movement or facial expression may improve as well as some head control (Dahaene, Dom, Marchau & Geens 1985).

Case Studies

Mr F – Age 39 at onset of Brainstem Cerebrovascular Accident (CVA). Previous work as an engineer. Divorced with three young children.

Equipment: Apollo powered wheelchair with custom made controller. Apple laptop computer with Discover:Ke:nx single switch system. Small plate switch activated by left thumb adduction. Specs switch mounted in headrest.

Mr C – Age 62 at onset of Brainstem CVA. Previous work as a Docker. Married with adult children.

Equipment: Foam Karve seat on Powered Shadow tilt in space wheelbase. Single switch scanning wheelchair controller from the Controls Dynamic DX range. PC Laptop with Clicker 4 software. Small plate switch activated by head rotation.

Mr P – Age 50 at onset of Brainstem CVA. Previous work as a Prison Officer. Admitted from home, four years post CVA. Married, no children, wife acts as main carer.

Equipment: Apollo powered wheelchair with tilt in space conversion by Nuffield Orthopaedic. Custom made wheelchair controller. Lightwriter SL85 mounted on rear of chair. Separate display for text output mounted on tray. Air pressure switch mounted in headrest. Wireless Radio Frequency (RF) connection to Steepers Persona environmental control.

Emotions, Motivation and Acceptance

Denise Gubbay gives an insight into some of the feelings clients experience during assessment and subsequent use of AAC (Gubbay & Van Creveld, 1998). She did not have LIS but required AAC as a result of a degenerative condition. She expressed feelings of anger and fear in the anticipation of her assessment. This was particularly due to the fact that professionals were taking the liberty to decide what her needs were, when she knew her needs herself. She reported feelings of embarrassment when using a communication aid and feelings of despair knowing that she was not going to change and that her loss of speech was permanent. Throughout all of this she tried to maintain a sense of dignity and identity. Case reports such as this lead us to examine our own practice and drive us as professionals to seek the best solution for our clients who have lost their speech without losing sight of the client's emotional state which influences their motivation and acceptance of EAT.

In a recent study Armstrong, Jans and MacDonald (2000) interviewed thirty SLTs to find out what factors they thought were important when providing a communication aid to people with Parkinson's disease. Twenty eight out of thirty SLTs interviewed rated a client's motor abilities as important in deciding whether AAC was viable or not compared to thirteen out of thirty who rated motivation of the client as important. Motor access for AAC is obviously important but if a client is not motivated to use an aid then good motor access is not helpful. As professionals we need to ensure that we give enough consideration to the motivation of clients.

In the early stages of rehabilitation clients often do not realise that EAT can assist them to communicate and gain more independence. It is the therapist's responsibility to assist the client in understanding what EAT can offer in order to allow them to make informed decisions at the appropriate time. Frequently though, we fail our clients, as we do not ask AAC users what their perspective is on electronic assistive devices (McCall, Markova, Murphy, Moodie & Collins 1997).

The Compass team at the Royal Hospital for Neuro-disability attempt to include clients in decision making as much as

possible. However clients frequently have difficulty coming to terms with their disability and therefore may not be able to make an informed decision. It is important to address issues related to EAT throughout the rehabilitation process in order to allow clients time to come to terms with their disability and their need for EAT.

Some of the factors which influence motivation and acceptance, as noted by the Compass team at the Royal Hospital for Neuro-disability, are described below, together with examples of how these factors affected the three case studies introduced at the beginning of this paper.

Family

Culp & Ladtkow (1992) agree that psychosocial issues play a key role in the provision of assistive technology and that frequently clients and families have difficulty accepting augmentative techniques as a result of their process of grieving. It is therefore important to work with the family and client in a counselling situation. Counselling can focus on grieving and adapting to the disability and on the acceptance and integration of EAT into clients' lives. At the Royal Hospital for Neuro-disability the Compass team work in collaboration with the psychology department to assist clients and families to understand their disabilities and the role of EAT.

Increasing family involvement throughout the assessment process decreases their anxiety of the unknown, develops better relationships with the professionals and in turn affects the long-term success of assistive technology. It is helpful to include families in the functional use of EAT at each stage of assessment.

Mr C's motivation to use a computer was increased when he was shown how to send and receive e-mails from his daughter. Mr F had always had difficulty establishing a relationship with his young son. Computer games and web browsing provided them with an activity in which they could both participate equally.

Staff

It is important to ensure that all staff working with the client are familiar with the equipment or are introduced to it at the same time as the client. To improve the confidence of both staff and patient, light tech devices should be introduced first with more complex devices introduced gradually. This should allow staff to develop a positive attitude towards technology before more complex technology and software is introduced. This positive attitude in turn will benefit the rapport between client and staff member. Consistency of staff involved in teaching the use of the equipment to the client is also essential. It is important that a client is exposed to many communication partners when they are using the equipment proficiently, but in the initial stages it may be more effective for one person to work intensively for a short time with a client to develop specific skills. Although consistent nursing staff with time to contribute to EAT provision is an ideal, it is recognised that high work load and changing agency staff are the reality, and can cause problems despite the willingness of staff to participate.

Mr F had a very strong rapport with one of the health care assistants. Although the health care assistant had little experience of EAT, he took time to learn how to use it. This increased the amount of time Mr F used his electronic communication aid, gave him confidence that a knowledgeable person was always close at hand if problems arose and ultimately led to successful use of all his assistive devices.

Mr C was taking longer than anticipated to learn an on-screen scanning system. It was established that he was being taught by several therapy staff members who had different levels of knowledge of the system. When his timetable was changed so that the same person always taught him, his skills improved much more quickly.

Timing

Timing the introduction of EAT is crucial. Clients must see the benefits of EAT in order to be motivated to use it. They should be proficient in low tech AAC before moving on to high tech devices e.g. making choices may be motivating (Calculator 1999). Therefore, as previously mentioned, clients are introduced to a low tech communication aid and then move onto light tech and eventually high tech devices. It is vital not to introduce EAT too soon, clients may see EAT as a permanent solution and an indication that they are not going to recover further. This may lead to rejection of the equipment and increased psychological problems. They may also feel that using technology will reduce the opportunity for human contact.

When EAT is introduced, switch access issues obviously need to be resolved first, and with locked in clients this can often take some time, leading to frustration on the part of the client. When switch activation may still be unreliable, it is best to use a very simple device to allow the client to practice and build up strength and stamina, however this must be balanced with the motivation of the client. A simple sound or light is effective but may become very tedious for the client to keep practising with. The Compass team will often use a simple environmental control set-up to work on switch access, introduce technology and show the client what is possible.

Mr C was introduced to an environmental control system prior to a high tech communication aid. Ultimately, he chose not to use an environmental control as he felt this might result in him being isolated from human contact. However he did agree to keep practising with it during regular sessions, and this in turn improved his skills and showed him how beneficial EAT could be. He eventually accepted a laptop based communication system.

Premorbid Attitude to Technology

Calculator (1999) found that previous experience of technology affects the attitudes of clients and this is reflected in the experience of the Compass team.

Mr F who had been an engineer, accepted technology much more quickly than Mr C, a dock worker, and Mr P, a prison warden. This may also have been related to age, as Mr F was far younger than Mr C and Mr P. Clients with little premorbid experience require considerably more training of the basics when using assistive technology.

Experience Prior to EAT Assessment

Previous negative experiences with technology post injury but prior to formal EAT assessment may also affect clients' attitude towards using technology and staff should try to ascertain if any such incidents have taken place.

In his first hospital, Mr C had the experience of a walkman being left on him, playing continuously. He could not remove or control it, the volume was uncomfortable and the same music was repeated over and over again. This obviously distressed him and left him with a deep distrust of all high tech

equipment. This may have contributed to his decision not to use an environmental control, preferring to encourage ward staff to check on his needs regularly.

Appearance of Equipment

Clients may often reject equipment because of the way it looks and the way it affects their self image rather than what it can achieve. Staff need to be highly aware of this issue and do everything possible to make the equipment fit in with the clients self image, rather than expecting the client to change. Equally, as their acceptance of disability changes, the types of equipment they will be willing to use may change. Staff must have the flexibility to change the equipment for them as their physical ability changes (Beukelman and Garrett, 1988).

Initially, Mr F was much more proficient at using a head switch than a hand switch, however he insisted that he did not want a head switch as he felt that wires around his headrest made him appear 'more disabled'. Two factors influenced his eventual agreement to use a head switch. Firstly, he was eventually able to drive a powered wheelchair using a hand switch, but the switch sometimes fell out of his grasp when he coughed, leading to safety issues in driving the chair. Using the head switch was the only way he could have an 'emergency stop' switch for the chair. Secondly, the Compass team embedded the head switch into the headrest, underneath the headrest cover, so that it could not be seen.

Mr F's decision to use a laptop computer rather than a Lightwriter was also influenced by his perceived self image. He felt that a Lightwriter marked him out as being disabled whereas a laptop was standard equipment used by many people.

Acceptance of Switches and Mounting Systems

The use and choice of switches are not usually rejected by clients, however low stamina levels may affect the length of use of the switch. In Mr C and Mr P's cases the OTs had a frustrating time finding a control site which would work. The assessment time took longer than anticipated as a result of the clients' physical difficulties and this added to their frustration of not being able to access either an environmental control or electronic communication aid. The Compass team feared that this would affect their motivation to use EAT when a control site was found. Luckily this was not the case.

Personal Preferences Following Assessment

Not all clients want to use electronic communication aids all the time to communicate. All three cases discussed in this paper left the rehab unit using both a low tech alphabet chart as well as the high tech communication aid. Mr F and Mr C used their laptops for other functions as well as communication. Culp and Ladtkow (1992) had similar findings in their case studies. They found that their clients used low tech communication aids more than high tech aids, but appreciated the independence and the speed which the technology offered. Reasons for this could be that clients feel a low tech aid is a more personal way of communicating as it involves a listener being there all the time, reducing feelings of isolation and loneliness.

Able bodied people communicate in many different ways, for example voice, written and electronic forms of communication. Able bodied people also use computer equipment for many different functions. Therefore, the LIS client should

have the same flexibility in their communication system, except that they can also use it as a primary means of communication instead of speech. But this should be their choice. Alternatively, the voice facility may be sufficiently motivating for a client to use a high tech aid more than a low tech aid depending on the communicative environment. When selecting high tech aids the fact that some have the facility to have leisure activities on them would also motivate some clients compared to a communication aid which is not as versatile.

Personal preferences may be difficult to anticipate. For example, Mr F was a Manchester City supporter. When his powered wheelchair arrived it was red, which caused Mr F to show great dissatisfaction. It took considerable time to persuade Mr F to use the chair.

Equipment Reliability

Some clients may feel that they do not want to use EAT as much as they should in case it breaks down and they then do not have the support to repair it. While everything must be done to ensure that the equipment is reliable, it is vital to be honest with clients and carers and prepare them for the fact that the equipment does occasionally break down. Otherwise, if clients are told that the equipment will always work perfectly, they will lose confidence and trust in the team if any malfunctions do occur. Clients must also be fully informed of all support and maintenance arrangements in order to give them more confidence.

Conclusion

These clients provide us with challenges when providing communication aids or other electronic assistive devices, but these challenges are positive as they improve the quality of life of the client. They make us continually seek the best way to help them function to the best of their ability in their environment.

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Sensory Software Advertisement



Trustees News

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

As I write this I am sitting in my very untidy spare bedroom which I mean to tidy...and one day, maybe become organised! The sun is shining outside and it is a lovely day...maybe the tidying and cleaning can wait just *one* more day...

CM2001 National Symposium & Study Day

This year's *Communication Matters* National Symposium & Study Day at Lancaster University in September looks like it's going to be cracker! If you've not already booked your place, you'd better hurry up – registrations are coming in thick and fast! It promises to be a 'new look' conference – the new Trustees you voted on at last year's AGM are making their mark. However, don't despair, the old favourites are still on the agenda. This year we were inundated with good quality papers. There were enough submissions to fill up a four-day conference! The academic committee had to make very hard decisions and were very firm with the submission cut-off date, selecting papers not just on their merit (they were all good) but to try and achieve a balanced programme with enough variety to satisfy all tastes. If your paper was one of the rejected ones, please do not take it personally – why don't you write it up for the Journal? – it will reach a wider audience that way. There will be more exhibitor stands this year, with most of the major AAC equipment and software suppliers present. And the social programme will be fun too!

CM Poster Display

As part of our ongoing strategic plan, *Communication Matters* is trying to raise its profile and become more visible. We now have a poster display – which will be on show at the CM stand in the George Fox building. Remember, you can borrow this display, to put up at a Study Day or other event you are involved with – just contact the CM information line with as much notice of when you would need the display as possible.

Information Leaflets

The long awaited information leaflets are now almost finished and should be launched at the symposium. These informative leaflets are the culmination of many people's ideas and work over the years. Hopefully they have been written in a way to make them understandable to people who know nothing about AAC. Their titles include: *What is AAC?*, *Using Symbols for Communication*, and *How to be a Good Listener*. We plan to have them available at the end of the conference for you to take away and distribute in your own area.

Communication Aid Funding

Good news (hopefully) on the communication aid funding front. I must say I feel rather jealous as I peer south over the border (doesn't happen very often!). Over the last six years

Communication Matters and the Communication Aid Suppliers Consortium (CASC) have worked as part of a team lobbying government for improved funding of communication aids, and these lobbying efforts are starting to bear fruit. In April the Department of Education and Skills (formerly DfEE) announced a £10 million Capital Modernisation Fund to provide high-tech communication aids to children with special educational needs and disabilities. The equipment will help pupils with communication difficulties to access the curriculum. It will also help ease the transition of pupils to employment or further and higher education. While this is exciting enough, the money is not just to buy equipment – but to pay for the assessment and training, which we all know is crucial. The project will be managed by the British Educational Communications and Technology Agency (BECTa) on behalf of the DES, and will run for two years starting in 2002. Also in April, the Department of Health announced a new budget for Community Equipment of £100 million over three years, from 2001 onwards. Equipment includes simple care equipment and adaptations, such as grab rails and pressure relief mattresses, as well as communication aids. It will increasingly include more sophisticated equipment such as automatic fall alarms and remote sensor devices. The underfunding of communication aids in the past is acknowledged in the report. The funding has already come on-stream and the first allocation has been included with the 2001 spend allocation. None of this money is ring-fenced, and the job now is for people to ensure that the NHS locally is earmarking more money for this area and implementing the guidance. If you work in the NHS, you are recommended to write a letter to the Trust Chief Executive outlining the importance of this guidance and asking about plans locally.

Many people and organisations have been involved in lobbying Parliament to highlight the need for funding in this area, many others have been on working parties and committees. While sometimes we have despaired of ever seeing any changes – so well done, it shows what *can* be done. Don't stop now – we need long term commitment, with equality in provision throughout the UK! In Scotland the 'tap is still dripping': funding of communication aids was raised as an issue with the Scottish Health Minister, Susan Deacon, during the Royal College of Speech and Language Therapists' Scottish region AGM, and we are still hopeful that the current inequality of provision will be discussed in Parliament.

News of your Trustees

Sadly, two of the Trustees felt they had to relinquish their role with *Communication Matters* due to pressures of work and other commitments. I would like to thank Joy Butcher and Gerald Masterson for their various contributions to the organisation. Two willing (?) volunteers agreed to be co-opted for the remainder of this year, Val Sprott of the COMPAID Trust and Steven Bloch from the West Sussex Speech and Language



Therapy service. They survived a Trustees' meeting in June in Edinburgh, and seemed happy to be given jobs to do. Many thanks to you two for standing in at short notice. Which brings us to the business of electing new Trustees...

Each year a third of the Trustees must retire (usually those who are longest in office); they may stand for re-election or they may stand down. We need 'experienced heads' but we also need 'new blood' so that Communication Matters does not stagnate. By the time you read this you will have been aware of a difference in our nomination procedure for new Trustees and you will be aware that there is a postal option for voting. This is the first year of these changes, and I am sure that there will be some hiccups, but hopefully this will mean that more people will feel free to vote.

Well, now I'm off to catch some of the sun's rays. Have a lovely summer. Hope to see you in September at CM2001.



News from CASC

Communication Aid Suppliers Consortium

by Simon Churchill, Chair of CASC

CASC Road Shows

This Autumn, the CASC Road Show will be held in Mirfield, West Yorkshire (3 October); Birmingham (5 October); Plymouth (8 November) and Oldham (14 November).

Also in October, the CASC Road Show will be visiting five venues in Ireland. Nine companies will be presenting their products in Galway (15th), Limerick (16th) and Tralee (17th), and ten companies will be presenting in Dublin (18th) and Belfast (19th). This is the rescheduled tour which was cancelled earlier in the year due to the Foot and Mouth outbreak.

Details of the Road Shows are on page 20. Further information at www.communicationmatters.org.uk



CASC members at the Perth Road Show, May 2000
(photograph courtesy of the Perthshire Advertiser)

CASC MEMBERS 2001 CONTACT DETAILS

Cambridge Adaptive Communication

Tel: 1296 719736

Website: www.cameleon-web.com

Crick Software Ltd

Tel: 01604 671691 Website: www.cricksoft.com

Don Johnston Special Needs Ltd

Tel: 01925 241642 Website:

www.donjohnston.com/uk

Easiaids Ltd

Tel: 020 8763 0203 Website: www.easiaids.co.uk

GEWA (UK) Ltd

Tel: 1296 393223 Website: www.gewab.se

Granada Learning Ltd / SEMERC

Tel: 0161 827 2719

Web: www.gradalearning.co.uk/special_needs

Inclusive Technology Ltd

Tel: 01457 819790 Website: www.inclusive.co.uk

Liberator Ltd

Tel: 0800 4582288 Website: www.liberator.co.uk

Morphonics

Tel: 01524 848373

Penny & Giles Computer Products Ltd

Tel: 01425 463100

Website: www.penny-gilescp.co.uk

Photon Technologies Ltd

Tel: 01283 534521

Website: www.photontechnologies.co.uk

Possum Controls Ltd

Tel: 01296 481591 Website: www.possum.co.uk

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Tel: 01733 370470

Website: www.prentromint.com

QED 2000 Ltd

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Richard Hill & Associates

Tel: 020 8368 6219

Ritchie Electronics

Tel: 01908 313624

RSL Steeper Ltd

Tel: 01634 226101 Website: www.rslsteeper.com

Sensory Software International Ltd

Tel: 01684 578868

Website: www.sensorysoftware.com

Sunrise Medical Ltd (Dynavox)

Tel: 01384 446688

Website: www.sunrisemedical.co.uk

Techcess Ltd

Tel: 01455 213708 Website: www.techcess.co.uk

Toby Churchill Ltd

Tel: 01223 576117

Website: www.toby-churchill.com

Widgit Software Ltd

Tel: 01926 885303 Website: www.widgit.com



News

Special Educational Needs & Disability Bill

The Special Educational Needs and Disability Bill is in the process of going through the House of Commons.

The 'All Party Parliamentary Disability Group' in the House of Commons, chaired by Lord Jack Ashley, invited *Scope* to make a presentation on its *Speak for Yourself* campaign. This followed the successful launch of the *Scope* report at Westminster in February. As a result, James Ford from *Scope*, Anthony Robertson and Simon Churchill made a presentation to this group and received a very positive reception. The representatives we met will report to all the 250 MPs and Peers in this group, and it is hoped they will raise the issues we presented with Ministers at the Department of Health.

Simon Churchill, CM Trustee & Chair of CASC

Letters



Andrew Stuart (front) with parents and Jane MacKenzie (left)

AAC on the Campaign Trail

Dear Editor

I was merrily campaigning along with several thousand others in London as part of the Jubilee 2000 Drop the Debt Campaign when I heard an unmistakeable voice! This young man, Andrew Stuart, was also on the campaign trail with VOCA, accompanied by his parents Chris and Bruce (see above photograph).

Jane MacKenzie

JOINING Communication Matters & ISAAC

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

What are the benefits of Membership?

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

How do I become a Member?

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

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

Do You Need a Small Grant?

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

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

The applications will be reviewed by the Small Grants Committee and an external reviewer in March, June and September.

For an application form, contact Communication Matters on Tel: 0870 606 5463 Email: admin@communicationmatters.org.uk



Diary Dates

13 September 2001 Dunfermline

Giving Augmented Language to Individuals with Cognitive Disabilities

Cost: £75/£50 Contact: SCTCI Tel: 0141 201 2619

13-14 September 2001 Swinstead, Lincs

Delta Talker Training with LLL

Cost: £350 (two days) Contact: Liberator Tel: 014 76 550 391

16-18 September 2001

Lancaster

CM2001 National Symposium

Cost: £265-290 Contact: CM Tel: 0870 606 5463



19 September 2001

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Giving Augmented Language to Individuals with Cognitive Disabilities

Cost: £75/£50 Contact: CM Tel: 0870 606 5463



20 September 2001

ACE Centre North, Oldham

Getting Clever with Clicker 4 (Windows)

Cost: £100 (full day) Contact: ACE North Tel: 0161 627 1358

25 September 2001

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Clicker 4 Basics (Windows)

Cost: £100 (full day) Contact: ACE North Tel: 0161 627 1358

25 September 2001

CALL Centre, Edinburgh

Using Intellikeys with Pupils with Complex Difficulties

Cost: £50 Contact: CALL Centre Tel: 0131 651 6236

26-27 September 2001

Swinstead, Lincs

Supporting Curriculum Access and Inclusion

Cost: £350 (two days) Contact: Liberator Tel: 014 76 550 391

3 October 2001

Mirfield, W. Yorks

CASC Road Show at Mirfield School

Contact: Angela Hunter Tel: 01924 490833



3 October 2001

CALL Centre, Edinburgh

Picture Possibilities: Using Scanners and Digital Cameras

Cost: £50 Contact: CALL Centre Tel: 0131 651 6236

4 October 2001

ACE Centre North, Oldham

How to Decide on an AAC System

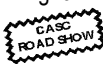
Cost: £100 (full day) Contact: ACE North Tel: 0161 627 1358

5 October 2001

Birmingham

CASC Road Show at W. Midlands Rehab. Centre

Contact: Julie Flanagan Tel: 0121 627 8235



9 October 2001

ACE Centre North, Oldham

Ways to Support Recording for Pupils with Phys. Disabilities

Cost: £100 (full day) Contact: ACE North Tel: 0161 627 1358

15-19 October 2001

Ireland

CASC Road Show in Ireland

(Galway, Limerick, Tralee, Dublin & Belfast)

Contact: Communication Matters Tel: +44 870 606 5463



17 October 2001

Oxford

SIG in AAC: AAC Policies in Adult Environments

Contact: Gillian Hazell, ACE Oxford Tel: 01865 759800

23 October 2001

ACE Centre North, Oldham

Boardmaker Basics / Advanced Boardmaker

Contact: ACE North Tel: 0161 627 1358

31 October 2001

CALL Centre, Edinburgh

Introduction to Speech Recognition

Cost: £50 Contact: CALL Centre Tel: 0131 651 6236

6-8 November 2001

Swinstead, Lincs

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Cost: £575 (3 days) Contact: Liberator Tel: 014 76 550 391

6 November 2001

CALL Centre, Edinburgh

Getting to Grips with TextEase (PC)

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8 November 2001

ACE Centre North, Oldham

Play through Technology

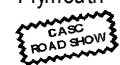
Cost: £100 (full day) Contact: ACE North Tel: 0161 627 1358

8 November 2001

Plymouth

CASC Road Show at Plymouth Novotel

Contact: Janet Lesley Tel: 01752 892461



14 November 2001

Oldham

CASC Road Show at St Anne's Rugby Club

Contact: ACE North Tel: 0161 627 1358



22 November 2001

ACE Centre North, Oldham

Switched ON! Maximising Success for a Switch User

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CALL Centre, Edinburgh

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Cost: £50 Contact: CALL Centre Tel: 0131 651 6236

28 November 2001

CALL Centre, Edinburgh

Getting to Grips with BoardMaker (Mac)

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CHATABILITY

and

Independent Expressions

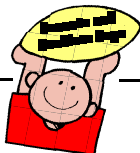
Provide courses for AAC System Users,
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The 7-day Courses, designed to increase the AAC system user's confidence in real-life, everyday situations, will take place as follows in 2001:

14-21 September	Elveden Forest Center Parcs, Suffolk
5-12 October	Elveden Forest Center Parcs, Suffolk
2-9 November	Longleat Forest Center Parcs, Wilts
7-14 December	Elveden Forest Center Parcs, Suffolk

The 2-day Basic Courses, for Rehabilitation Professionals and Assistants, discuss the use of both low and high-tech AAC systems, design a low-tech system based on case studies and how the two types of system can be integrated, provide hands-on experience with high-tech systems and discuss the implementation of AAC systems.

For more information, please contact
Tel: 01572 811085
Email: info@chatability.co.uk



Parents and Enablers Page

A Smashing Time with the Clarkes

The Clarke family has got a new conversation stopper: *Have you ever heard a skull fracture as it hits the tarmac?* Well, I can honestly say it has got to be one of the most awful sounds - a bit like a gunshot.

Nadia had an unlucky weekend a fortnight ago. Her electric wheelchair went over a football at disabled sports on the Saturday and tipped right over. Luckily the arm of the wheelchair took all the weight and although she was frightened she got away with a bruised face and a sore arm. Then, the next day we had our street barbeque - a wonderful affair with music, booze and lots to eat. Abigail, one of our keen young helpers had got Nadia out of the wheelchair to dance with the other kids and unfortunately dropped her literally onto her forehead with a smash.

Nadia is like a cat only she has ninety lives instead of nine. The CT scan showed no blood clot or haemorrhage so that was a huge relief. She stayed conscious and was signing that she was afraid and I knew she was going to be all right when she gave the nurse with a needle a right good kick to tell her in no uncertain terms that she did not want any blood taken. Unbelievably she was home within 24 hours with just paracetamol for a sore head. Nadia then had great pleasure in phoning up as many friends as she could to recount her gory tale on her Dynavox. This increased her motivation and incentive to use her aid no end.

Nadia went back to school on Friday to receive her report. Comments included: Nadia participates in all PE activities. She especially enjoyed Mrs Ross's Dance Class where she exerted herself to the point of exhaustion. History seemed more tricky especially when it came to the Vikings: Nadia found it hard to discuss their invasion of Britain. Hardly surprising as it is one of those few topics that I also find rather difficult to talk about even after a few glasses of wine.

School continues to go well. It is wonderful to see her so included and so popular. Last Saturday, we were invited to the party of a woman who has been feeding Nadia at school for the past 6 months. Our kids had a great night and managed to go all night without a single accident. Nadia was like the guest of honour - she seems to touch a lot of people's hearts whilst giving her mum more grey hairs.

To mount or not to mount? That is the question. Why is it such a problem? The joystick is so big - the tray gets in the way which means she can't directly access the aid when she is trying to do school work - she should really have an integrated system that she could then access the computer as well of course. At least the Dynavox now spends more and more time out of the bag than in. The programme Nadia is learning to use is good and she has made great leaps and is actually starting to see some reasons for using it instead of trying to sign. So, once again we are heading to France with a car-load of kids and camping gear and batteries. Batteries for the communication aid, cochlea implant and the electric hairdryer - I mean the wheelchair. Hoping you have a good summer - and maybe see you on the One Voice Family Weekend or at CM2001.

Katie Clarke

Email: andykatie@btinternet.com

A Parent's Perspective on Introducing a Hi-tech Communication Aid to her Child

Josh is nine. He uses a wheelchair and has speech that is very difficult to understand. He goes to Fountaindale School, a special school in Nottinghamshire. He has been using a voice output communication aid since November 1998. He is a participant on the Fountaindale Communication Project, a research project looking at the way children develop use of hi-tech communication aids. The Project funded Josh's communication equipment and AAC specialist speech and language therapy and assistant support time.



When Josh was born I knew he would have some difficulties but I always thought his speech would come normally. When he was little he would watch my face really attentively. As time went by some speech did develop but it was limited and very difficult to understand, even for us.

I hadn't given a second thought to Josh needing something like a Talker. I remember some parents, whose daughter has a Talker, saying to me "When Josh needs a Talker come and talk to us". I thought, "What are you on about, he won't need one of them."

When Nicki, our speech and language therapist, first mentioned getting a Talker it was a real shock, and our first reaction was "no way". We agreed to talk to her to get more details about the project but were very reluctant.

We had lots of concerns. Our main one was that Josh would stop speaking. This was a big worry for both of us. Our speech and language therapist assured us that he wouldn't lose his speech but we weren't really convinced. Our other worry was how other people would react. It's bad enough with him being in a wheelchair. We didn't want to give them something else to stare at. As parents we were also concerned that it would be all too much for Josh. His hands shake and we were worried we'd just be adding to his difficulties. I thought, "He'll never be able to do this". (He's proved me wrong!)

At the end of the day we were still unsure but decided that the speech and language therapist wouldn't suggest something if she didn't think it would help. We decided to trust her and give it a try. Josh began with a Chatbox with about nine messages. To start off with it was too basic for a lot of situations and I

VocaFlex

(Toby Churchill)

Advertisement

thought, "How's this going to help him?" The more words and layers that were added the more I felt I could have a conversation with him and other people could too. After five months he started to use a Deltatalker with 32 messages and then quickly moved onto 128 messages.

It was weird; at the beginning we weren't having any of it, but as time went on, the more he had, the more messages we wanted. We realised the more he can say, the better off for all of us. It was hard trying to think of things that Josh might want to say. We used things his brother says for ideas. It's nice now because as his brother is getting older he wants to be involved and records songs and messages in for him.

We really needed the speech and language therapist to give us ideas and direction. She is able to step back and look at him clearly because he's not her son. We needed help to move forward and take the next steps. Change is hard.

From the beginning he has had his Talker with him wherever he goes. Some people in the community really helped. A nice lady at the shops really helped by being interested and giving him time to ask for his sweets. At the local pub the landlady also gives him lots of time and interest and asks him about the Talker and how he is getting on, instead of staring. People do stare at times but now we just think "Stuff them, this is what Josh needs and this is what other people will have to get used to". It doesn't worry us now, we know it's back to the unknown for a lot of people. Some people still look at us like we've just dropped out of the sky, but not everyone.

Josh has had fun chatting to people and asking for things with it especially sweets and chocolate! In shops if he sees something on a shelf that he has on his Talker he presses that message square. He has chats and little play arguments with his Grandad. Josh says "Can I have some chocolate" then his Grandad presses "No", then Josh presses "Yes"! Then he gets the chocolate because they spoil him! They both love it. His other Grandparents still find it hard. I think it's an age thing. When he's a bit hit and miss with it they think, "what's the point". They expect him to run before he can walk.

Josh's sense of humour has really come out. At a recent hospital appointment he piped up with, "I'm really enjoying this". This really made the consultant laugh and broke the ice. He talked to Josh much more normally after that.

Not everything has been plain sailing. To start with at school he was pressing the messages all the time and his teachers wanted to turn it off during lessons. I wouldn't have that; it would be just like taking my mouth away. The speech and language therapist and I talked about it to them and they agreed not to. The speech and language therapist suggested they could tell him "it's time to listen" and basically treat him the same as some other children in the class who talk too much. The staff have come on a lot with this and Josh is getting better at listening. Sometimes he makes his teacher laugh by saying "I'm really enjoying this" and yawning at the end of a less favourite lesson.

It surprised me how strongly I feel about it now. When he was assessed for a power wheelchair and they thought they couldn't mount his Talker, I made sure there would be a place for it. I wouldn't have fought my corner so much a year ago; I'd have just said, "Don't worry".

We also had conflicting advice about the Talker when we had an external assessment of his overall skills. We chatted to our speech and language therapist when we got the report and went through the issues. In the end we decided to trust our local therapist because she had known him a long time and we felt happy with what Josh was doing with her. We felt the pace was right and the other report was trying to make him run before he could walk. We look on each bit of progress he makes as another precious thing that he can do.

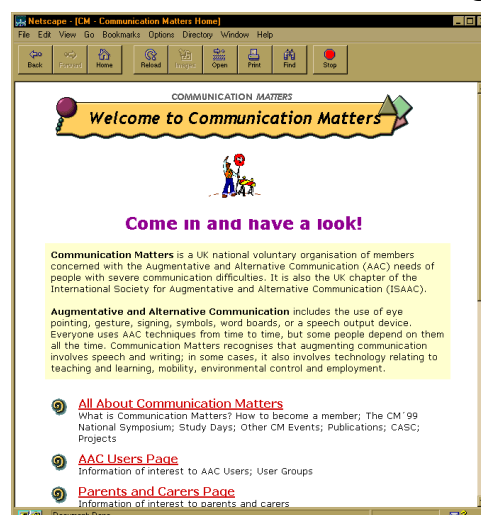
The Talker helps him deal with situations and his personality is really coming out. Before Josh had his Talker he was a quiet, passive, little lad. He would sit quietly in his wheelchair in shops not even letting us know when he wanted some chocolate. Now it's nice to be pestered for it. When he was with other children he was the quiet little boy sat on the fringes not joining in. It was like he was in a little shell. He's found a way to express his sense of fun and it's making him join in. He smiles at funny things in a way he would never have done before. It's lovely because now he comes across as a cheeky, lively boy. It's like he was an egg waiting to hatch and show us what he could do. I wasn't sure at the beginning that he would cope with this new challenge but he's risen to the occasion and changed the way other people see him completely. I wouldn't have thought that was possible.

I don't know what the future holds but I'm so pleased with every step he's made. It reassures me that he has a way to communicate. At home we know what he wants but other people don't. Now, if he wants something he can get it with his Talker. He will be able to get involved and mix with other people instead of being on the edge of the group.

I don't want him to be on his own. I want him to be one of the lads. His Talker has given him a way to do that.

*Debra Lissaman (parent) & Nicki Worth (SLT)
Fountaindale School, Nottingham Rd
Mansfield, Notts NG18 5BA*

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Communication Matters Website
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ChatAbility has a lot of switch-access software for both children and teenagers/adults. Most software is accessed by a single switch, mouse, Intellikeys or touchscreen. Titles include: **Old MacDonald's Farm, Monkeys Jumping on the Bed, Looney Teens, Teens and Tunes+ and many more.**

ROADSHOWS 2001

We shall be coming around the UK with these products in May and June 2001. Please let us know in which area you are, so as we can send you an invitation.

If you would like more information or free demonstrations, or an invitation to the Roadshows, please contact:

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The Official Journal of the International Society for Augmentative and Alternative Communication (ISAAC)

Editor: Pat Mirenda, Faculty of Education, Univ. of British Columbia

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AGOSCI News

AGOSCI News is the newsletter of the Australian Group on Severe Communication Impairment. Published twice a year.

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Can AAC promote communication and language in children with autism?

by Imelda Reynolds

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

Introduction

Difficulties in communication and language are amongst the defining features of autism. Many children with autism fail to acquire spoken language. Augmentative and alternative communication (AAC) systems can be introduced to support communicative output (Jordan and Powell, 1995). However, the development of AAC has proved challenging for this particular client group (Durand, Berrotti and Weirner, 1993). Very often an aid is introduced but the child may fail to use it to communicate their wants and needs.

In the past, more traditional methods such as imitation have been used to teach language out of context. There was dissatisfaction with this method of teaching language. Often this resulted in the child acquiring the structural aspects of language, but failing to use it in other social contexts (Jordan and Powell, 1995). More importantly, many children with autism fail to respond to speech or communication from others (Frith, 1989). Therefore, the first step is to increase an understanding of the communication process and encourage some notion of communicative intent (Nind and Hewett, 1998).

Alternative and augmentative communication is usually seen as a method of communicating which supplements or replaces speech (Communicating Quality, 1996). However, this case study suggests that AAC can also be used as a tool to teach a child with autism about communication and to develop communicative understanding, which is a priority for this particular client group.

Case Study

This paper presents a case study of a six year old girl, 'Rose', who has autistic spectrum disorder with severe communication and language difficulties.

This case study examines the impact on Rose's communication and language abilities of a vocal output device, a *BIGmack*. The autistic features Rose exhibited included being extremely aloof, lack of social interaction and self-injurious behaviours. It was felt that the source of her challenging behaviour was due to her limited communication. Expressively, she was able to label objects but this was on her terms, and she exhibited both delayed and immediate echolalia. She did not appear to have any functional use of language or intentional communication. The *BIGmack* was introduced into structured requesting situations. The *BIGmack* helped to utilise her echolalia to promote functional communication, and understand the communicative function of request. It also helped her to make the connection between the language she had and using it to communicate her needs.

Rose received speech and language therapy thrice weekly in a specialist pre-school provision. She now attends a specialist facility for children with autism, attached to a mainstream primary school.

The facility has a specialist curriculum, which is designed specifically to address difficulties in communication, social interaction and flexibility. The classroom environment is structured using a TEACCH approach (Mesibov & Schopler, 1985), with different areas of the classroom organised to signify different activities (e.g. an area for group work, for individual work, and for snack). The speech and language therapist attends the unit for half of the week, working within the classroom in collaboration with the class teacher. Aims and activities are formulated jointly, and are evaluated together. Rose receives intensive small group teaching with speech and language therapy integrated into class work.

Presenting Profile of Rose

Interaction

On arriving at the facility Rose presented as very aloof, she rarely engaged in interaction with adults or peers. She also lacked joint attention, and presented as having poor eye contact. She engaged in musical activities; singing along with tapes in the class and copying action songs. It was observed that Rose displayed self-injurious behaviour (head-banging) when an adult attempted to direct her in both structured and unstructured situations. She required concrete objects to cue her into different activities throughout the school day (e.g. a tape recorder to show her it was singing time; juice to show her it was snack time).

Language profile

Based on informal assessment and observation Rose demonstrated that she was able to follow instructions at gestural and object level. She had delayed processing of language, taking four or more seconds to respond to a command. During a structured group activity she required frequent redirection to maintain her attention to task, as she would often wander off. Redirection often resulted in self-injurious behaviour.

Expressively Rose showed both delayed and immediate echolalia, and would label objects within her environment (e.g. when looking at a chair she would verbalise 'sit'). For objects in the immediate environment (e.g. adult offering a choice of two drinks) she made her needs known by reaching for them, or by using the adult's hand (motoric communication). If a situation occurred in which she was unable to acquire what she wanted she would demonstrate self-injurious behaviour. Based on evaluation it was felt that her

Talk:About (Don Johnston) Advertisement

communication difficulties might have partially contributed to her challenging behaviour. A change of activity, or the sequence within an activity, was also felt to contribute to this behaviour.

Response to environment

It was observed that Rose sang along to tapes and participated at snack time, which indicated that these motivated her.

Intervention Aims

- Basic Makaton signs such as *sit* and *stand up* were introduced to promote her comprehension of basic everyday instructions.
- The communicative function of requesting, using spoken language and symbols, was targeted through snack time, so that requesting could be demonstrated in a concrete way using food and the function of requesting would not be taught divorced of context.

Methods

- Choices of two drinks were given; the choices were offered verbally by an adult and also using symbols.
- The aim was that Rose would either point to the symbol of her choice, or state verbally the drink of her choice.

Outcome

- Rose was echolalic, she pointed to both symbols and said both labels.
- She did not appear to making a choice.
- She would then physically retrieve the drink of her choice.

Evaluation and Modifications

- The therapist gleaned that blackcurrant was her favourite drink.
- The demands of the task were reduced to her requesting her favourite drink.
- A photograph replaced the symbol. As Rose always took the objects it was felt she did not comprehend at symbol level, but was functioning at object level.
- The verbal model was given to her, and it was hoped that she would repeat the model given by the adult.

Outcome

During the initial stages Rose repeated and was rewarded with the drink. There was no evidence of her pointing to the photograph or the drink. After approximately 4 weeks she would no longer repeat, and if the adult persisted in encouraging her to imitate she would become self-injurious. The therapist deduced from this that Rose did not understand that she had to communicate verbally or non-verbally to make her needs known. It also appeared that she was not receptive to the verbal model given by adults. Additionally, it was evident that continuing this aim could result in increased self-injury, and had to be avoided.

Evaluation and Modifications

The therapist then reconsidered how to teach the requestive function. On reflection, the therapist observed that Rose had repeated language from tape recorders, and decided to explore different types of AAC. The obvious choice was a *BIGmack*,

simple voice-output device. A photograph of the drink was placed on top of the *BIGmack*, and the label recorded on to the device. At snack time Rose was encouraged to press the device and then would immediately be given the drink of her choice.

Outcome

- She used the device and imitated the verbal model consistently.
- Initially she pressed it repeatedly and would look at both the object and the picture.
- Within 4 weeks she was imitating the verbal model given by adults and her eye contact and joint attention improved.
- By the end of her first year in school she was able to comprehend at single word level using the verbal label.
- Eventually she progressed to choosing between two drinks using two *BIGmacks* and then onto to other food and drink.
- By her second year in school she was verbally requesting at sentence level using the phrase "*I want _____*" with the support symbols and the written model.
- She increasingly used verbal language to achieve her needs.
- The incidence of self-abusive behaviour reduced during structured requesting situations.

Overall Evaluation

This case study demonstrated that AAC could be used to develop the following:

- *The communicative function of verbal and non-verbal requesting*
Using the *BIGmack* Rose learned how to request both verbally and non-verbally for different food and drink within a specific context. Eventually she was requesting different objects (e.g. pens and toys) both verbally and non-verbally with the support of symbols and written word with different people. This was evidence of her skills being generalised.
- *Immediate imitation of the verbal model*
She imitated the verbal model given by adults. Due to her being able to imitate, she began to learn language. Children that do not understand spoken requests may not learn language and speech comprehension is important for the development of language (Peterson et al, 1995).
- *Understanding of single words using symbol support*
Receptively Rose made the transition from objects and pictures to symbols and speech. She was able to identify objects according to their verbal label (e.g. cup, plate). The *BIGmack* promoted her understanding of verbal language at single word level and she began to respond to it with meaning, which many children with autism fail to do (Schopler and Prizant, cited in Schopler and Mesibov, 1985).
- *The use of proto-imperative pointing*
An unexpected outcome was that it developed the use of proto-imperative (pointing as a form of requesting). Studies have shown that gesture in individuals with autism is impoverished (Bartak, Rutter and Cox, 1975) and it is important to develop this because very young children use pointing as a way to communicate with an adult long before speech (Landry and Loveland, 1988).

• *Joint Attention*

She started to respond to the communication of others. If an adult initiated communication with her she would look at and respond to them. This resulted in increased joint attention.

• *The reduction of self-abusive behaviours*

There was a reduction of self-abusive behaviour within structured snack time situations. This may have been because the *BIGmack* gave her an alternative and more acceptable response to support her communication difficulties. Often challenging behaviour is another form of communication (Durand, 1990).

Why it worked

During the initial stages of the programme Rose's responses to the task indicated that she was not making any progress. Evaluation suggested that her level of ability had been overestimated, and that the task demands were at too high a level:

- Rose was expected to make a choice between two drinks by either pointing to the symbol or saying it. This meant she had to understand the concept of requesting and making a choice.
- In addition, she was expected to be able to understand symbols when she was still functioning at object level.
- Rose was also expected to imitate the verbal model, which she found difficult. Many children with autism are found to be unresponsive to the human voice (Frith, 1989).

Following this evaluation the above factors were reconsidered and modifications were made, which resulted in success.

The *BIGmack* was introduced, with a recording of the target word and a photograph of the target placed on top. This was successful for a number of reasons:

- Rose was willing to use the *BIGmack*, and in using it was rewarded with her favourite drink.
- Rose had shown she was responsive to a taped voice.
- She was no longer expected to understand symbols, photographs were used as the next step up from objects.
- A single word was recorded on to the device, which minimised the amount of auditory information given, and the amount of auditory processing required. Children with autism have problems processing auditory information (Schopler and Prizant, cited in Schopler and Mesibov, 1985).
- The *BIGmack* utilised her echolalia, and shaped it into something with communicative intent. Nind and Hewett (1998) suggest that an effective approach is to follow the child's responses.
- The *BIGmack* made the task more asocial, thus reducing the demands for social interaction. It permitted her to concentrate on understanding the meaning of the word receptively and expressively. Jordan and Powell (cited in Morgan, 1996) suggest that new tasks be tackled in an asocial way, and one should adopt a non-confrontational approach when teaching (Williams, 1996).

Successful Requesting

- Rose was able to learn the communicative function of request because it was presented in a concrete and tangible form. This supports evidence by Bondy and Frost (1994) that request is the easiest function to develop because it is easily demonstrated.

- Snack time was the optimum time for her to make her needs known.
- Request was taught in a functional, everyday situation.
- The task occurred daily, ensuring the context never changed. Consistency and predictability is an important aspect when working with individuals with autism (Morgan, 1996).

Conclusion

Overall, this case study demonstrates that AAC can be a valuable teaching aid in developing communication and the pre-requisite skills necessary for communication in children with autism. It not only develops expression but it can develop auditory comprehension. By developing Rose's communication it may incidentally have developed her theory of mind (Baron-Cohen et al, 1985).

Although these results are limited to the experience of this particular case study it would be worth investigating further the use of AAC in developing communication and language with this particular client group. Care would need to be taken to ensure that the child or the individual is aware of how to use the AAC device to communicate his or her needs.

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Conversation Analysis and AAC: from Principle to Practice

by Steven Bloch, Mike Clarke & Sarah Collins

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Overview

This paper introduces Conversation Analysis (CA) as a practical method for examining interaction between two or more speakers. It also provides a background to CA, and outlines its methodological premise - which is shown to be particularly suited to the study of AAC related conversation. Following a brief overview of CA, the paper will present two key concepts which underpin CA work: adjacency pairs and turn design. The paper will conclude with a practical example of CA to develop our understanding of AAC related interaction in the 'real' world.

Introduction to Conversation Analysis

Everyday conversation is all around us, and is something that most of us experience throughout the day - regardless of our level of communicative ability. However, much clinical/educational training and research work takes the conversation out of communication and leaves us with a formal and highly sanitised version of language. The study of communication itself often follows this tradition - placing an emphasis upon what individuals say and do in isolation rather than as an interactive dyad. There is often an emphasis upon content rather than *structure* of interaction.

Conversation Analysis emerged in the 1960s as a new way of looking at everyday social interaction. Its focus on conversation as an arena for the study of how people interact with one another brought to light an ordered architecture of interaction which had previously been neglected. The hesitations, pauses and overlaps which characterise our everyday talk, and which have often been viewed as nuisances by formal linguistics, were shown to play an important part in the structure of language in everyday conversation. Through the lectures of Harvey Sacks (1992) and other key figures, CA began to examine real life talk (as opposed to contrived examples) - showing how, through conversation, people structure their world. This approach and its methodology in research focus upon meaning and understanding as it is situated in everyday settings, rather than a consideration of abstracted themes like gender, race or social class.

Initial CA work examined any conversations that could be taped - especially those held over the telephone. More recent work over the past decade has utilised video data and enabled the study of a far wider range of interaction. This includes: patient-doctor consultations, counselling sessions, children at play, teaching of children, therapy sessions, and, most relevantly, the use of AAC in interaction (Collins and Markova 1999).

The aim is not to make broad generalisations but to examine what is really happening between the people actually involved in a conversation. So, for example one does not count up the frequency of a particular behaviour (e.g. AAC switch presses) but looks in careful detail at how two (or more) people actually manage the interaction between them.

In summary, Conversation Analysis is a qualitative research tool that aims to '*reveal the tacit, organized reasoning procedures which inform the production of naturally occurring talk*' (Hutchby and Woofitt 1998). Its value to the study of AAC is just beginning to emerge.

Conversation Analysis in Practice

One example of the sorts of contributions CA can make to our understanding of talk-in-interaction comes from Sacks' first lecture. He quoted the following three examples from telephone conversations collected at an emergency psychiatric hospital (A refers to a staff member, B is someone calling in):

1. A: Hello.
B: Hello.
2. A: This is Mr Smith may I help you
B: Yes, this is Mr Brown..
3. A: This is Mr Smith may I help you.
B: I can't hear you.
A: This is Mr Smith.
B: Smith.

In response to a practical, everyday problem for staff at the hospital - 'how to get the caller's name' - Sacks started to examine examples like these in detail to see how people actually apply so-called 'rules of conversational sequence'. For example, by answering the phone with the unit "Hello", Sacks saw that that Person A is providing Person B with a 'slot' within which to reply. What fills the first slot actually indicates what should be supplied into the following slot. Thus, by answering the phone as in Example 2 with a name, the slot is provided for a name in return. However, as Example 3 shows, person B is not obliged to provide his/her name, but instead chooses to use a device which asks for a repeat. Sacks goes on to examine how powerful this device is because it allows the speakers to continue without breaking the so called rules of etiquette. If the name was not volunteered in reply to the staff member offering his/her name (as in Example 2), then any other answer (as in Example 3) meant that the name would probably not be given at all at any stage.

The relevancy of this initial lecture matter was that it showed how so called 'everyday' and naturally occurring conversation data could be examined in a way that did not make judgements about what the participants were thinking, but rather what their talk was doing.

Central Themes in Conversation Analysis - Adjacency pairs and Turn design

One of the fundamental concerns in CA relates to how participants accomplish turn taking between them irrespective of their relationship or mode of communication used. It is not the

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case that turns simply follow on from each other in a serial order, but rather that they are sequentially ordered, i.e. each individual turn relates to the one prior to it, and it then shapes the turn that will follow. This may sound obvious, but explicit recognition of this in any analysis can assist our understanding of how conversation works.

To understand some of these underlying mechanisms we can examine two interrelated features of the organisation of interaction to which CA has given attention: adjacency pairs and turn construction/design.

Adjacency pairs describe those type of utterances which normally come in pairs: greetings and returns, questions and answers, complaints and excuses etc. The second part of the pair is implicitly tied to the first - a question is conventionally followed by an answer. The adjacency refers to the fact that second pair parts conventionally come after the first, but they may not be produced immediately after. In this sense the second part becomes relevant to the first, even if it is not produced straight away. An example from Sacks [LC2: 529] demonstrates this:

1. A: Can I borrow your car?
2. B: When?
3. A: This afternoon.
4. B: For how long?
5. A: A couple of hours.
6. B: Okay.

In this example the question in line 1 is ultimately answered in line 6 (the adjacency pair). However, between the two parts of this pair, we can identify two insertion sequences that also happen to be adjacency pairs themselves. The important thing is that these insertions are directly related to the subject of line 1. They are not answering the initial question but deferring an answer until further information has been provided - in this case relating to time. Crucially, both participants are showing that they understand what is happening and what each utterance is designed to achieve. Person A doesn't simply repeat his request in line 3 (although he could have done) - instead he shows an understanding of B's prior turn in line 2.

In summary, an analysis which takes account of adjacency pairs shows us that talk is not just a case of one turn following the next, but rather that a consideration of *how* one turn follows on from another can demonstrate how two people actually make sense of each other.

Turn construction/design refers to the way in which each turn is designed to fit with its recipient. Taking turn design into account in our analysis can tell us, for example, about how turns may be constructed to display a preferred choice. For example, following an invite in a 'first slot', acceptance in a 'second slot' is generally the 'preferred' choice. This is commonly shown in conversation by an immediate positive response as opposed to the dispreferred choice (a decline) which is characteristically slower to come and preceded by a delay like "well" or "ummm". For example (Sacks 1987):

1. A: You coming down early?
2. → B: Well, I got a lot of things to do before getting cleared up tomorrow. I w- probably won't be too early.

One may identify two design features in turn 2 above that show this to be a dispreferred response to an invitation. The first is that the declination comes late in the turn *after* a reason for not

coming early has been given. The second is that the actual decline is 'weakened' via the use of the word 'probably'.

Taking both individual turn design, and the sequential properties of adjacency pairs into account allows us to examine conversation from the point of view of the participants themselves. CA stresses the need to see each turn as intimately tied to the preceding turn and significant for shaping what will follow. It is only when individual turns are considered for their design properties in relation to the other turns that precede and follow them that we can begin to understand what they mean to the participants themselves. From this perspective, we can begin to build a picture of how conversation is organised.

The Application of CA to our Understanding of AAC Related Conversation

We may now consider how CA may be of benefit to the understanding of AAC conversation. There are two main points to highlight. The first relates to CA's underlying premise. It has been mentioned that CA focuses very much upon the 'real' world. This does not rule out what happens in, for example, school, work or hospital settings, but it does draw our attention to conversation in its true sense - an interaction between two (or more) people which has no set format other than that displayed by the participants themselves. Any finding resulting from an analysis of conversation in a CA style is thus valid for those individuals concerned in a way that no other research can be: irrespective of relationship, setting or agenda.

The second relates to how AAC related conversations actually work. CA directs us to examine talk-in-interaction. It does not aim to criticise conversation or make comments about what could be done to make it better. It simply describes in great detail, and can thereby show what is actually going on. The patterns and practices that one may identify can then be used to inform our understanding of how a conversation is working, and leaves us to decide what we might want to help change.

Thus for teachers, researchers or therapists working with people who utilise AAC, Conversation Analysis is of value in its ability to: direct us to the detail of talk; show us how participants display an understanding to each other, and demonstrate how AAC related conversation actually works in practice.

An Example of the Application of CA to the Study of AAC Related Conversation

A study of how AAC related conversations are brought to a close (Collins, Markova, and Murphy 1997) illustrates some of the contributions a conversation analytic approach can make to our understanding of AAC and to our clinical practice.

This study shows how the design of AAC user's turns, in conjunction with how these turns are interpreted by a 'natural' speaking participant, can present specific difficulties for ending a conversational encounter. The pattern of closings identified in CA studies of interaction between two 'naturally' speaking participants looks like this:

1. A: so I'll let you know what's happening next week with that.
2. B: fine
3. A: okay
4. B: alright

5. A: goodbye
6. B: bye

Typically, closings such as this example are enacted through a sequence of three adjacency pairs:

- *A closing down of topic*, moving the conversation into an environment where closing is a possible next option (lines 1-2)
- *A pre-closing*, providing an entry into closing with an exchange of minimal words such as 'okay' and 'alright' (lines 3-4)
- *A closing*, enacting the closing itself through an exchange of final words (lines 5-6)

In AAC related conversation, there appear to be a number of variations on this pattern which display the particular exigencies that closing a conversation presents, both for the AAC user and the 'natural' speaker. Two examples will be provided here of how the AAC user initiates closings, and the effect that has on their subsequent development. ('A' is the AAC user; 'N' is the natural speaker).

Example 1: the closing is initiated using AAC system

1. N: is your pad in your bag
2. A: ((operating switch on LightTalker)) **no**
3. N: will we write that up later then
4. A: ((operating switch on LightTalker)) **cheerio**
5. N: have you had enough ((laughing))
6. A: ((smiles at N))
7. N: okay
8. N: cheerio

In this case, the closing begins rather abruptly (line 4). While there is some indication in the first three lines that the conversation may be drawing to an end, there is no 'pre-closing' of the kind found in conversation between 'natural' speakers. N's turn, in line 5, displays an understanding of A's previous turn as relatively abrupt: rather than producing, in this second slot, a reciprocal closing move like 'cheerio', N checks, in a humorous tone, that A does in fact want to close here. And the sequence ends with a single pre-closing from N ('okay', line 8), followed by a return 'cheerio' (line 8).

Example 2: the closing is initiated using gesture

1. N: you'll need to hire a big hall to get all your cousins aunts and uncles in
2. A: ((smiles, looks up at N, turning her head towards the door))
3. N: is that it
4. A: ((drops head, and holds it still))
5. N: ((looks up at A))
6. A: ((looks up at N))
7. N: mm
8. A: mmm
9. N: ((nodding)) you want to go

N's turn in line 1 indicates that the topic (plans for a birthday party) is coming to a possible endpoint. In line 2, A, in both looking at N and at the same time turning her head to the door, makes a proposal (nonverbally) that the conversation end at this point. In line 3, N checks that she has understood A's gestures correctly: 'is that it'. Through a nonverbal display of a minimal, passing turn, A confirms (line 4) that N has

understood. This, with the subsequent exchange of glances in lines 5-6, and the exchange of a muted form of agreement ('mm') in lines 7-8, provides a means by which the conversation can gradually move towards closing, and by which N and A can display their mutual orientation to closing. The minimal actions and words in these turns (lines 4-8) house resemble those of a pre-closing from a conversation between 'natural' speakers; but because the pre-closing in this case is done largely through gesture, it is more gradual, and takes place over an extended sequence, rather than through one pair of turns. N's turn in line 9 makes explicit, verbal, recognition of the prior moves (from lines 2 onwards), as closing moves. The 'you' in her turn recognises that the closing has been initiated by A, and the nod accompanying her words is indicative of her agreement with the proposal to close.

These cases illustrate that when AAC users initiate closings, they may do so differently from 'natural' speakers. They may use their AAC system, in which case the closing may seem abrupt, as the *closing* is not prefaced by any *pre-closing* moves. Alternatively, they may use gesture, in which case the process of closing may be protracted, with an extended *pre-closing* phase. In either case, difficulties may arise for both participants.

Studies that apply the conversation analytic approach to the study of AAC related conversation point to implications for clinical practice, and for training people in the use of AAC in everyday lives. For example, in conversational situations where AAC users are initiating closings, it may be useful to think about ways of making provisions for pre-closings in AAC systems. For some AAC users, and for some AAC systems, the initiation of closings through gesture may continue to be a better option. In such cases, it may be possible to provide training for AAC users and 'natural' speakers in the effective use of gesture, and to attune people to this use of gesture in place of speech. And regardless of *who* initiates the closing, and *how* it is done, it may be of benefit to alert people to the phases of closings, so that they can consider how to manage them in conversational situations where resources are limited.

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The Triple C: Checklist of Communication Competencies

by Karen Bloomberg, Denise West & Hilary Johnson

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Introduction

The *Triple C* is a communication assessment designed for use with adolescents and adults who have severe learning difficulties or multiple disabilities. It provides a checklist of abilities which are grouped together to form communication stages. The checklist allows us to ascertain the approximate stage at which the person is communicating. This screening tool is for use by caregivers and those who are familiar with, and who interact regularly with, individuals who have severe or multiple disabilities.

The *Triple C* was developed to fill a gap in the assessment materials currently available for adolescents and adults with intellectual, physical and sensory disabilities. Its flexibility ensures that information about an individual's communication ability is provided regardless of the nature or degree of the disability. However where the individual has both motor, learning and severe visual disabilities additional assistance from allied health professionals to interpret the results is helpful.

An accompanying video is available. This video presents scenarios which highlight the skills and abilities seen in the first six stages of communication development. The case study examples assist viewers to recognise and score behaviours which correspond to the emergence of early communication skills.

Communication begins at the earliest preintentional or unintentional stage of communication and progresses through a series of stages to an intentional referential level of communication and beyond. (Coupe-O'Kane and Goldbart, 1998) The *Triple C* outlines the first six stages of communication. It has been designed to assist caregivers to assess and gain an understanding of how an individual communicates and the level of communicative competence demonstrated by the individual.

We believe that it is important to know an individual's level of communicative functioning if we are to cater appropriately for his or her needs and interests. Unfortunately, for clients with high support needs, their communication skills are not always easy to determine. The *Triple C* tries to simplify this by providing a checklist of abilities which can be observed by caregivers who may have received minimal formal communication training. It is designed for use by those caregivers who work or live with individuals who have severe or multiple disabilities.

A 'No Fail' Assessment

The *Triple C* is designed as a 'no fail' assessment. All individuals, no matter what their level of functioning, will gain credits for some items. It has been developed specifically:

- for an adolescent or adult population
- to assess skills that are observable

- to assess functional skills
- to assess communication skills at a preintentional/unintentional level of development
- to assess skills at an early intentional level of communication
- to assess skills that do not rely on verbal language

Individuals with severe or multiple disabilities often 'fail' standardised assessments due to their degree of disability. Standardised assessments for this client group are often unsuitable because they:

- cater for a child population and are not appropriate for use with adolescents and adults
- begin with the assumption that the individual is an intentional communicator
- are based on performance skills (requiring some degree of physical ability)
- are based on verbal skills (requiring speech or some formal means of communication)

Developmental Model

The *Triple C* assessment is based on a developmental model. It begins at the earliest preintentional (or unintentional) level of communication and progresses through 6 stages to an intentional referential level of communication. The stages in normal development provide the framework for our understanding of the development of communication skills.

We know that for adults a direct parallel cannot be made with the developmental model. The key difference lies in the additional years of life experience of the adolescent or adult.

Sometimes the individual appears to have isolated skills which have actually been taught through years and years of practice however he or she is unable to generalise that skill to other areas. This is particularly true for motor skills which may appear to be in advance of other cognitive and communication skills. For example, having self help skills for eating and drinking but no understanding of using people to get assistance; the ability to walk but no understanding of speech or gesture; the ability to use a switch to operate a radio but no understanding that a different switch may operate other appliances.

We also know that some skills may be masked by years of learned helplessness. This occurs for a variety of reasons including: when others pre-empt the individual's need to communicate, when others communicate on behalf of the individual or when the individual's attempts to communicate are not 'listened to'. This is particularly true for individuals living in congregate care facilities or in environments where they have little involvement in activities of daily living.

The *Triple C* provides a checklist of skills. In early development it is difficult to separate cognitive and communication skills. Many of the early cognitive skills act as building blocks for emerging communication skills. In developing the *Triple C*, a number of developmental checklists were investigated: Anderson (1996), Coupe O'Kane and Goldbart (1998), Duncan (1983), Dunst (1980) and Granlund and Olsson (1988). The *Triple C* utilises the framework presented by Coupe-O'Kane and Goldbart (1998) in their book *Communication Before Speech - Development and Assessment*.

Six Communicative/Cognitive Stages

The *Triple C* is divided into six communicative/cognitive stages, comprising three preintentional stages:

- (i) reflexive
- (ii) reactive
- (iii) proactive

and three intentional stages:

- (iv) informal
- (v) formal
- (vi) referential

The manual contains a general description of each stage, an outline of the skills and abilities seen and case study scenario of an individual presenting at this stage.

Using the Checklist

The checklist is designed to be used by caregivers who know the individual well. Different caregivers from the same environment and caregivers from different environments are encouraged to complete separate checklists and compare findings. The person completing the assessment is required to tick the appropriate box when the listed skill or behaviour is observed or reported.

Completion of the checklist may take a few days as the caregiver needs observe the individual when he or she is most aware and alert, and identify as many skills and behaviours as possible. In some instances it may be necessary to set up an activity or structure the environment to observe particular skills or behaviours. For example, in Stage 3 one needs to record if the individual demonstrates the behaviour: '*Visually follows objects falling within view*'. To be sure of this, the caregiver may need to drop an interesting object in order to observe what the individual does.

It is also important to date the checklist. Some abilities may be masked and only emerge over time. Changing the environment may have a marked effect on how an individual presents.

For the purpose of this assessment, the individual's level of functioning is indicated by the *highest* stage at which the *majority* of skills or behaviours are observed. Individuals may exhibit some or all of the behaviours within a particular stage e.g. All items in Stage 1; 10 items from Stage 2; 3 items from Stage 3 - represents an individual operating primarily at a Preintentional Reactive Stage (Stage 2). Sometimes carers have difficulty deciding which stage is the highest stage. It is always preferable for a speech and language therapist to examine the checklist to look for inconsistencies in marking.

The aim of the assessment is to determine the communicative/cognitive level which best represents the individual's level of functioning. Then appropriate intervention strategies can be planned. The manual explains briefly basic intervention strategies.

The accompanying video uses case study examples to highlight the skills and abilities seen within each different communicative stage. Each segment of the video re-enacts the individual case study through a series of still photographs. This is followed by a short scenario which reinforces the relevant skills and abilities seen for each of the six individuals. At this point in each stage, people viewing may want to pause the video. This provides an opportunity for people to discuss their observations and attempt to complete the relevant stage in the checklist. The last segment of each stage provides viewers with a brief summary of the possible skills and abilities that may be observed.

Further Developments

At the moment a further video manual package is being prepared which details appropriate interventions. This too will be aimed at carers and instructors. The expected date for the completion of this package is mid 2001.

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New Publications

Speaking Up and Spelling It Out

Melanie Fried-Oken, Hank Bersani Jr
Paul H. Brookes Publishing, 2000, 268pp
ISBN: 155766-447-1 £19.95

Comprising essays, poems, and interviews written by 27 adult Augmentative and Alternative Communication (AAC) users, this book offers a unique insight into life without natural speech. Predominantly written by authors with a developmental disability (cerebral palsy), the book also contains several chapters by authors with acquired disorders (such as aphasia and Motor Neurone Disease.)

The authors were given a free hand to discuss the issues most important to them; the editors then cross-referenced these according to topic and then tabulated them in the Introduction. A wide range of issues are discussed, the most popular being: the role of technology and alternative access; family-centred issues; self-determination and AAC; the educational inclusion of AAC users; and AAC intervention.

The discussions about AAC tend to be focussed on 'high tech' voice output communication aids and the influence these have had on the authors' lives. Additionally, some authors describe low-tech strategies such as American Sign Language, wordboards and, in particular, the use of personal assistants to expand upon communication ideas.

Humorous, poignant and sentimental at times, this is essentially a book about people, their relationships, self-belief and communication. In contrast to a textbook, this is a personal view, not just of AAC, but also communication and physical disabilities. It is a very readable book and the contributions are eloquently written by competent AAC users.

This book will be beneficial both to students and experienced clinicians (not just those working with AAC.) It will be inspiring to other AAC users and thought provoking to a wider readership.

*Julie Flanagan
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Single Case and Small-n Experimental Designs: A Practical Guide to Randomization Tests

John Todman & Pat Dugard
Lawrence Erlbaum Associates, Inc
0-8058-3554-7 Hardback + CD-ROM, May 2001, 264pp
RRP £47.95 (£38.00 to CM members)

This book is a practical guide to help researchers draw valid causal inferences from small-scale clinical intervention studies. It should be of interest to teachers of, and students in, courses with an experimental clinical component as well as clinical researchers.

Inferential statistics used in the analysis of group data are frequently invalid for use with data from single-case experimental designs. Even non-parametric rank tests provide, at best, approximate solutions for only some single-case (and small-n) designs. Randomization (Exact) tests, on the other hand, can provide valid statistical analyses for all designs that incorporate a random procedure for assigning treatments to subjects or observation periods, including single-case designs.

This book is first and foremost a practical guide, although it also presents the theoretical basis for Randomization tests. Its most important aim is to make these tests accessible to researchers for a wide range of designs.

No statistical or computing expertise is required to use these programs. This is the 'new stats' for single-case and small-n intervention studies, and anyone interested in this research approach will benefit.

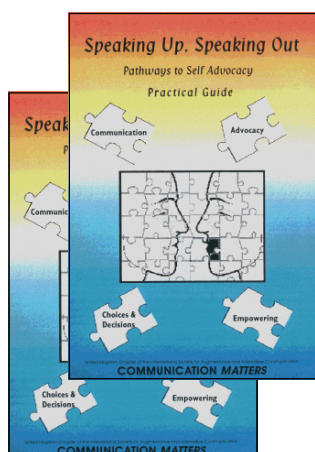
The UK distributor is offering this book to members of Communication Matters at a special price of £38, a discount of over 20%.

Communication Matters members should address orders to Tina Moran at the address below, stating clearly that they are members of Communication Matters in the correspondence and quoting their CM membership number (contact Communication Matters if you have mislaid your membership number).

Cheques should be made payable to EDS Publications Ltd, or credit card details can be sent (name as it appears on card, expiry date, card number, and address where card is registered). Send your order and details to:

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Tel: 020 7845 0811 Fax: 020 7379 3313 Email: tina.moran@eurospan.co.uk

Essential Publications from Communication Matters



Speaking Up and Speaking Out! Pathways to Self-Advocacy

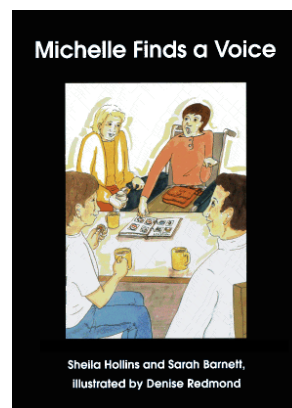
This pack is intended for carers, facilitators and others concerned with the advocacy needs of people with severe communication difficulties who need or use AAC. It is useful for staff development, especially for those working with adults. Developed by a special task force of Communication Matters members,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

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

Michelle Finds a Voice

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

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



Alternatively Speaking

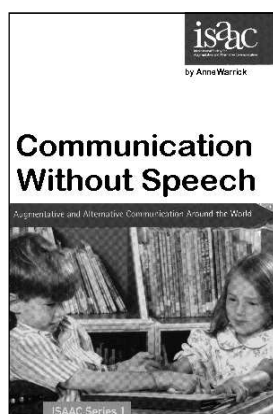
Published three times a year, this eight page newsletter, from Augmentative Communication Inc. in the USA, contains AAC issues and in-depth reports on topics vital to the AAC community. It is written by Michael Williams, who is an AAC user and serves on ISAAC's executive committee.

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

Augmentative Communication News

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

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



Communication Without Speech:

Augmentative and Alternative Communication Around the World

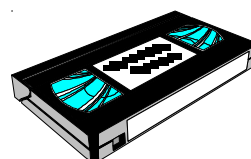
This ISAAC book, written by Anne Warrick, is a highly accessible but very comprehensive introduction to augmentative and alternative communication. It contains lots of questions and practical tips such as vocabulary selection, assessment, education and vocational considerations, making communication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

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

In Other Words (ISAAC video)

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

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



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

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