Teaching Communication to Individuals within the Autistic Spectrum

There is a unique need in people who function within the autistic spectrum to learn the meaning of communication. Teachers need to develop an approach that makes the meaning of developmentally early interactions explicit. By applying careful functional analyses one can look for ways of inputing communicative interest so that the learner is taught 'how to mean'.

RITA JORDAN is a lecturer in special educational needs at the University of Birmingham. She is the first person to hold a position specialising in autism in a British university education department.

INTRODUCTION

Communication is most usefully seen as involving some notion of communicative intent.

It also involves having a means for communication (spoken language or some alternative), something to communicate about (an awareness of one's needs and concepts) and a reason for communicating (an environment that is responsive and yet does not anticipate need). Teaching language and communication skills to individuals with special educational needs has traditionally concentrated on teaching these latter three aspects of communication, since this is where the majority of special educational needs will lie. Individuals with autism, however, are unique in that they are the only group who will need specific teaching to help them understand about communication itself and how to develop and understand communicative intent. This will be needed regardless of the general level of language ability. Understanding the underlying psychological problem in autism is important in developing an effective communication programme for such individuals.

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THEORIES OF AUTISM AND IMPLICATIONS FOR PRACTICE

Baron-Cohen et. al. (1985) have shown that individuals with autism have a particular difficulty in understanding and attributing mental states to themselves or to others and Frith (1989) has shown how such a theory may account for many of the difficulties in communication found in people with autism. The more able individuals with autism can come to an understanding if they are given explicit instruction. As with so many features in autism, it is not so much that there is a deficit or that they can't do something, as that it does not come naturally or intuitively to them and they have to work it out. The task is daunting, of course, but nevertheless teaching can be successful, even if the learning is by a different route from the norm.

A failure to understand mental states would lead to failures to appreciate what others can be expected to know and so result in language that is either pedantic or ambiguous. It would also account for difficulties in spontaneous communication since there would be no communicative intent without awareness of one's own intentions and that one could affect another's mental state. The communicative functions that develop would be those that affected behaviour (such as request) and not those that affected mental state (such as comment) which is what has been found to be the case (Tager-Flusberg, 1988, Jordan, 1993). However there are other problems where an explanation in terms of difficulties with early interpersonal development (caused by the child's biological difficulties, not inadequate parenting) may be more comprehensive (Hobson, 1993; Powell and Jordan, 1993).

Where individuals with autism do not acquire spoken language at all, the explanation will probably lie in additional specific language difficulties or in additional severe learning difficulties although an inability to use an understanding of communication to help in the acquisition of speech will make language learning itself more problematic.

A PROGRAMME THAT ENABLES COMMUNICATION

A programme to teach about communication may mean going back to the very early stages of communication where the caregiver imputes communicative intent to what are in reality mere responses to the baby's own states and thereby teaches the baby what it means to intend. However, it is not just that the child with autism has missed these experiences and merely needs to go back over them; autism is a biological disability which means that the child is not

'programmed' to recognise what Forrester (1993) has called the 'social affordances' of communicative exchanges. So, it is not enough to go through early stages of development again; the processes have to be made explicit. A good example is the fact that children with autism do not share joint attention with others by automatically looking where others are looking ('others' in this context being those who have been engaged with them prior to looking away) or even where they are pointing but they can do this if they are specifically instructed to do so. The teaching point is that the teacher must be aware of this need for explicit instruction so s/he can say, for example, "Look at what I'm holding up" before talking about it and not assume that the mere act (a communicative act) of holding something up means that this is the focus of regard.

In the same way, pupils with autism will need to be taught to notice different ways things are said and the gestures, facial expressions and body postures that go with different meanings. Many pupils with autism learn more easily from the mechanical voice of a computer where such nuances are not present. Academic learning can be accelerated through computer assisted learning, or written instructions because the child is not having to decipher simultaneously all the confusing messages conveyed through natural speech. Most of our understanding comes from understanding people, and we respond to what we infer the speaker means rather than what the words mean. But the child with autism will not have available such a natural inferential process and will have to learn that the words have more than their literal meaning; they will need to be taught how to infer and work out what the speaker means which in turn means that these normally implicit processes will have to be made explicit.

TEACHING COMMUNICATION THROUGH REQUEST GESTURES

Teaching the least able individuals with autism a verbal or signed label for an object is likely to lead to failure to use that 'label' unless prompted in some way, or it may result in inappropriate use as the individual runs desperately through his/her repertoire or learned (but meaningless) actions or sounds in the hope of hitting on the one that will give him/her what is wanted in this context. Request is often the best communicative function to start it is the earliest (and sometimes the only) function acquired by individuals with autism and it is the one whose meaning is easiest to demonstrate.

The individual may be at the stage where outbursts are a simple reaction to need without communicative intent at all. However, the teacher can use such outbursts

to impute the communicative intent of a request (if that is what the situation suggests is appropriate) and teach the individual to grab; if the individual already tries to grab (or grabs the teacher's hand and 'throws' it at the desired item) then the communication training starts there. Teaching the individual to stop and look at the teacher, by interrupting the 'grab' sharply with a restraining hand (and thus causing a momentary glance at the person causing the obstruction, in most individuals, even with a autism) can be built on until the individual is coming to give that checking look spontaneously as he or she reaches for the item. This can be extended to a variety of contexts and, once it is secure, the grabbing hand can be gradually shaped into a point until the individual has the communicative act of pointing and looking.

Teaching pointing, without these preliminaries to teach the meaning, will only lead to meaningless pointing, even when there is no-one in the room to the see the point.

THE REASON FOR REQUESTING: COMMUNICATIVE INTENT

The teacher also will need to give communication priority over behavioural conformity, or even control. Thus, merely getting the child to ask politely for something that is in front of him/her teaches cultural forms of polite behaviour but does nothing to help the child understand about communication; in fact it assumes that that communicative understanding is already there. The child with autism will need to learn to ask someone for something when there is a reason for doing so and not just as a mechanical habit. The desired items should be clearly in the control of someone whom they must then ask in order to obtain them (ie on a high shelf, or locked away when that person has the key etc). The teacher may need to "engineer' many of these situations throughout the day so the child has many opportunities to learn about that communicative act.

In the same way teachers need to look at undesirable or aggressive behaviour not just with the aim of reducing it, but also looking at it as a form of communication. Under conditions of extreme distress (which is often when this kind of behaviour occurs), the more complex forms of behaviour may not be available even to the more able individual. The behaviour needs to be treated as if it had communicative intent and the individual given an alternative way of expressing that intent. Even the most verbally able individual may need to be taught a simple gesture (perhaps a gentle push away) to express that communication and, only when the success of that communicative gesture has been demonstrated, taught the verbal forms to accompany, and eventually replace it.

PROBLEMS IN PRONOUN REVERSAL

Jordan (1989) has shown that these are not to do with confusions about self (as separate from others in an objective sense) but may be in part to do with problems in the development of an 'experiencing self' - a subjective sense of self that enables one to be assertive, intend actions and remember personal events (Powell and Jordan, 1993). Thus, the general educational strategies designed to give the child a sense of 'self agency' of actions will help with correct use of the first person pronoun. So too will general teaching about conversational roles because there is in reality little meaning to 'I' or 'me' other than to mark a conversational role of 'speaker' and the child needs to understand about such roles before learning the labels for them. Otherwise, as we can see, the child merely learns the label as a 'name' for a person rather than a role and this leads to the characteristic confusions. Merely correcting the terms used without increasing the child's understanding will not be very effective.

The second person pronoun 'you ' suffers from the same lack of understanding about conversation roles, but has the added problem of needing the child to notice its application to addressees other than self in order to resolve its true meaning. Individuals with autism seldom pay attention to speech addressed to others or notice (or realise the significance of) the eye direction of the speaker so they are not in a position to learn about its meaning. Oshima-Takane (1988) has shown that if they are taught this meaning explicitly (by direction of their attention to another addressee in controlled situations) then some at least are able to learn and resolve the difficulty with personal pronouns.

REPETITIVE QUESTIONING

The answer to repetitive questioning lies not in behavioural management, although that may be necessary as a short term measure, but in trying to unpick the communicative intent (real or imputed).

Teachers often act as if the only way questions were used was 'sincere' questions i.e. asking for information we do not already have. But, of course, we ask questions to test for knowledge (teachers' display questions) or to try to get the other to think of alternatives, or to seek reassurance (when the questions will require the same answer in order to be reassuring e.g. "Do you love me?" said a thousand times is still looking for the answer "Yes") or to express anxiety (often repeated as in the anxious "What's the time now?" said every few seconds as we are stuck in traffic jam on the way to an important meeting).

We can distinguish the different communicative purposes of these different forms of questions and so we do not treat them as odd or bizarre. But the child with autism may not know about minds that can have different access to different kinds of information and so the 'sincere' purpose of questions is not perceived. Instead, s/he may copy the teacher and use questions as a device to further his/her own topic (looking for the answer that fits his/her agenda, just as the teacher does) or s/he may often use them to seek reassurance (seeking the same answer) or to express anxiety (keeping the topic up front). What is often different about individuals with autism is that they are made anxious about things that do not normally give rise to such feelings and so we are not alert to what they are communicating by their questions; nor, of course are they responsive to our irritation or boredom, which normally helps keep such repetitive questioning within bounds. The teacher needs to look for the underlying meaning of the questioning and show the child explicitly that his/her needs have been recognised and give an alternative to that way of expressing them.

LITERAL UNDERSTANDING: ORAL AND WRITTEN LANGUAGE

Individuals with autism base their understanding of language on a literal understanding of the language forms (words and sentences) with no application of any 'common sense' notions of what the speaker is likely to have meant. Nor will they be able to decipher the nuances of meaning that are conveyed through accompanying gestures or facial expressions or through tone of voice. Some teaching techniques deal with this by trying to get everyone to speak unambiguously, without using metaphorical or figurative language of any kind and with no verbal jokes, but this is seldom feasible and in any case does nothing to help the individual with autism resolve the difficulty. What is needed is explicit teaching of how meaning can be conveyed and altered in a variety of ways apart from changes in vocabulary or sentence form. There needs to be explicit teaching of the cues that signal such changes of meaning and of how social situations change meaning also. None of this will be easy, but it is possible, at least for the more able verbal individual with autism even though the understanding reached may be imperfect and may not generalise to all examples of non-literal language.

In the meantime, pupils with autism are often better instructed through written language which is more static, more explicit and less subject to contextual variation than spoken forms. Teachers do need to help pupils get to grips with the difficulties of spoken language but they should use written or pictorial forms as a way of conveying information accurately until such an understanding has

been reached. The least able may be able to move towards symbolic functioning through the use of 'objects of reference' whereby certain objects or parts of objects can be used to 'stand for' an item or a situation and through their use the individual can learn to ask for things and to understand what is going to happen next.

SPONTANEOUS SPEECH AND CONVERSATIONAL SKILLS

In order to perform any spontaneous actions that are not part of learned habit structures, the individual needs to be able to intend actions and produce mental models of his/her actions; yet individuals with autism have specific difficulty with this (Powell and Jordan, 1993). Conversation requires spontaneity not only in the production of utterances but in establishing the mental models of the discourse that will enable the individual to monitor its progress and actively listen to the contributions of others in order to match his/her own utterance in terms of topic relevance, style and timing.

Some of the outward forms of conversational behaviour can be taught. Children can be taught to take turns by having a moveable 'conch' (or a microphone attached to a PA system perhaps) to indicate each speaker's turn. They can be taught rules for entering conversations and ways of changing the topic politely and even ways of closing conversations, although that is more difficult. It may even be possible to get children with autism to pay attention to what others are saying by playing games like the 'suitcase' or 'shopping trolley' game where the child has to repeat in order the items others have placed in the suitcase/trolley before adding his/her own. What is far more difficult is to teach appropriate timing for these behaviours or the very subtle responsiveness to difficult circumstances which is the hallmark of fluent behaviour. Videoing conversations and using them as 'micro teaching sessions', to let the individuals with autism examine their own and other people's behaviour, can be helpful at dealing with some of the grosser abnormalities. The actual question of spontaneity is more difficult to deal with and probably needs work at a more general cognitive level (Powell and Jordan, 1993).

CONCLUSION

There is no single approach that can be followed; there is a need for careful functional analyses so that one can see either what the child is communicating (in however bizarre a form) or one can look for ways of imputing communicative intent to the non communicative acts of the individual until s/he is in fact taught

'how to mean'. This will require a range of strategies and techniques geared to the needs of particular individuals but based on the principle of teaching about communication as a priority.

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