Helping Children with Autism to Learn

Edited by Stuart Powell

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Note:

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Preface

This book considers how individuals with autism can be enabled to learn through specific approaches to teaching that fall within the context of a broadly consensual view of the nature of autism. The book draws together understandings of how children with autism think and learn and the implications for those who aim to teach them. It is important to note at the outset that 'teach' is used here in its informal as well as formal sense – i.e. including parents and carers as well as teachers. The book aims to offer insights into the reasons behind autistic ways of learning and behaving and give guidance about appropriate ways of responding.

The theme of the book is that in autism the very nature of learning is distinctive and that therefore those involved in the care and education of individuals with autism need to begin by trying to understand the child's perspective on any potential learning and teaching situation. This is not as easy as it might seem because that perspective does not follow the template of a 'normally developing' understanding of what it is to learn and what it is to teach. Understanding on the part of the adult therefore requires some fundamental re-assessing of what is happening whenever the child is faced with an experience that is in any sense new to him/her. The contributing authors show how such re-assessing can take place within their various areas of interest.

The premise underlying the book is that while parents and teachers can benefit from guidance as to how best to proceed in caring for and educating individuals with autism, that guidance needs to incorporate an increase in understanding rather than simply an instruction in skills. If they are to be truly effective, those caring for individuals with autism need insight into *why* they need to approach their task in a particular way and *how* some skills and strategies become useful in autism.

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May 2000

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Chapter One

Learning about Life Asocially: The Autistic Perspective on Education

Stuart Powell

Introduction

The title of this book points deliberately to a specific stance with regard to the education of children with autism. It suggests that in autism, perhaps more than in any other context, the very nature of teaching and learning needs a special kind of scrutiny. There is an underlying premise here that what can usually be assumed when anyone engages in trying to teach something to someone else cannot be assumed in autism. The individual with autism needs help to learn. For example, it is not enough to ask from the singular perspective of the teacher, 'How can I motivate this child to learn?' Rather the question needs to be, 'How can I help this child learn to be motivated?' Clearly, to get to a position where an answer to this latter question can be reached there first needs to be some understanding of what is habitually regarded, in this instance, as 'being motivated' and more generally as the process of teaching and learning. Following this there needs to be some consideration of what effect the autism will have on that way of being and that process. In autism effective teaching can only be realised by an initial consideration of the individual's way of learning and its effects on whatever the teacher might plan to do. Education in autism needs to be pursued from the child's perspective.

In this introductory chapter I try to justify the stance described above and the implied way of operating by considering the relationship between *autism*, *meaning* and *self* and subsequent implications for those engaged in trying to help children with autism to learn. In doing this I draw on the writings of others (e.g. Peeters 1997) and make use of some speculative findings (e.g. Luckett, unpublished). I am, therefore, offering an account rather than stating established facts. It is my hope that readers will find this account useful when considering the ideas and practices of the contributing authors. It is not my intention here to suggest any consensual view of the nature of autism nor indeed to include reference to competing theories (for a review of various theoretical approaches to autism see Powell 1999).

Meaning

This section on meaning is influenced by *Autism: from theoretical understanding to educational intervention* by Theo Peeters (Peeters 1997; and Chapter 2 of this book).

Making meaning and learning meaning

Central to the way in which most of us perceive, and act upon, the world around us is our inclination to make meaning of that world. When things are presented to us meaningfully they are easier to understand and remember than when they are presented meaninglessly. Indeed, if things seem meaningless then to understand and remember them effectively we may strive to make them meaningful by imposing a meaning of our own. For example, one way to memorise a random selection of words is to create a meaningful story that incorporates them, even if that story has to be implausible and bizarre in order to incorporate them all.

Meaning is central to our socially constructed way of living. Objects and events have meaning or are given meaning and this enables us to manage our world and learn within it. Yet in a different culture acceptable meanings might differ. Words, gestures, actions, tolerances, objects: all differ in what they mean in relation to the specific cultural context in which they are found. While we might not recognise it overtly, what things mean is largely a matter of what we have learnt that they mean. That learning, of course, is in turn largely informal and intuitive. The young girl gets to know what her father thinks about eating meat because of what he says and what he does, the kinds of expression that he makes when he eats meat (or avoids it) and so on. Other episodes of others' reactions to meat eating are learning experiences that lead to an understanding on the part of the girl about the meaning of meat eating. No direct teaching need go on here (though it might, and indeed it may include scientific understandings about proteins etc.) but the learning is significant and long lasting nonetheless. Meat eating is valued and treated differently in different cultures and subcultures – its meaning is not consistent. So, meaning is learnt in a pervasive, implicit and social way within the confines of a particular context. To a very large extent things mean what people agree that they will mean. Because of constraints on space and the need to focus sharply on an autistic perspective on the world I am sidestepping some significant philosophical and epistemological issues here (tackled elsewhere, e.g. Bruner 1990) and some issues within the literature on autism which relate to the perception and learning of meaning (e.g. Frith and Happe 1994). Whatever issues surrounding this topic remain unresolved it may well be that those with experience of working with individuals with autism recognise that here some of the aspects of the learning of meaning are dysfunctional. Indeed, those with autism are often described as being outside of the culture in which they live, as not accessing the kinds of beliefs, understandings and skills that are typically taken for granted as accepted within a particular society. Perhaps the most obvious instance of dysfunction in relation to

the example in the previous paragraph is the potential for learning from 'kinds of expression'. Children with autism find it difficult to detect the meaning of what is being said from the clues offered by the expression of the speaker. In this sense learning of meaning does not occur naturally in autism. This difficulty in learning about what things mean in the way that is assumed by the non-autistic results in any 'meaning' that *is* achieved remaining idiosyncratic (and thus limited in usefulness) and rigid (unlikely to change as new experiences are encountered). The child with autism who wears a particular hat whenever he goes to the shops but never when he goes anywhere else is displaying a learnt preference indicating that the hat has a particular meaning, which relates in this instance to shopping. However, the meaning is for him alone, it is not shared by others.

Implications of the lack of use of meaning

Reliance on rote memory

Lack of ability to use meaning to organise the experiences of the world, and in particular the social world, is likely to increase the load on memory in that the child with autism cannot code lots of information within a meaningful structure. A whole mass of new information can be made manageable by the child without autism because it can be understood as a structure with clear connections; yet that same information can remain disconnected and therefore unmanageable to the child with autism. So, for example, a boy without autism is able to cope with a trip to a new shopping centre because the buildings where goods are sold are understood as shops within which the functions of display cases and shop assistants and the roles of other customers are all readily understood. This non-autistic boy has an expectation that several shops will be visited and refreshments will be taken: for him a shopping trip is a meaningful event. However, in the same scenario the child with autism is faced with a bewildering set of confusing stimuli. Nothing makes sense because understandings of purposes, functions, roles and time constraints have not been learnt. If the child does not have meaning to help him then he will have to rely on rote memory all the time and subsequently will be less efficient at remembering and less flexible in coping with new and changing experiences. The example used here is based on a social event. But the same principles apply in the context of the learning of academic material. New information about Victorian England can be understood when existing concepts about invention, industry, poverty, diet, fashions and games enable the learner to organise the new information in meaningful ways. When children understand about playing games then they are able to understand the nature of 'games playing' in Victorian times even if the games themselves are totally new to them.

Difficulties with prediction

When a child learns the meaning of something then it becomes possible for her to begin to estimate on the basis of that meaning. Once she has a conception of 'ball' that includes 'bouncing' then she can predict that a ball will bounce once dropped

(and later come to more sophisticated estimations of height of bounce in relation to consistencies of ball and surface and to velocity of throw etc.). If the child can solve, for example, tasks involving partially hidden figures she is showing evidence that she can go beyond the information that is present and determine what the whole of the shape may be on the basis of what she can see. Here she estimates meaning from the clues that are available to her. Being able to successfully complete a partially hidden figure indicates one of the most useful aspects of meaning – its potential to enable prediction. Meaning allows us to understand what the rest of something is like, what something will be like when something else changes it, what something will be like in the future.

Now again, where children without autism typically display the ability to go beyond the information that is given to them, for example to predict, pretend, infer and extrapolate, those with autism find it difficult to do these things. Children with autism will perform less well than children of similar mental age on tasks such as the partially hidden figures task mentioned above. There is a sense in which the understanding of those with autism remains at the level of the perceptual – it is literal and objective. In some contexts literality and objectivity are useful dimensions to thinking; for example, in proof reading text or in working through particular mathematical algorithms. But in other contexts these dimensions are less useful and in some cases can be deleterious to problem-solving; for example in analysing poetry or using humourous analogies to make a point (see Chapter 8). The ability to move away from the literal and the objective to an understanding that things can have meaning beyond what is perceptually available is extremely useful. It is an ability that underpins much of the non-autistic way of thinking and learning yet one that is largely inaccessible for those with autism.

Difficulties in making connections

It is the meaningfulness of things that enables us to make connections between different events. If 'understandings' were to remain at the level of the perceptual, at a literal/objective level, then they would remain isolated in our minds. For example, it is because I know something of the meaning of a violent act that I am able to make connections between a fight in the playground, racial hatred, genocide, the Thirty Years War and violent crime on the streets. Not that these things are the same, of course, but it is meaning that enables me to begin to connect them together in an understanding of how they are similar and how they are different. Without these kinds of meanings connections will always remain simplistic, direct and inflexible and, again, this seems to be the case in autism.

Difficulties with categorisation

Young children without autism are driven to make sense of the world. Part of this drive involves the need to categorise. Certainly they make mistakes of categorisation – for example, calling all four-legged furry things dogs regardless of whether they might, in fact, be cats or something else – but they learn the rules by which categorisation takes place. And in this learning they seem to be influenced intuitively by meaning rather than perception. They learn that while things might

look the same or sound the same or feel the same they fall into categories that mean what 'we' have all agreed they will mean. So a donkey is not a horse even though it looks like one, feels like one, smells a bit like one and acts much the same as one. Also, children learn about the vagaries of commonplace descriptions of categories of things. They learn, for example, that a coat might also be described as an anorak or a jacket.

In autism, however, the situation described above is reversed. Here children have a tendency to be influenced by perception rather than meaning. This tendency is exemplified by Peeters (1997) when he describes a boy called Thomas who gave names to things that were the same but which didn't look exactly alike. He had different bicycles which he called: 'bicycle', 'wheels in the mud', 'wheels in the grass', 'feet on the pedals'. At one level this may sound creative but he could not understand what his parents were saying to him if they said, 'get on your bicycle' if his 'feet on the pedals' happened to be in front of him.

In autism, perceptually-based rather than meaning-based development leads inevitably to a lack of understanding of socially accepted categorisations. So a child with autism might have real difficulties in accepting that the different things in front of him are conceptually bound within a collective notion of 'bicycle'. Similarly another child might have difficulties in accepting that what she knows as her jacket might equally well be referred to as an anorak or a coat. Her understanding is locked in to the one case that she has come to understand as relating to the label 'jacket'.

Self

In this section the relationship between the development of meaning and sense of self in autism is explored. This exploration is of a psychological kind; there is no intention here to make allusion to the moral, legal or sociological selfhood of individuals with autism. The need to recognise qualities in these respects is returned to at the end of the chapter.

Levels of self in autism

Neisser (1988) has described levels of self: the ecological, interpersonal, conceptual, temporally extended and finally private self. This way of conceptualising self is useful for my purposes because it enables a way of describing self in autism as a matter of partial development. Clearly it would not be correct to say that individuals with autism have no sense of self because we know, for example, that they can recognise themselves in a mirror (provided they are above 18 months mental age). On the other hand individuals with autism do seem to have difficulties in developing a sense of self in relation to others in the world and in particular in relation to the ever-shifting patterns of social happenings. In terms of Neisser's model then it seems that the ecological self may well develop in autism. For example, children with autism often seem to be very aware of where they are in

space, they are very good at squeezing through small spaces and knowing where they will and will not fit. But their difficulties begin at the level of the interpersonal self.

The interpersonal self

Functions of the interpersonal self

It is the interpersonal self, in Neisser's model, that enables individuals to know that they are having experiences which relate in some way to the experiences of others. For example, the student without autism who sits in a lecture listening to the teacher knows that the words spoken are what he is hearing and that others can hear them too. He also knows, at some level, that those words will be affecting others differently according to the prior knowledge and experience that they bring to the situation. It is this interpersonal self together with the conceptual self that enables individuals to begin to code events as part of a personal dimension. The student makes sense of the lecture, or not, according to how it affects him as a person in relation to others – as someone with more or less knowledge and experience and with certain intentions and not others. In this example the student makes more of the lecture than would be involved by a simple encoding of the words spoken. The event becomes meaningful because he is able to relate what he hears to what he already knows and to what he thinks he will be able to do with the new knowledge, i.e. how it affects *him* and what *he* knows.

Again, the difficulty in autism becomes apparent in the breakdown of the normal synergy between meaning, social mediation and self. The student with autism has difficulty in picking up the socially conveyed meanings (some of which will be extremely subtle and implied) and difficulty in relating his own understanding to that of others. The knowledge that he does pick up in this kind of scenario will tend to be factual, disconnected and impersonal.

Implications of difficulties in developing an interpersonal self

If, as I suggest, there are difficulties in developing an interpersonal self in autism, and beyond to a conceptual self, then the individual with autism is in a position where events are experienced but at a perceptual level, non-subjectively. In a sense the individual is operating within the ecological level of Neisser's model and is thus acting according to an objective reality that is not mediated by any social implicatures or socially defined meanings.

Such difficulties will mean that there will be problems in learning through social interactions about the self and others as 'mental agents'. In short, the non-autistic learn that they and others have attitudes and beliefs and, furthermore, learn to act according to these things rather than according to 'objective reality'. (They may of course act contrary to prevalent, accepted attitudes but this would be for purposes of rebellion or rejection rather than unknowingly.) This early learning leads to the later, 'sophisticated' understanding that people's actions and behaviours relate as much to their attitudes as to any sense of objective fact. For example, one can