Flexible thought in pupils with autism.

"Teachers are always saying stuff I don't get like 'pull your socks up' or 'that's a red herring'. Then I get, I'm rude, when I bend down to pull up my socks or I'm stupid when I say I can't see a red herring. I give up and just think about trains".

This is a quotation from a pupil with autism in a mainstream school. It demonstrates his literal interpretation of language and his difficulty with attaching alternative meanings to words. People with autism find thinking in new or different ways to the literal ones they usually think in difficult and sometimes impossible. For pupils with Severe Learning Difficulties, this inflexible thought can be all encompassing and very disabling especially if they do not have verbal communication or symbolic representation because they cannot verbalise their confusion and fear.

Results of inflexible thought and its interaction with the non-autistic environment.

Dr Wenn Lawson who writes about autism from the perspective of someone who is on the spectrum, states that autistic people are 'mono-tropic'. That is they can only think about one thing at a time and find it very difficult to switch their attention to something different. She goes on to state that it may be impossible for people with autism to think about two things at the same time. In daily life, we are constantly challenged to do this. Routines change, are interrupted or stop altogether; people can change in appearance and in the classrooms, noise and visual stimulus will compete with the attention required for focus on learning.

Latest research in neuro science reveals that the brains of people with autism are not flooded with feel good endorphins in response to social stimuli as the brains of neuro typical people. People with autism are excited by objects or activities with sensory stimuli. This may increase and compound their inability to focus upon social situations or to share their focus across stimuli.

Focusing upon one favoured thing can become all-consuming to the point of being seen as obsession. If it is prevented by well meaning teachers without the replacement of an acceptable alternative, then it will become a compulsion.

Ross Blackburn, another eloquent speaker with autism, states that when she is speaking to a large audience she cannot focus upon controlling bodily functions and has to take preventative measures to ensure there are no accidents. She also speaks very movingly about the high levels of fear attached to thinking with only one available channel and pleads with the non autistic community to understand the need for people with autism to manage their stress and emotional regulation.

The response of adults to the obsessional behaviour of pupils with autism can become polarised when adults do not understand it. Adults may either feel they should indulge the obsession and feel helpless to prevent it becoming all consuming or they may prevent it at all times hoping the child may forget about it and begin to behave more 'normally'. Both these reactions may be detrimental to the child. At Lakeside, we strive to provide an understanding of the need for compassionate and long term view to be taken regarding these behaviours. If we do not allow the participation in special interests, they may become all consuming obsessions or the pupil may stop that obsession and move onto another one which could be more consuming and less socially acceptable such as spitting or running for example.

On the other hand, if we allow unconditional access to special interests, we risk preventing learning and the same resultant all consuming behaviour.

We aim to encourage pupils to communicate their need to enjoy their special interests through the use of sentence strips and symbol exchange systems. We give them time to enjoy these behaviours and encourage them to learn what "finished" means. We are committed to providing broad sensory experiences which we know will interest children with autism.

There is one important caviat: Sometimes pupils choose dangerous or socially unacceptable behaviour which may affect their dignity and opportunities if they are allowed to continue it. For example, they may want to play continually with their own excrement or hurt themselves. If this occurs, it needs to be prevented and ceased. We are committed to providing safe alternatives to these behaviours and rewarding more appropriate choices.

Results of inflexible thought in SLD settings can be summarised as follows:

A. Repetition of actions, for example:

- Hand-flapping
- -Spinning of the body
- -Obsessional interest (collecting)
- -Lining things up
- -Repeating the same exert on a DVD or computer game.



Figure 1: Lining up can be a way of playing.

B: Inflexible thought will be manifested in the following:

- 1. A need for and reliance upon routines.
- 2. A need for favoured activities or objects to be on hand for comfort and respite.
- 3. A need for clear, concise and unambiguous language with visual support.
- 4. A need for explanations about changes in routine and environment
- 5. Fear reactions (fight or flight) shown in response to different staffing and changes to usual activities.

Interventions to support thought and behaviour in pupils with autism.

As stated in our policy on autism. We are committed to remediation where possible to help our pupils overcome their frustration and fear. However, just as in the case of pupils with sensory impairment, we also understand that compensatory changes to our methods and environment will help and support pupils to remain calm and function to the best of their ability.

Intervention 1:Use of photographs and video.

Typical people retrieve information when it has a personal experiential element attached to it (Rogers, Kuiper and Kirker, 1977). It is thought that people with autism have a diminished ability for recalling episodic autobiographical memories (Goddard et al, 2006). Realistically it means that people with autism will not be able to remember or reference themselves in different situations. Changes to an environment take on a whole new importance when one cannot remember oneself in the old environment.

Taking photographs of people with autism in different environments and then showing them these when they next need to visit that environment or situation will help.

Other supports include:

Who is in class today? A board of photos so pupils can be helped to work out why people are missing from the environment in a visually structured way.

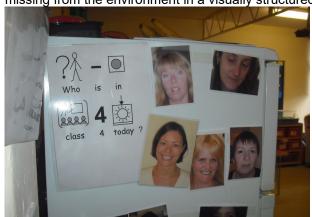
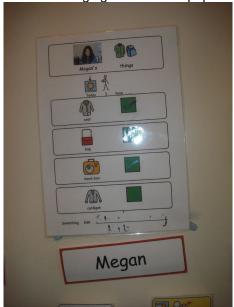


Figure 2: Who is in class?

Lists of belongings or what the pupil needs for certain tasks.



Choices in photographic form:



The child who refuses to take his jumper off even though he is nearly expiring from the heat, may respond to seeing pictures of himself with the jumper off and pictures of the jumper safely in his school bag etc.

Guidelines for helping pupils with autobiographical memory through photographs and video.

- 1. Take pictures of every environment in school that pupils will access. There is a folder full of pictures of various environments around school on the learning platform with this document. Help yourself it will save time.
- 2. Preferably take pictures of the pupil in each environment- for example a picture of them swimming in the pool or reading in the library. This will help them with their memory and sense of self.
- 3. Take particular care over environments that have more than one purpose such the dining hall which is also used for music and assembly. Take photos of every activity that takes place there for the pupil and let them hold them if necessary while they do the activity.
- 4. Remember to take a new photo if the environment is going to look significantly different. Christmas decorations, different types of PE activities in the sports hall, a change in table layout in a classroom, all of these can cause upset.
- 5. Sequential memory is usually affected; therefore there is much learning to be gained from providing sequenced event photos of the pupil going through a series of steps to reach a goal such as getting dressed or walking to the hall or making a sandwich.



- 6. It is possible to help pupils to manage their own behaviour by taking video of them and discussing good and unhelpful reactions to stress.
- 7. Take as many photos as possible of the pupil experiencing different emotions and build up an autobiographical visual reference. Just because they have trouble remembering themselves, it does not mean they are not interested, in fact they often become very animated when they see themselves in video or photos. It is as if they have been given the ability to access their memories.

Guidelines for making visual timetables.

All pupils with autism, throughout the school, should have access to a visual timetable.



1. For the youngest and some older but less aware pupils, these will use real objects and photographs of the pupil and take the form only of what is happening now and what is happening next. Pupils with autism have their own agenda and because of lack of an experiencing self will be determined to stick to it! By providing now and next visual reminders, it is possible to help them through the desire to remain at one repetitive, favoured task.



2. For more able younger pupils and most older pupils, visual timetables will require symbols or even be in the form of words. For older pupils, it may be possible to be age appropriate by telling them what will happen today and asking them to make their own 'notes' in the form of ready made symbols on a prepared daily timetable. This will further the aim of giving them insight into their needs and strengths.



 Use a non- distracting backing on which to mount the timetable. Use velcro so that each event can be removed if necessary after it has taken place.
See next page>



4. Put rewards and choosing time onto the visual timetable and encourage pupils to choose favoured activities to place on it.



5. Some pupils will need individual lessons to be broken down visually into their component parts. For example a picture of the group circle time, then a picture of the individual learning the pupil will be doing with the person with whom they will be working.

Intervention 2. Repetition.

To allow learning to take place, repeat repeat repeat. Pupils with autism must be given the chance to overcome any fear they have about an activity, focus upon it, become familiar with it and then commit to memory because they have practised it so often.

WARNING: Do not however allow pupils to habituate certain ways or situations in which they do tasks. Vary the people they do it with and the places they do it in. Do not just teach counting across a page, teach them also to count down a page or allow the same people to sit with them for too many months at dinner time. Inflexible thought prevents learning being generalised. For

example, practicing money maths in class will only have limited value. Pupils must access the shops where that learning is needed.

Rita Jordan, renowned expert on autism, suggests that we must not teach them the 'cupness of cup' with just one cup but be careful to present as many different cups as possible to them lest they have only one cup in their mind and be unable to use any other type of cup. This can be applied to all objects that are going to be functionally important to the child or will impact upon their experiences.

Intervention 3: Social stories.

Autism is a cognitive, literal way of being. People with autism have been shown to have great difficulty attributing and understanding the feelings of others. This can often result in them being labelled as rude or unfeeling. Neither of these assumptions is true. They simply use cognitive and visual processing methods in preference for emotional channels and ways of thinking. Verbal explanations about feelings or events will usually 'pass the SLD pupil with autism by'. They will need a visual and matter of fact method of explanation. This is where social stories, which were devised by Carol Gray (2000), can be very useful as a way of explaining rules and events and attaching them to external logic.

Guidelines for writing social stories

- 1. Be clear what it is about. Make the title positive and personal to the pupil: e.g.: Michael can go to the dentist. OR Callum's difficult times get sorted out.
- 2. Use minimal language and support this with photos and writing with symbols where necessary.
- 3. Start the story by framing the problem:
- E.g. everyone must go to the dentist because the dentist can stop us from getting sore teeth. OR: Callum's Dad has gone to live in a different house. Callum feels very sad and afraid. He thinks it is his fault. He gets angry with himself and feels like hurting people or running away.
- 4. Do not allow for negotiation of meaning in the story. People with autism respond best to black and white rules: e,g: 'everyone must go to the dentist' or 'no one is allowed to hurt'.
- 5. Make the steps that the pupil must take or what will happen clear and unambiguous where humanly possible. E.g. Michael will sit and wait and look at his train book in a room with chairs and a table called a waiting room. Then a buzzer will sound and the dentist will call a name. If it is Michael's name, Michael will go up some stairs to the dentist's room.
- 6. Link unpleasant steps with rewards. E.g.: If Michael lets the dentist put his mirror on a stick in his mouth and look at his teeth for 5 minutes. Mum will get him a train comic. If he does not, there will be no train comic and Michael will try again next time.
- 7. Use pictures to illustrate and add weight to meaning.

See the Autism Team if you need assistance writing Social Stories.

References:

Blackburn R- Lecture notes.

Crane, L., & Goddard, L. (2008). Episodic and semantic autobiographical memory in adults with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, *38*, 498-506. Gray, C (1995) *Comic Strip Conversations: Illustrated interactions that teach conversation skills to students with autism and related disorders*. New York. New Horizons.

Jordan, R. and Powell, S. (1996) *Understanding and teaching children with autism*. London, Wiley.

Lawson, W. (2001) *Understanding and working within the spectrum of autism an insiders view*. London. Jessica kingsley.

Rogers, T., Kuiper, N., & Kirker, W. (1977). Self-reference and the encoding of personal information. *Journal of Personality and Social Psychology*, *35*, 677–688.