

GLYNE GAP SCHOOL

Curriculum Guidelines No 20

Communication and the pupil with an autistic spectrum condition (ASC)

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Main Points:

- Language & communication are affected by ASC
- Comprehension difficulties include situations, events, times as well as language, words, signs & symbols
- Expressive communication often has typical features
- Principles of structured teaching apply to all pupils with ASC
- Careful assessment of individuals is vital
- Pupils will have their individual needs addressed from the range of strategies

A. INTRODUCTION

To contextualise the following and to understand the ‘culture’ of autism please see Curriculum Guidelines No. 21 – “Teaching the pupil with an autistic spectrum condition”. These guidelines also give specific advice on how the pupil with an ASC thinks, learns, processes information and comment on certain behavioural characteristics.

It is essential to have an understanding of these aspects before applying communication strategies.

It is important to distinguish between language and communication in order to emphasise how both are affected by autism. Language development may not only be delayed but it also has features, which are characteristic of 'autistic language', such as delayed echolalia, and the poor understanding of pronouns. However, it is the non-communicative use of spoken language which is so characteristic of autistic children, for in spite of having adequate words at their disposal they have difficulty in using them in meaningful conversation.

Impairment of social communication then, in its most extreme form, is shown by the total absence of the wish or desire to communicate with others. These are the children are often mute. Some children may make literal comments, often irrelevant to the conversation, while those least impaired may talk a great deal, irrespective of the wishes or responses of their listeners and have a monologue rather than a conversation.

B. SPEECH, LANGUAGE AND COMMUNICATION DIFFICULTIES

During the first year of life there are a range of communicative skills a child learns that are essential if spoken language is to develop normally. It is these skills which are often impaired in children with ASC. The following is an outline of the skills learned in a normal way, before words appear, skills which children with ASC are unlikely to learn.

- Shared Attention – making eye contact i.e. catching their mother's eye, it is the initiator of whatever is to follow, perhaps playing, dressing, a shared area of interest.
- Joint Attention – once eye contact is established the child then learns to look at the object of their attention and then back to mum, waiting for a response. This skill once established is accompanied, a little later by finger pointing, either to indicate a shared interest or indicating the child wants something.
- Dialogue and Turn Taking – these develop together as you can not have a dialogue unless you have a clear understanding of turn taking. These begin as a conversation without words, the child catches mum's eye, she asks 'are you hungry?', child gurgles and mum responds again. Dialogue is established and how to take turns is being learned.
- Social Timing – in every dialogue there are pauses and interruptions. These skills are learned early by babies and become more sophisticated once language itself develops.
- Pitch and Intonation – young babies use strings of babble which uncannily resemble the intonation patterns of our language. They are already learning that the way in which we say words has meaning. These and other aspects of communication, speed of delivery, tone; stress patterns are understood and used. These are the more subtle but essential skills for verbal communication. For the children with autism who do develop spoken language, it is the relevance of these aspects of communication they

- do not readily understand, and do not use them in their speech in the same way as we do.
- Non Verbal Communication – babies learn to interpret facial expression, body language and gesture. For even the most able adult with ASC these skills remain beyond them.

C. COMPREHENSION

i **General**

As language develops children with ASC continue to experience difficulties. In general it is the lack of receptivity to spoken language, which accounts for the characteristic indifference that children with autism commonly display. They can show odd and unusual responses to sound from the extreme of being unable to tolerate it to total indifference, so that the question of deafness may be raised. Sounds in the environment which we ignore such as aircraft flying over or plumbing are as likely to be attended to as the spoken word.

The difficulties that the child with ASC has in processing information has been likened to an alien traveller understanding our culture. Added to the difficulty in understanding this ‘alien culture’ the autistic person lives in an often heightened state of anxiety. Anxiety can be due to overstimulation which may be caused by speech, touch and physical and visual clutter. The part of the brain that interprets facial expression and social communication is impaired in people with ASC (sometimes referred to as a hard-wired brain). So comprehension in the context of the child with ASC, thus takes on a much broader significance. It includes not just the understanding of a code of language (whether by words, signs or symbols) but also situations, events, times and information from a range of sources.

A child with ASC will have difficulty in deciding what is the most relevant detail and selecting relevant from irrelevant information. The child may also have problems in ordering and sequencing events and how all the information is connected to form a whole.

Concept words are difficult for a child with ASC to understand, because they are relative and can have shifting meanings. Behind for example can mean immediately behind or with a large space between objects. Some concepts have several references such as before and after, which refer to both space and time.

Pronouns also have shifting meanings ‘you’, ‘I’, ‘me’, ‘her’ etc. Both the listener and the speaker can be ‘you’ and ‘I’ at the same time. Pronouns as a class of words also present difficulties for children with ASC, because they always refer to something or somebody, that has already been mentioned.

Children with ASC have problems understanding figurative language, such as ‘you’re pulling my leg’ and will follow the literal meaning of the language making their actions

seem absurd. They will have problems interpreting the implied meaning, which requires an understanding beyond the literal and concrete.

Humour is an area of language pitfalls. This does not mean that certain types of jokes can not be understood or appreciated by children with ASC. It is the more subtle humour, which can be daunting for them.

Predicting what other people might say is an ability impaired in children with ASC and can cause considerable anxiety and panic. If what the child hears does not fit into their repertoire of understanding, they are at a loss to know what is expected of them.

Aspects of communication such as intonation, pitch, stress etc. which can change the meaning are not easily understood by children with ASC. We can convey sarcasm and irony in the way we say a phrase, which can in fact mean the opposite of what we say. For example, 'oh on time today' is understood to mean 'late again'.

Children with ASC do not understand that communication is a tool for conveying information to others, or appreciate the social uses of communication. They need to be taught how to communicate effectively.

The most effective bridge for the child with ASC to understand in the alien culture' and the greatest prosthetic device to aid the 'hard wired' brain is structure.

Teaching a child with ASC functional language through structure is usually the most effective method, by developing individual communication systems using visual cues.

ii Structured Teaching

The general principles of structured teaching apply to all children with ASC, however to key to its effectiveness is the use of these principles based on the individual needs and skills of each child. Therefore it is important that the child is assessed, looking at how the child processes information and his social and cognitive strengths and needs. Then build upon the child's strengths and linking in his interests to compensate for his needs. For full details see Curriculum Guidelines 21 on teaching the pupil with an autistic spectrum disorder (ASC).

1. Physical Structure

This requires (particularly for the young child) clearly defined spaces and areas that the child goes to, to work, play and find information about change of activity. The latter could be a wall, table, board etc. and helps the child to focus on details and their purpose.

2. Individual Timetable (Schedule)

The aim is to actually teach flexibility through a visual structure which is concrete. It says what's next, what's the work, when will I be finished, what will I do next. The timetables can be very simple object reference timetables with just a few objects through symbol timetables to complicated written work schedules. All will have a feature to show that that activity/work has been 'done'.

3. Work Systems

The work system clearly shows what the work is, what the expectation is. It will thus show how long the task is going to take. There will be a finish place. The system may be very simple with a single activity or may involve matching boxes/numbers/prompt cards or even written instructions.

4. Visual Structures

The principle is that where possible materials define the task in visual way. These may be from the simplest stacking/inset tasks to product samples that are matched through to worksheets. Visual structures increase the child's ability to work independently without interaction or intervention by the teacher.

iii *Concept of Finish*

To reduce feelings of anxiety, the child with ASC will feel more in control if he understands how long an activity will last and understand when it is finished.

iv *Understanding People and Language*

The amygdala, a small organ between the lobes of the brain that interprets social communication and facial expression, is impaired in people with ASC. Even those with good verbal skills often can't understand language and social interactions. It is known that many children with ASC are visual learners and think in pictures and find visual representations a more concrete form of manipulating ideas and information. Therefore using aids such as symbols, pictures, concrete aids, demonstrations of activities and physical prompts are likely to be a help for the child. A child with ASC may find the verbal instructions, distracting, confusing or even meaningless in relation to the visual clues around them.

D. EXPRESSION

The deficits shown by children with ASC in early communication have already been described, however, once words appear, they may also show an abnormal development of language.

- Echolalia – is a characteristic of spoken language with children with ASC. The child will repeat the word or phrase that has been said either immediately, or sometimes much later on which is called delayed echolalia. The type of echolalia can vary from

the earlier meaningless echoing of sounds, intonation patterns, words and phrases, to a point where phrases may convey some meaning and are used appropriately.

- Some children may use repetitive words and phrases as a means of getting positive reinforcement from an adult or another child by agreeing that what they are saying is correct, sometimes over and over again. It is important that details of how these situations are managed are transferred between classes and that all staff working with the child consistently follow the Individual Pupil Arrangement for behaviour management.
- Repetitive Speech – is also a typical feature of the language of children with ASC, and is frequently heard with echolalia. The utterance is not only echoed by it is repeated incessantly. From the way that children with ASC use language, which is so different from other children, it is possible to speculate that they do not learn it in quite the same way.
- Some children have an amazing capacity to ‘regurgitate’ snippets of other people’s speech, TV jingles and sometimes whole stories. Some children with ASC can become very skilled at reproducing language at the appropriate time, which can give a false impression of expressive language.
- Responses of children with ASC can be bizarre or inappropriate, as this is linked to the whole understanding of social communication. Even when language is appropriate it often has a pedantic over formal quality about it.
- Pronoun Reversal – is an abnormality of spoken language of children with ASC. Reversals between ‘you’ and ‘I’ are particularly common. This is often associated with echoing, where ‘you want a drink’ means ‘I want a drink’.
- Problems with conditional words and their distinctions – for example, ‘could’, ‘would’, ‘may’, ‘must’ ‘ought to’. Once language has been learned, children with ASC have difficulties in adapting their inflexible language to subtle changes in meaning.
- The difficulties in understanding other aspects of language, which add meaning, are reflected in the child’s speech. It is frequently lacking in expression, very flat and uninteresting, the normal tunes of language are absent. Often speech is also too loud, too soft, too fast or too slow.

In the past when teaching children with ASC, people have endeavoured to ‘teach to the deficit’ – often arranging teaching to a developmental framework. However it is now recognised that teaching pragmatically i.e. skills with a practical significance – is a more productive approach. Rather like people visiting a foreign country learning to interpret menus quickly because the subject matter is so motivating and there are clues!! A lot of children with ASC don’t communicate because they don’t understand the reason for communication and a major aspect is to teach the meaning of communication.

For expressive communication to be effective for a child with ASC the system needs to be simple, easy to use, relevant, interesting and in its simplest form meaningful for the individual child. Therefore it is essential as that the child with ASC is carefully assessed.

i Indicators for Progression

Assessment is the key to whatever approach or approaches that are finally decided as most appropriate for the individual child. It is through assessment that a starting point or baseline is set and it could also be used for indicators of progression. If we know about the child's strengths, weaknesses, what is odd or unusual about their communication, then we can plan accordingly.

In its simplest form three questions may form the basis of an assessment: -

- How is the child communicating spontaneously e.g. what systems are they using i.e. symbols, objects, signs etc.
- What is the function of his communication e.g. asking, rejecting, expressing, etc.
- Where is communication taking place most frequently e.g. snack times, playtime, during social routines.

For a more detailed assessment a further series of questions may be useful: -

- What is the child's understanding of language?
- What is the child's current level of expressive language, i.e., sentence structure, content?
- Does the child have an understanding and use single words?
- What is the child's understanding and use of grammar?
- What is the child's use of language in social situations?
- Is there evidence of the child having developed and now using early communication skills such as eye contact?
- Does the child show other non-verbal skills such as turn taking, body distance etc.?
- Does the child appear to demonstrate listening and attention skills?
- Does the child interact with others, when and how?

ii Forms of Expressive Communication

- informal 'gestures' such as pulling someone, or leading them to a desired object or place may give a means for the autistic child to express himself.

- Signing has been widely taught in the past however many researchers have shown that although labels have been learnt, spontaneous signing is mainly absent. This is probably due to the abstract nature of signing being particularly difficult for autistic children. Having to look, attend and to imitate the actions of others (all difficult areas for autistic children) compound the problems. The child may also find the signs together with speech confusing and may be unable to focus on which is the relevant details not realising that they form the whole picture.

- Pointing – some autistic children may lead an adult and/or ‘throw’ their hand to something they want. In this instance the child is using the adult not communicating their need. The aim in this instance is to teach the child that a point is a request. To teach a point this framework can be used:
 - touch point, taught by moulding the point and physically touching the desired object.
 - touch point, taught with verbal prompt
 - distance point, e.g. obsessive object on high shelf
 - distance point preceded by gaining adult’s attention (preferably by looking at the adult)

- objects of reference/picture pointing systems can be extremely useful as eye contact and imitative skills are not required and the representation/object is concrete and doesn’t move. N.B. Consider carefully the developmental framework of index, icon and symbol discussed in the communication guidelines No ?

However there are problems with pointing systems: - Some programmes progress through stages of matching object to object, object to picture, then picture to object often with verbal prompts and social rewards e.g. “point to the ball ... good pointing.” Sometimes pointing systems become prompt dependent e.g. they will only point to the drink when offered it and so don’t use it as a means of spontaneous communication. Sometimes pointing can be learnt but the child doesn’t realise that it’s no good pointing to a picture if the adult is in another room.

iii The PECS System

The Picture Exchange Communication System (PECS) is a unique augmentative alternative communication training package developed for use with children with autism and other social communication deficits in the United States.

PECS give children a means of communicating within a social context. From the beginning of training the child learns to **initiate** communicative exchanges. Children using PECS are taught to approach and give a picture/symbol or object of reference of a desired item to a communicative partner in exchange for that item. By doing so, the child initiates a communicative act for the concrete outcome within a social context.

A variety of behavioural teaching techniques are used throughout PECS. Careful consideration is given to both the prompts that are provided before an expected behaviour or response is to occur and the consequences that follow the behaviour.

PECS begins by assessing the child to find out what things the child is attracted to or wants, as these are used as reinforcers.

The PECS system is divided into the following six phases: -

- **Phase I – The Picture Exchange**

Initially, the child is physically helped by a second adult to pick up the picture and give it to the trainer adult in exchange for the object. Gradually the prompts are reduced until the child initiates unprompted physical exchanges.

Outcome- Child approaches people to initiate communication.

- **Phase II – Increasing Spontaneity**

The child learns to remove the picture from a board, then take it and give it to an adult in exchange for the object.

Outcome – Generalisation across people, places, reinforcers and distance.

- **Phase III – Discrimination Training**

Introduction of a second picture which has a low reinforcement value or a blank distractor, so the child chooses a highly motivating picture and exchanges as before. Working towards the child choosing between two equally desired pictures.

Outcome – Child chooses between pictures, approaches adult and gives picture to adult.

- **Phase IV – Sentence Structure**

Start with ‘I want’ on a single sentence strip, and then move towards the child constructing the sentence. The child and adult ‘read’ the sentence strip together followed by the exchange. Then the teacher begins delayed prompting so the child reads the sentence independently and the exchange occurs.

Outcome – Child uses simple sentence structure to spontaneously request.

- **Phase V – Answering ‘what do you want?’**

Initially, as the teacher points to the 'I want' sentence strip, the teacher says, 'what do you want?' The child picks up the sentence strip and completes the exchange. Gradually, the child learns to spontaneously respond to 'what do you want?'

Outcome – Responds to 'what do you want?' and spontaneously requests.

- **Phase VI – Answering 'comment questions'.**

Introduce 'I see', 'I have', in response to 'what do you see?' and 'what do you have?' questions. This final stage can be difficult for the child as the communication changes from requests to comments.

Outcomes – Comments in answer to questions and spontaneously requests.

iv other approaches

iv Non Directive Communication Therapy

This approach is based on the work of Dr. Rachel Pinney, who evolved a creative listening method for working with children. Each child receives periods of total attention from an adult who sits with him in whatever they do - but not directing or judging, only entering the activity if invited or instructed to do so. The child is free to choose his own activity, explore the environment and talk about anything.

The 'therapist' supplies a commentary on the child's play and also on the child's behaviour, e.g. 'teddy fell over and now you're hitting him'. The 'therapist' will also provide some interpretation on the child's play or his behaviour e.g. 'oh you're feeling angry because teddy's fallen over'.

Limits are placed on the number of choices available to the child and the length of time he can devote to them, which are made clear to the child before the session begins.

This approach lends itself to the development of the early communication skills described earlier, which usually need to be taught to children with ASC.

v Social Use of Language

Social communication is a major impairment for children with ASC. Wendy Rinaldi has developed the Social Use of Language programme. The programme and ideas it contains can be used in a meaningful and flexible way, depending on the ages, abilities and skills of the children.

The many skills needed are taught at all stages of communication development, from making meaningful eye contact, to choosing the right language for the person you are with. It is not always necessary to have a specific time to learn and practice social skills. As opportunities can be found in the classroom from playing in the 'house' corner, to circle games and to PE time.

vi motivation

General advice in facilitating expression is to concentrate on the power of communication i.e. using it can get things I really like and want (obsessional things/food/favourite activities) and so use practical meaningful situations that motivate. Be aware that individuals can move through different levels of communication – particularly at stressful times.

E.g. Some very useful communication work using symbol recipe cards and instructions has been undertaken in specially set up cookery lessons. Students are highly motivated to choose ingredients, match and follow sequences etc all because the end product, which is eaten is so motivating. Similar programmes could be followed in the trampoline room, swimming pool, in a music lesson etc.

When using such an approach physical prompt pointing to symbols is used to encourage attention to the symbol and it's meaning.

vii Challenging Behaviour

Research has shown that a structured approach has a positive effect on children with ASC who exhibit challenging behaviour. Literature also highlights that when a child with ASC who has challenging behaviour, is given an effective means of communicating their needs and with others, there is a positive effect on behaviour. The number of incidence of the child exhibiting challenging behaviour will dramatically decrease. For further details see curriculum guidelines no 17 – Supporting Positive Attitudes and Good Behaviour.

Various sources have been used to gather information for these curriculum guidelines including, Teaching Children with Autism & Asperger Syndrome Guidelines for Schools, written by East Sussex County Council, Language & Communication in Children with Autism by Jenny Barrett and Alison Nutall and Could this be Autism ? by the National Autistic Society. Further information can be obtained in the above booklets which are available in school.

Viii Intensive Interaction

This approach teaches the pre-speech fundamentals of communication to children with severe learning difficulties/autism. It is a very practical approach, involving an interaction partner. It works by developing enjoyable and relaxed interaction sequences and to teach the basics of communication (the same interaction that adults have with babies during the first year).

SOCIAL STORIES - Appendix to CG 20 Communication and the pupil with an autistic spectrum condition (ASC)

Social Story™ definition

'A Social Story™ is a process and product that accurately describes a situation, skill, or concept according to a defining criteria.'

Are based on the principal that an ASC pupil:-

- Finds visual information more useful than spoken information
- Interprets language literally
- Has inappropriate behaviours which have arisen from an impaired understanding of the social context
- Has obsessional behaviours
- Has core needs related to social interaction, social understanding and communication
- Has additional difficulties with "social skills" groups and the natural difficulty of the subject matter
- Needs support to understand social situations and have strategies for responding successfully and appropriately

THE MERITS OF SOCIAL STORIES

They:-

- Focus on social development and understanding
- Provide for the **individual** and often idiosyncratic needs of each child i.e. **personal** to the pupil
- Are **visual** - they are presented in a written form and contain developmentally appropriate photos, charts, drawings or diagrams
- Written in a **predictable** style to a prescribed formula (20 - 300 words to inform and advise about a social situation) in **simple language** reflecting the child's language levels and current vocabulary
- **Permanent** - they allow the child to revisit the same story over and over again
- **Explicit** - they make explicit the rules, expectations and codes of behaviour which are often implicit or assumed
- **Factual** - who is doing what and why
- **Focus directly on what people are thinking and feeling** and how that relates to behaviour
- **Specific to a situation** - real life social situations
- **Feel natural** - reassuring parents and staff that they already have the relevant skills which can be used in a focussed way

POTENTIAL FOR SOCIAL STORIES

- Limiting obsessional behaviour that intrudes into learning time e.g. repeatedly closing doors and windows
- Managing potentially dangerous behaviour e.g. pushing other children in playground
- Self help skills e.g. blowing nose using a handkerchief
- Inappropriate sexual behaviour e.g. inappropriate touching of self and others
- Developing friendships e.g. how to greet a friend
- Supporting transitions e.g. from class to class, leaving school, going to college, home to respite

A social story alone **cannot teach a new skill** it can provide information and prompt a skill that the pupils already have but which as yet the pupil does not use appropriately.

The most effective use of social stories is to consider which skills the pupils need in order to behave "appropriately" teach these skills and use social stories to guide and consolidate these important skills.

Acknowledgement must be given to Caroline Gray who developed social stories - she has given us an opportunity to have another very powerful tool in our teaching kitbag

WRITING SOCIAL STORIES™ 10.1

Emphasis is placed on positive acceptable actions, sometimes giving strategies that might be used, and NEVER focussing on undesirable behaviours. Always make your social story appropriate to the pupil you are working with.

Suggested amount of sentences for young and severely challenged is 3-12

There is now a new formula for writing a Social Story

However many describing sentences there are, needs to be divided by how many coaching sentences. If the number of coaching sentences is 0 then divide by 1. The answer must be greater than or equal 2

Type of sentence	Nature of sentence
Descriptive sentences	<p>Descriptive sentences describe what happens, where the situation occurs and why. The sentences should be as accurate as possible and should include terms such as "usually" or "sometimes" rather than "always", in order to avoid literal interpretations and to help the pupil to cope with change</p> <p>A Social Story <u>must</u> have descriptive sentences in it.</p>
Perspective sentences	<p>Perspective sentences describe the reactions and responses of others in the target situation and sometimes the reasons for their responses, and may describe the feelings of others.</p> <p>You may want to use 3rd person perspective depending on age and ability of pupil.</p> <p>Possible words may be; Confused, understand, calm, forget, like, know, unhappy.</p> <p>A Social Story <u>may</u> contain perspective sentences.</p>

Affirmative sentences	<p>Explains the importance of the task. E.g.: 'I will try to keep my seatbelt on' Affirmation - 'This is very very important as it keeps you safe'</p> <p>A Social Story <u>may</u> contain an affirmative statement.</p>
Coaching sentences	<p>Coaching sentences gently guide the behaviour and describe desired responses to social situations, and tell the child in positive terms what he or she should try to do or say in the target situation. They often begin with "I will try to .."</p> <p>A Social Story <u>may</u> contain coaching sentences.</p>
Sentences that coach	<p>Sentences that coach identify what others will do to assist the child. e.g.: 'Mrs Clarke will try to give me more time to complete my work'</p>
Self Coaching sentences	<p>Self Coaching sentences are written by an individual or on behalf of an individual, to identify personal strategies.</p>
Partial Sentences	<p>Partial sentences encourage the student to predict the next step. All the above sentences may be written as partial sentences.</p> <p>A Social Story <u>may</u> contain partial sentences.</p>

Language that should not be used in a Social Story -

- Should/shouldn't
- Supposed to
- Must/mustrn't
- Ought/ought to know better
- It's really bad/naughty/inappropriate

To be used with caution CAN (make sure the student CAN actually do what you are saying)

Example of a simple Social Story

Going out on the bus

- Descriptive - Today I am going out on the bus.
I will sit at the back.
- Coaching- I will try to talk quietly on the bus
- Perspective- Jo will feel happy when I am talking quietly.

Type of sentence	"How to behave in the doctor's surgery"
Descriptive	It has a row of chairs around the edge.
Descriptive	The people sitting on the chairs are waiting to see the doctor.
Perspective	They usually like to sit quietly because they don't feel very well.
Descriptive	Sometimes little children run about a bit.
Perspective	That's OK because usually little children find it hard to sit still.
Descriptive	I can sit still and wait a bit because I am older.
Co-operative	My dad will help me wait. He will give me a magazine and say "Count the faces in that".
Self Coaching	To help me wait I will try to count the faces and tell my dad the number. My dad will like it if I count the faces quietly.
Perspective	The receptionist will be happy if it is quiet and she can answer the phone.
Perspective	After the doctors we will go home in the car.
Partial	