Royal National Institute for the Blind

One of the family

3 Making contact

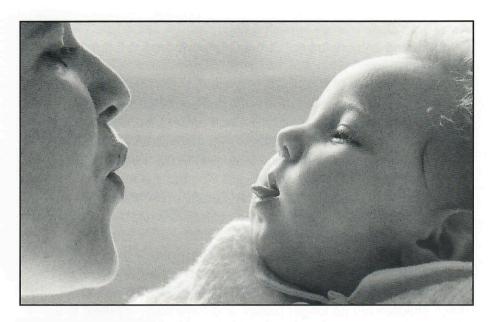RNIB
challenging blindness

Making contact

- Communication is not only about learning to use speech, it is a broader, multi-channelled means to access the world.
- It is a two way process with both partners playing an active role.
- In order to have a need to communicate we have to have something we want to impart to the world.
- Communication is power – to get what we want – to manipulate our environment.

> *Some authors define communication as a general function belonging to all levels of development. All behaviour whether of a symbolic nature or not is linked to this function. In this way the cry of a baby at one month is a method of communication just as the 'goodbye' gesture of the 15 month old child. For other authors it only exists when a certain cognitive and symbolic level is reached.*
> (Souriau and Green 1987)

In the first moments after birth an intricate interaction begins between mother and baby. Babies are born with a sophisticated sensory system which enables them to establish a visual rapport with their carers and the ability to use sound to elicit attention. During the early months the interaction between carer and child becomes a subtle dialogue with each using all means available to make contact. By the time babies are two weeks old their carer will already be able to hear a difference between their general comfort crying and more specific hunger or discomfort sounds. The baby in turn will respond more readily to a female voice than other types of sound.

Initially the world of the newborn baby is close. We know that vision is an important part of that world. Much of the early interaction between babies and carers is developed by the ability to observe and copy facial movements. Touch is also vitally important during the early months and babies will establish and receive physical contact from their carers. The close proximity of all these major interactions provides babies with a natural order and structure to their environment. Babies can later build on this security and consistency as they seek to explore the world around them.

> *Unless the individual has a solid fixed-point in which events are predictable and from where it is possible to obtain an overview of the system: unless there are predictable reactions to his self-activity then he will neither meet nor accept new challenges.* (Nafstad 1989)

Away from close human contact a baby has few strategies. The world is frightening and confusing. Babies are powerless to influence what happens to them.

Interaction between mother and baby can be disrupted or curtailed in its very early stages. This can happen for a variety of reasons but is more likely in the case of children with multiple disabilities. The effects of a sensory and physical loss can lessen the baby's ability to establish a visual and tactual dialogue. The baby is therefore unable to respond to the visual and auditory signals presented by the carer. Mothers can become disorientated and discouraged by the seeming 'difference' in the responses of their multidisabled child.

Children with multiple disabilities may reach school age and beyond functioning in preintentional levels of communication. Although these children are no longer babies and have been exposed to a large number of different experiences the early disruption in their development has meant they have been unable to use those experiences to act upon or enlarge their world view. As teachers and carers working with these children it is therefore important for us to be aware of the developmental stages involved in communication.

As in other areas of development communication is continually being refined. There is a developmental process from birth onwards towards becoming an independent communicator. Although this process cannot easily be divided into discrete components a rough hierarchy separates preintentional from intentional communication. Preintentional communication can be divided into the following (Goldbart 1994):

1 Subdivisions of Preintentional Communication

A Reflexive Stage - students' reflex and very early responses to internal and external stimuli serve as signals to familiar people who interpret them.
Eg: recognizing different cries as resulting from hunger, discomfort and tiredness, or interpreting a relaxed state as comfort and contentment.
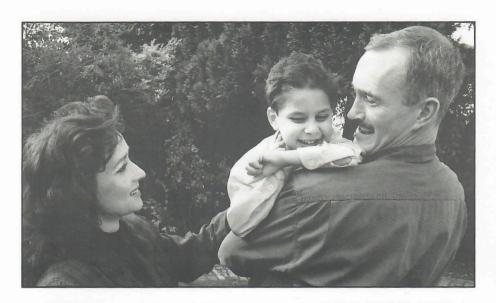
At this stage children with a sensory loss are at a particular disadvantage. Firstly their responses may be 'different' and consequently harder for the carer to interpret. Secondly the response by carers may not reassure children but may further confuse or frighten them. The children or young people are powerless and feel no control over what is happening to them. The loss of distance senses means:

> *...in other words there is only chaos in the child's life, he does not know to which stimuli to orientate* (Fox 1985).

> *This is a clear description of a (multi)sensory impaired child who lives in an unstructured environment where persons touch the child indiscriminately...* (Van Dijk 1989)

During this early stage vision plays a vital role in co-ordinating and mediating the other senses. Children who are congenitally blind can have a particular difficulty in externalising into the environment.

> *It is only when the child has differentiated himself from people, objects and events that intentional communication, communications about the external world, and communications outside familiar contexts are possible.* (Stillman and Battle 1986)

Children with multiple disabilities who remain in these early stages of development will have few communication strategies. They may possibly have some deliberate vocalisations but because of their sensory loss are unlikely to use these consistently. Eye contact may not have developed and physical disability may have limited their ability to use any exploratory behaviours.

What can be done?

- The environment
  Unlike babies who will experience contact with very few carers, the child or young person in a school environment will encounter many. Wherever possible the number of adults attempting to interact with the child should be limited to key workers.

- Structure
  Establishing a routine is important so that changes in carer and possible disruptions can be compensated for by the security of the routine. The routine will also provide a basis for staff to get to know the child. Observations can therefore be set against common reference points. A routine will also help the child to learn to anticipate what is going to happen and will increase the possibility of the child beginning to recognize a familiar adult. The foundation of early memory is being laid:

  > ...persons who are unable to recall that a certain person provides a particular pleasurable reinforcement will not develop a special relationship with this person. By the same token they will not remember daily living situations in which s/he has successfully been engaged before. This learning has to start all over again and does not build upon previous success. (Van Dijk 1989)

- Sensory
  Lighting and acoustic conditions should be considered carefully so the child is positioned in an optimum environment for sensory functioning. Children with cerebral visual disturbance (cortical visual impairment) should be provided with plenty of light without glare.

- Time
  Sensory loss means the child will need plenty of warning before a change of position or activity.

B Reactive Stage - students' reactive responses to internal and external stimuli serve as signals to others who assign communicative significance to them.
Eg: understanding smiling and arm-waving as conveying pleasure, or a stiffening of the body as conveying dislike of an event.

Much early reactive behaviour is learnt by copying the expressions or actions of others. Children with a sensory loss may have had little or no opportunity to observe or hear others. Their responses will primarily be directed to internal stimuli.

Stereotyped behaviours are not uncommon in these children and may take the form of rocking, eye poking, hand flapping *etc*. Some behaviours may even become self injurious. It is therefore important to base our interpretations of a child's signals on careful and structured observations. We can:

- develop routines which include the use of sensory timetables. Days can be differentiated by particular smells and tastes or activities. To some extent the school day will already have the components of this eg circle time, lunch etc.
- introduce physical routines such as circuits, if the child is independently mobile, or link physiotherapy routines to music or massage with specific songs or creams for particular times and days.

- allow children with visual loss to feel the movement of others so they can learn appropriate postural positions. Physiotherapists working with visually impaired children will need to bear in mind what sort of visual loss is experienced by the child. In order to use their sight more effectively a child may adopt an unusual posture or head position. Co-active movement not only teaches children about the movement of their own bodies but provides the closeness necessary for the child to influence the movement of another.
- reduce visual and auditory clutter - to enable the child to concentrate on visual and auditory input we need to limit visual and auditory clutter as well as other forms of distraction such as strong smells and sudden temperature changes.

C Proactive Stage - students' intentional acts on objects and/or people serve as signals to others who assign communicative intent to them.
Eg: responding to vocalisation and jigging up and down as if they were signals for 'I want that' or pursing lips and turning away as 'I don't like that.'

Action on and exploration of the environment enable us to control and make choices within that environment. Studies on language acquisition in typical child development indicate that early language:

> *...is dominated by words for items which acquire their meaning during infancy through the children's own actions or perceptions.* (Nelson 1973 in Bigelow 1988)

In order to be able to act on objects or people within our environment we have first to perceive their existence. A blind child even without physical disability does not have the visual stimulus to explore his or her environment. If visually impaired children have additional disabilities it becomes more difficult for them to find objects and people within their environment independently. To provide the opportunity for children to find out what is happening around them we can:

- Organize the environment
  There are now a variety of 'little rooms' available as recommended by educators such as Lilli Nielsen. In this small acoustic environment the child is presented with a variety of objects suspended from above. The child may at first accidently knock against these objects but behaviours then become more intentional as the child explores the objects around.

  Begin to establish the use of objects linked to particular activities in order to introduce the activity.

- Know the student
  It is important that we build on our knowledge of the student so
  the likelihood of misunderstanding his or her signals is reduced.
  Frustration can easily be caused by a continual misinterpretation of
  a behaviour. If misinterpretation continues the student may give up
  communicative behaviours or may replace acceptable ones with an
  increase in stereotypic or challenging behaviours.

- Offer choice and allow control
  It is important to respect behaviours which seem to indicate the
  student is making a choice, *eg* pushing away food to indicate
  'finished' or pulling an adult towards an object.

- Enhance sensory information
  The use of a consistent colour for the student's cup or plate; a
  particular series of sounds or vibrations linked to choice making
  activities; patterns in bold contrast being used to cover seating or
  objects; sound and objects in combination; members of staff
  wearing tactile or visual objects to identify themselves; the use of
  makeup by staff to exaggerate facial movement; on-task lighting to
  access visual information; the use of learning corridors covered in
  interesting and rewarding textures and colours; the identification of
  parts of the room by sound, texture and colour.

- Provide consistency

  Ensure all staff involved with the students share an interpretation of the signals used by them. Be consistent in the type of language used to describe objects and people.

- Assessment

  Whatever the level of a student's communication, assessment should be ongoing and should include assessments of hearing and vision. It should be remembered it is very easy to amass information and less easy to use it ! Assessment should be manageable and embedded within the curriculum. It will be necessary during assessments to examine the various modes of communication available to the child. The effects of visual or hearing loss in combination with any physical and neurological impairments may make some communication modes more accessible than others. It is likely that more than one mode of communication will be used (possibly different ones for expressive and receptive communication). There should be some flexibility in determining which seem the most appropriate. Whatever the discussions undertaken by staff the final choice must rest with the individual and should arise out of the individual's needs and not the institution's !

2 Intentional Signalling

> *A communicative attitude has developed: the child will*
> *become active on the basis of his need to make something*
> *clear to the other person. It will be clear that at this stage*
> *of development everything depends on the ability of the*
> *adult to 'receive' and interpret correctly the signals given*
> *by the child, which are certainly very vague.*
> (Van Dijk 1989)

Children can use a variety of different body parts and actions to indicate their needs. A visually impaired child will be less likely to point to an object but may vocalise. Some children are tactile-defensive and are reluctant to touch objects. Visually impaired children can become resistant to new tactile sensations, especially if they have their hands placed on a new texture without adequate warning or preparation. Generally it is important for children to back up visual or auditory information with touch. They will need encouragement to make this touch meaningful and explorative.

However subtle the signal given by a child a correct interpretation by teacher or carers is more likely to make the child repeat the signal.

Once shared attention between educator and child has been established it is then appropriate to introduce the use of objects as reference points more formally for the introduction of activities (objects of reference). For children who have difficulty gripping objects it is possible to use velcro bands or hang objects so the child can use any voluntary movements to 'swipe' at appropriate objects.
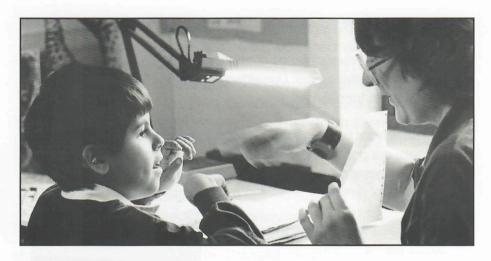
3 Referent Stage

The stage at which an object or person comes to stand for something.

When the child has reached this stage it is possible to develop the use of objects of reference into 'timetables' or 'calendars'. These are sometimes called 'memory' boxes. Sequencing information in this way builds on the memory skills the child has begun to develop. It is helpful to choose key points in the day which already have especial significance for the child. It is important to build upon success. This method provides the possibility of a 'conversation' between educator and child. Some children may have a preference for using drawings or photographs rather than objects but this depends on the child's visual development. Hopefully at this stage the child will begin to choose his or her own symbols. A widening range of shared experiences will give the child an opportunity to 'discuss' these with other people.

Signing

This will depend on the child's physical development. If the child has been using gestural signalling it may now be possible to formalise some of the gestures he or she uses. Visual impairment may reduce access to signing because it may mean the children:

- are unable to copy signs
- are unaware and consequently unmotivated by signing
- find it difficult to form signs away from their own bodies
- find receiving signs more difficult.

Enhancing signing visually
- Use on-task lighting to emphasise signing
- Try using coloured gloves to draw the child's attention to your hands
- Draw attention to the child's own body movements by the use of colour and reflection
- When trying to interest the child in your movement wear stripes or bold colours
- Try introducing the child to 'shadow puppets' with strong contrast and plenty of movement
- The use of computer programmes will help the child to establish visual cause and effect.

Children may respond at different levels at different times and in different circumstances, and use a 'mishmash' of modes. Flexibility on the part of educators and carers remains important.

4 Symbolic stage

A symbol can be described as something which replaces or represents something else. Donaldson describes Piaget's view of the symbolic function:

> *The advent of the general symbolic function shows itself, then, not only in the beginnings of language but also in the appearance of make-believe play and in 'deferred imitation' (imitation when the model is no longer present).*

Reynell sees a hierarchy in this:

- object permanence
- recognition of an object by its use
- the ability to relate to toys which are very like 'the real thing'
- the ability to play with toys that are removed from reality either by size or physical characteristics
- the ability to use two dimensional symbols
- the ability to find out what symbols have in common with each other.

Many of the children we teach will not follow this hierarchy because their sensory and physical impairments take them along a parallel but different route. Many blind children never 'play with objects' in the way that sighted children do because toys (even ones which look 'like the real thing') do not feel at all like the real object. These children do, however, develop a love of language and may learn to read braille. They will learn to use two dimensional symbols and they will find out what symbols have in common. The indicators we look for in children with multiple disabilities may be different but in the end will run along a similar path. To facilitate this process we can:

- reduce the size of the objects of reference
- use partial representation (handle representing cup for instance)
- parts of 'real objects' can be changed into another tactile form by thermoforming (using a vacuum forming process) – ask for advice on this from your local service for visually impaired children
- drawings can be simplified to salient features (a feature of an object which is most meaningful for the child)
- sequencing can be developed by binding tactile or visual symbols into books or ringbinders.

For some children technology will provide the necessary flexibility. A range of augmentative communication devices are available. It may be necessary to adapt or customize equipment to meet a particular physical or sensory need.

But most importantly making contact is a *two way* process with both partners playing an active role. We must make sure the child feels it is worthwhile trying to communicate with us!

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Further reading

Ace Publications
Ace Centre, Ormerod School,
Waynflete Road,
Headington, Oxford OX3 8DD
Tel: 0865 63508

Software for children using alternative and augmentative
communication systems
The importance of correct seating
Touch screen software
Augmentative communication – more than just words

Bloom, Y (1990) **Object symbols: a communication option**, Monograph Series, Number 1, Royal New South Wales, Institute for Deaf and Blind Children, Australia

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Periodicals and journals

Eye contact: meeting the needs of children with impaired vision and additional learning difficulties. 3 times a year. Available from the Editor at: RNIB
      224 Great Portland Street
      London W1N 6AA
Tel: 0171-388 1266 x 2297

Information exchange: for parents and professionals working with children and young people with sensory and additional complex needs. 3 times a year. Available from:
      Ken Woods
      53 The Circuit
      Cheadle Hulme, Cheadle
      Cheshire SK8 7LF
Tel: 0161 486 6514

Talking Sense: the magazine of Sense, the National Deafblind and Rubella Association. Available from:
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