



The Down Syndrome Association Gauteng

BASIC SUPPORT FOR CHILDREN WITH SPECIAL NEEDS 'WHAT YOU NEED TO KNOW' COMMUNICATIONS – SPEECH AND LANGUAGE

Children with Down syndrome are usually good communicators. They are keen to interact socially right from infancy but they have to rely on non-verbal skills such as gestures for longer than other children because they usually experience significant speech and language delay. Once they start to talk, they make good use of the speech and language skills that they have for the same range of communicative activities as everyone else, particularly if encouraged to do so by sensitive support from those around them at home, at school and in the community.

However, they have specific difficulty with learning grammar and with developing clear speech. Some of the reasons for their difficulties with learning to talk are known and provide pointers to effective intervention strategies. Since speech and language skills are central to the development of mental abilities such as thinking, reasoning and remembering as well as to social inclusion, it is essential that speech and language is a focus to parents, teachers and therapists from infancy through to adult life.

The importance of learning to talk

Learning to talk is central to all other aspects of early childhood development. It is very important for social and emotional development and for the development of intellectual abilities. Being able to talk allows children to gain control over their social and emotional world.

Social interaction and the role playing by speech and language

Because we are human beings, we have to communicate with each other in a social sense. The reason for communication is to exchange information between two or more human beings. Talking means children can ask for what they want, share experiences, understand what is about to happen and express themselves when they are hurt or upset. In order for communication to take place the participants must both speak the same language. In other words, talking helps children to relate to others.

Why do we need to communicate?

When a child cannot communicate a parent can feel isolated and even rejected by the child. This can lead to problems in the relationship between parent and child. We need to form relationships with other people. In order to do this, we need to talk about our feelings, our thoughts and to talk about things, events and actions, as well as understand other people.

How do we communicate?

We can do all of the above verbally i.e., talking, laughing, groaning, listening, or by using non-verbal communication i.e., making gestures, using body language, eye contact, or facial expressions, or written communication. Learning to talk is an everyday activity. Children will communicate because they want to. The human being is a social being above all else.

When we communicate, we can get people to do things; we can make them react to us. Being able to communicate in the preschool enables children to play together, to share and to learn together. Throughout life communication underpins the development of friendships, supporting one another and negotiating our way through the world – shopping, travelling and working.

Children understand spoken language before they use it.

All parents want their child to talk because most people around us talk. When we communicate this way, we have to learn to listen when someone else is talking and take turns to talk. Some children find this difficult. These children can be helped either by using a sign language e.g. The Makaton System, or by use of a communication board. Communicating through gestures leads to talking for many children.

How does the child develop language?

Key words

What do the following words mean?

Language: The ability to express oneself in an appropriate arrangement of words and sentences.

Speech: The sounds we use when we express words or sentences

Voice: The use of a voice that is pleasant to listen to and easy to understand. **Fluency:** The ability to speak without many repetitions or hesitations (pauses).

People who can speak fluently need:

- Enough intelligence
- To be able to hear
- To be able to use the tongue, the lips, the mouth properly

Foundations of language

The child also needs to be able to imitate in order to use language and to be able to recognise objects.

Before he can understand language, the child needs to be able to:

- Be aware of speech
- Recognise speech
- Tell the difference between sounds
- Understand speech

These stages are what we call auditory development. This has to happen before a child can develop receptive language.

Receptive language describes all the words, sounds, signs and body movements that a person understands.

The child's understanding of language is always better than his expression or use of language i.e., his expressive language.

Feeding is important for the development of expressive language because the same muscles that are used for feeding are used for speaking.

The developmentally delayed child may have difficulty co-ordinating the movements of the lips, tongue and jaw that are needed for feeding.

This means he will have difficulty in making speech sounds.

The development of expressive speech follows these stages:

- Maintenance of eye contact
- Cooing and gurgling
- Babbling
- Imitating
- Pointing
- First word
- Telegraphic speech and sentences

Communications is anything the child does to make his needs known.

So, if the child can understand language (has certain receptive language skills) but cannot express himself with speech, he may try to communicate by doing the following:

- Asking/demanding by reaching.
- Refusing/protesting by shaking his head.
- Greeting by smiling and waving.
- Commenting by pointing/making gestures.
- Questioning by pointing as well as making a sound.

This is communicating and we must respond to it.

How can we help the child to communicate?

It is very important to talk to the child all the time, even if the child does not talk back to you. Here is a list of things you can do to encourage the child to communicate. (Remember, communication should be fun and playtime is the best time to teach language).

- Copy the sounds and gestures the child is making.
- Expand on what the child says e.g., if the child says “Boy sit” you say, “The boy is sitting”.
- Respond to the child immediately. This encourages the conversation. It shows that you are listening.
- Talk about what the child is doing.
- Follow the child’s lead in communicating – this keeps his interest and encourages more communications from him.
- Repetition is very important. Repeat words and movements to your child.
- Praise with a pat a smile, a hug or with words.
- Take turns to speak. Ask open- ended questions to keep the conversation going. Avoid giving orders. The use of questions, giving choices and explanations will lead to children who do the same.
- Try not to be so worried about his level of development that you do not respond to his attempts to reach you. Have fun interacting with him and then he will want to do it more often.

Joint attention

Babies are good at creating situations for learning language. At about one year of age, they will engage in ‘joint attention’ sessions. This is when the baby and parent/carer are looking at the same object e.g., both looking at a toy or at a car passing. The baby draws the attention of the parent/carer to the object by either holding it up or pointing. The parent/carer then talks about it. The more ‘joint attention’ sessions the baby experiences, the faster he/she will pick up the meaning of words.

Adults can also create such situations by drawing the baby’s attention to something. The more children are talked to in situations like these, the faster they learn to talk.

Play activities and book reading

Studies have shown that the language parents use when joining in play activities and reading books with children, provide the richest sources of language experience for their children. Learning from regular repetition in social situations (e.g., ‘bye-bye’, ‘all gone’ and ‘more’; nursery rhymes; responses in games; songs etc.) is probably even more important for children with language learning difficulties.

The learning of grammar (and vocabulary) is also influenced by being read to and by learning to read. This is because in books, sentences are written with complete grammar while in conversations; the use of grammar is often shortened.

Social learning with other children

As children move beyond the family to pre-school and other school settings, the opportunities to communicate with a wide range of partners develop. The quantity and quality of these social opportunities, particularly with peers, will also influence all aspects of speech and language development.

However, teachers and parents need to be vigilant. If the gap between the language level of the child with Down syndrome and other special needs and the peer group is too great, the child can be discouraged and communicate less. With sensitive mediation from either the teacher or the parent, situations can be engineered where communication skills will be practiced and will develop.

Is there a critical period for learning language?

Apparently, the brain is most ready for speech and language learning between birth and 6 to 8 years and the ability to learn language, lessens after this. What should be understood is that there is no reason for speech and language to steadily progress into adult life. However, if some control over both grammar and speech production is not in place by six years of age, then the child may never attain the fully sophisticated control over these aspects that most of us take for granted.

Some researchers suggest that the parts of the brain that would be used specially to control grammar and speech production would be used for something else if grammar does not develop. This fact emphasises the importance of early language intervention. Parents, therapists and teachers should therefore realise the importance of ensuring that children are exposed to both listening to and saying grammatically correct sentences by 5 years of age if possible. This can be done by reading to a child who it not yet able to use sentences.

There is also evidence that a child needs to have a 300-word vocabulary before the learning of grammar can begin. If the above statement is true, then it is important to try and teach a language delayed child a 300-word vocabulary before the age of 5 or 6 years and probably earlier.

Parents who were more effective language teachers:

- **They talked to their children frequently**
- **They tried to be positive**
- **They told children about things**
- **They gave children choices**
- **They listened to their children**

Some ideas for attempting to improve the development of speech and language in children with Down syndrome

Children with Down syndrome and other special needs want to communicate. They do so effectively from the early years and use gestures to compensate for their difficulties with spoken language.

- They find speech production difficult. They will benefit from therapy directed toward motor control of the tongue, mouth and vocal tract as well as exercises emphasising rhythm and pacing, awareness and control of starting and stopping gestures and sounds and of gradually or abruptly increasing and decreasing their speech and volume.
- They may find learning word meanings from sentences difficult and will by extra opportunities to learn from language teaching games in which, words can be learned one at a time. This will be particularly helpful for early vocabulary when it is mainly nouns and verbs that are being learned. Later specific teaching of early grammar and sentence meanings may also help to accelerate learning.
- The anatomical differences associated with Down syndrome, (differences in skull shape, jaw, palate, dentition, tongue size relative to mouth and difficulties with motor skills development and fine motor control), will all contribute to the greater difficulties that children with Down syndrome have in developing clear speech. Therapy aimed at increasing oral-motor control from infancy will help articulation but there is no evidence that surgery for tongue reduction improves speech.
- The growth in verbal memory span during childhood is specifically delayed in children with Down syndrome. This affects the learning of words and grammar. There is some evidence that memory training can increase the short- terms memory spans for these children. This increases the rate at which grammar is learned.

Alternative approaches to support learning from listening

The difficulties in learning, auditory discrimination and working memory indicate that learning language from listening, the way most babies do, will be difficult for children with Down syndrome.

Signing

Evidence suggests that parents should be encouraged to learn to use signs (e.g., with systems such as Makaton or Signalong) to support the development of spoken language with their baby from 7/8 months of age.

Research shows that children with Down syndrome do not learn words from speech input alone and that those children who have been on sign supported therapy programmes have bigger spoken vocabularies at 5 years.

Some parents have difficulty accepting this as they believe that the use of signs will delay speech development.

Others fear that signing makes their child appear more 'handicapped'.

The benefits of using signs as a bridge to talking

- Being able to sign allows them to communicate effectively and reduces frustration;
- Parents who sign can engage in more effective language teaching and communication with their children;
- Signs help children to learn and understand words;
- Signs help children to be understood whilst their speech is still difficult to understand;
- Children with Down syndrome have larger vocabularies when they have been in sign supported programmes;
- Signs are a bridge to speaking and should be needed less as children learn to talk;
- Speech sound work should be focused on from infancy alongside the use of signs;
- The focus should always be on learning to say words with signs used as an aid.

The benefits of teaching reading to teach talking

- Children with Down syndrome find learning visually easier than learning from listening;
- Printed words seem to be easier for them to remember than spoken words;
- Print can be used from as early as 2 years of age to support language learning;
- All language targets can be taught with the aid of written material, even to children who are not able to remember the words and read independently;
- Reading enables the child with Down syndrome to practice complete sentences – teaching grammar and supporting correct production;
- Reading can help speech at the level of sounds, whole word production and sentence production;
- Reading to children with Down syndrome and teaching them to read may be the most effective therapy for developing their speech and language skills from infancy right through the school years;
- Research shows that reading also has a significant effect on working memory development for children with Down syndrome.

Conclusion

The risk appears to be that children with Down syndrome / children with language delays will experience fewer language learning opportunities throughout life, when it can be argued that they are likely to need more quality opportunities that typically developing children to learn language at an adequate pace.

Effective intervention should ensure that throughout childhood everyone needs to be aware and try and compensate for the delayed and limited production of speech.

If this does not happen, the quality and quantity of opportunities to learn and practice language and communication skills are likely to be reduced.

**Remember children with Down syndrome are strong visual but poor auditory learners.
Wherever possible, they need visual support
and concrete
and practical materials
to reinforce auditory input.**