**Speech and Language Development for Children with Down Syndrome (5 – 11 years)**

**Background**

Most children with Down syndrome (DS) will enter school at age 5 with a spoken vocabulary of about 300 words and probably a larger comprehension vocabulary (words they understand but don’t yet use) of around 400 words. At 8 – 9 years the average spoken vocabulary of children with DS is around 450 – 500 words, but the range is between 150 to over 600 spoken words. Very few children with DS have totally clear, fluent and grammatically complete spoken language skills at 11 years of age, so we expect most children to need targeted speech and language intervention throughout their primary and secondary school years.

Children with DS need practice to improve, but they often practise less than typically developing children.

The ideal scenario is for a speech therapist to work with the child, his/her parents and teachers at least once a month. This is rarely the case, however, so Downs Ed has developed a speech and language programme for parents to implement at home, backed up by teachers and/or TAs at school.

The programme is based on two main principles: the need to improve quality and quantity of everyday communication with the child and the need to target the specific skills that underpin effective communication (non-verbal skills, vocabulary, grammar and speech/motor skills). It is important to record progress.

**Improving everyday communication**

It is essential for everyone to try and improve the way they are communicating with the child – both in terms of quantity and quality.

Minimise effects of hearing loss

* Keep on top of any hearing issues – insist on regular hearing assessments
* Reduce background noise, speak clearly, maintain eye contact
* Use visual supports (signs, pictures, prints)

Improve articulation and phonology by:

* Encouraging control over oral motor skills
* Building up sound discrimination and production skills
* Practising single speech sounds
* Keeping a record of the child’s speech sound skills
* Practising whole word and sentence production
* Using signs and reading activities to support speech sound work

Accelerate vocabulary comprehension and production by:

* Teaching a target vocabulary
* Keeping a record of the child’s comprehension and production of words
* Using an additional communication system, usually signs, to support comprehension and production of words
* Using reading activities to support the comprehension and production of vocabulary

Accelerate mastery of grammar and sentence building by:

* Encouraging the use of complete sentences
* Teaching the early grammatical markers
* Teaching word order rules
* Teaching function word grammar
* Keeping a record of the child’s comprehension and production of grammatical markers and sentences
* Using reading activities to support the comprehension and production of grammar and sentences

Take account of auditory short term memory weakness by:

* Practising words to improve the sound traces stored
* Playing memory games
* Supporting the learning with visual materials, pictures and print, to reduce memory requirement

Capitalise on the children’s good social interactive skills and develop them by:

* Being sensitive to all the child’s attempts to communicate by listening and responding to them
* Creating opportunities for the child to make choices and to express him/herself through language
* Encouraging the use of gesture to communicate as it is a strength and may be important throughout life for some individuals
* Remembering to listen and to wait to give the child a chance to organise their contribution to the conversation
* Using styles of conversation that encourage the child to expand on and develop their contribution
* Providing as many social opportunities as possible for the child to be able to communicate with and learn from other non-language delayed children and adults in ordinary classes eg in school and clubs.

**The Checklists**

DownsEd has developed a set of checklists to allow you to evaluate your child’s current speech, language and communication skills and to record future progress.

It is important that your child masters a 300-400 word spoken vocabulary as soon as possible as research shows that this is needed before grammar will develop. The learning difficulties of children with DS vary widely – what really matters is that your child is progressing – even in small steps – and that communicating together is fun and effective.

There are six Checklists and Record sheets:

1. Speech sounds checklists and record sheets, which cover all 44 single sounds and the common blends and clusters.
2. The Sentences and grammar checklists and record sheets give examples of the early two and three word combinations that children use.
3. The Interactive communication and play checklists and record sheets provide a guide to the range of communicative functions that children use and their ability to join in and initiate conversations. It also covers imaginative play activities.
4. Vocabulary checklists and record sheets – First 120 words
5. Vocabulary checklists and record sheets – Second 340 words
6. Vocabulary checklists and record sheets – Third 350 words.

These are available for purchase from the Downs Ed website ([www.dseinternational.org](http://www.dseinternational.org)). The set of six costs £12 in PDF or £20 for the printed version.

For school age children, it is best to use these checklists at home and to ask your child’s teacher or TA to complete them at school too. Observation records should be kept for a week or more in both settings.

Before you start choosing activities from those given in this module we suggest you observe your child over the next few days and note down the gestures, signs and words he/she is already using. If your child is joining words together, note down the words that he/she is using in the day. Keep an observation diary close to hand and write down the words just as they are said – eg “juice, Mum” or “me car”. Make a note of the range of communication that your child engages in – eg showing, asking, refusing or greeting. You will be able to use your observations to complete the checklists and decide on the correct targets for your child.

The activities in the checklists are set out for each area of development, starting with interactive communication skills, gesture and sign, then speech, vocabulary and grammar. In each area activities are recommended in developmental order. The checklists cover at least five years of typical development – up to teenage years for many children with DS.

**Interactive communication skills**

Interactive communication skills are usually a strength for children and adults with DS. They use and understand the non-verbal communication skills that everyone uses including eye contact, smiling, turn-taking, facial expressions and gesture.

It is important to encourage all forms of communication because non-verbal skills, including gestures, lead to spoken language and also because children with DS may rely on non-verbal skills for longer than other children.

**Non-verbal communication and signing**

Research has shown that signing acts as an important bridge to speaking for children with DS, especially in their preschool years. They learn to understand and to use new words faster if they are accompanied by a sign and can often sign the word spontaneously before they can say it.

Children with DS typically learn around 50 – 100 signs before moving on to using words as their main means of communication. As they begin to say a word, they normally drop the sign for that word and use the spoken word. If children are still entirely dependent on signs when trying to put 2 and 3 words together then their speech sound skills should be reviewed as they may be in need of extra help with speech sound production. By school age signs should only be used as a support to speaking (eg for new words, sentences, sounds and grammar) and speaking should be the focus for daily communication. Too much use of unplanned signing when it is no longer necessary may hold back clear speech. However a significant minority of 4 year olds (around 25%) and older children will still need to use signs as their main mode of communication.

**Conversational skills**

As children become talkers and use their spoken language more confidently, we need to consider the way they are joining in and also starting conversations. If you ask a question, does your child respond? Does your child comment on things that s/he sees when you are out? Does s/he ask questions? Does s/he join in family conversations at the meal table? If not, is it possible to think of ways to include your child in school and family conversation and encourage him/her to ask questions? Initially you may need to draw him/her into conversations by asking questions and then giving your child time to answer, followed by comments like: “that’s interesting” and “what else happened?” or “can you tell me more?”

Being interested and being a good listener will really help encourage children to talk. However, it is not easy for children with DS to become fluent and confident and they need thoughtful and sensitive encouragement to join in.

**Increasing the quality and quantity of language experience**

Increasing the quantity of language use and experience as well as the range of useful phrases that your child can use is important. If you observe your child at home, in a social situation or in the classroom, how much does he or she talk compared with other children of the same age? It may not be easy to increase this, but it is important to try. At school, make sure your child takes full part in “show and tell”, taking his or her turn with whatever support is necessary, such as a holiday picture or object. Conversation diaries can also help. A conversation diary is a personal book which your child can take between home and school. In the book, write a sentence about something that your child has done or is going to do, that s/he would like to tell his/her friends or teacher about. For example, “last night, I watched TV”, “Mum and I will go to the park tomorrow”, “We made a cake at Grandma’s”, “Mrs Andrews helped me on the computer today”. This will help your child to say complete sentences and to be able to share their experiences with family and friends. It will serve two useful purposes: it will support your child’s development of spoken language, sentences and grammar and it will enable him/her to tell everyone what they do at home and school. It is important that the child is actively engaged in choosing what s/he wants to tell. For example, if the child says “Played drum” you write “I played the drum today”.

Include the child in answering questions during lessons and in conversations during group work. Remember that the other children will act as models for the language needed to talk in the classroom, so turn taking with other children will be valuable. It is important that the other children fully understand the difficulties of the child with DS and that they are encouraged to be sensitive, to listen and to include the child in their activities. It is important that both adults and children do not become too helpful and talk for the child or jump in to prompt too quickly. Remember it will take your child with DS longer to organise what s/he wants to say.

**The social use of language**

Children with DS may need help to learn the language for opening a conversation such as “Hello Mrs Andrews” “Hello Susie, where have you been?”, “This is a delicious cake Granny”, “May I have a drink please?” – or when meeting strangers: “Hello, I’m Julie. What’s your name?” etc. The most effective way to learn these social sentences may be to write them down on cards, which can be used to support practice and used in real situations while the child is learning.

**Behaviour and communication**

School communication in lessons and elsewhere can be a problem and lead to behaviours, often disruptive behaviours, as the child’s only means of communicating. Some of the behaviours that seem inappropriate in young children at school are often used because the child cannot say what they want or what the problem is. In the playground, other children crowding a child or being over-enthusiastic to “mother” the child can lead to pushing or even hitting. In the classroom a child may slide under the desk or become “stubborn” because they cannot say “This work is too difficult, can I have some help please” or “I am hot/thirsty/have a headache.”

 You may need to model, expect and prompt socially appropriate language at a level your child can master – eg “Leave me alone please” instead of “go away” or pushing. Sometimes other children can lead the child with DS into trouble and they cannot say “Sally took that pencil, not me.”

In the classroom, phrases such as “I need help please”, “Can I go to the toilet please?” “What are we going to do after play?”, “Where is my book?”, “I can’t do this, it is too hard”, “I feel ill”, “I have an earache/tummy ache” will be very helpful.

Some of these sentences may seem much too difficult for your child at the moment, but write them on cards and help them to use them. At first, your child may be able to choose the right card because they can recognize one keyword on it, but make sure this doesn’t deter your child from learning to say the words. Remember to model the sentence so that your child can copy you, both at home and at school.

Social scripts or stores can help children to understand what is expected of them in social situations and at school. For example, “In assembly, a Year 2 pupil is expected to sit and listen quietly. First we sing and then the Headteacher will talk to us. After that we go back to our class.” Sometimes we forget that although we tell children off for behaving inappropriately, no one has actually made sure that they know what behavior is actually expected of them.

**Speech**

Clear speech is a challenge for children with DS. This can be very frustrating for them as it means their speech is often not understood. Several small studies have demonstrated that speech work is effective at this age and can be carried out by parents and should be considered a priority.

**Skills that affect speech**

It is important to encourage good feeding, sucking, chewing, drinking and breathing. The coordination and control of the movement of lips, tongue and breathing needed for chewing and swallowing develops similar actions that are needed for making clear speech sounds. Many 5 year olds will be chewing ordinary foods but some will not and if your child is delayed then feeding and drinking skills need to be addressed.

It is important to move your child steadily on to chewing lumpy foods, just increasing the texture a little at a time until s/he can chew ordinary pieces of food. At the same time, move your child forward to drinking from a normal cup in stages, using a cup with a spout, then a recessed lid and finally an ordinary cup. Watch that your child keeps his/her tongue inside the mouth when drinking and does not put her/his tongue down the outside of the cup. Encourage your child to drink using a straw. Encourage whistle and bubble blowing games to get your child to make a round lip closure.

Often children with DS make progress with feeding and drinking skills once they are in school as they model their behaviour on other children.

Some children with DS seem to be hypersensitive and to dislike touch around the mouth area or the feel of things in and around their mouths and these children need help to tolerate these sensations. A speech and language therapist can provide advice, but if this is not available, gently massage your child’s face with fingers, a face cloth, or a soft brush for a few minutes several times a day. Encourage the child to try different tastes and textures. Sometimes eating with fingers is more acceptable to the child than the feeling of a spoon in their mouth.

Encourage mouth closure and nose breathing. Games to encourage lip closure and breath control include blowing through a straw to move pieces of foil, tissue paper or small balls.

Your child’s gross motor development, including head and trunk control and muscle tone, will also influence his/her ability to control breathing and face, mouth and tongue muscles.

**Speech sounds**

Children with DS can be introduced to teaching activities that will help develop their awareness of sounds and their ability to produce sounds through daily games, as long as these are kept interesting. In time, practice through talking and reading may take over from specific speech sound activities.

Pictures and signs will help children to remember sounds – eg cued articulation and the Nuffield Centre Dyspraxia Programme. These are available from speech and language therapists. Although designed primarily for children with speech and language disorders, they are sometimes appropriate for teaching children with DS, but any programme developed will need the guidance of a trained professional to advise when and how to introduce activities.

**Development of sounds**

There is a very wide variation in how early all children can produce sounds and children with DS are no exception. In addition, the order of development of sounds cannot be predicted for individuals. However, for all children, spoken words become more intelligible with increasing age and use of their language skills. Achieving intelligibility takes time, even for children who do not have specific speech and language disorders or delays. Studies suggest that at 2 years of age, 25% of children are intelligible, at 3 years, 70% and at 4 years 90%. This does not meant that all four year olds can pronounce all their words as clearly as adults but it does meant that 90% of them speak clearly enough to be understood by an unfamiliar adult.

Many of the early difficulties noticed in children with DS are part of a normal process, and will improve, provided the children have sufficient practice through talking and using their skills. The children may be able to say a sound on one day and not the next and more practice and feedback over many months may be needed to establish consistent production. Early attempts at words may not even be close approximations and so any attempt should be rewarded.

Some sounds are not accurately produced by many 5 year olds who do not have DS or language delay. Learning to say sounds may be slow, including the progression from being able to make the sound after it has been modeled and being able to produce it from memory without a prompt.

While lack of confidence can contribute to slow progress, it is more likely that an unresponsive child *cannot remember* the sounds without a prompt, even though s/he may recognise it when it is said and can imitate it, rather than s/he is being deliberately resistant to producing the sound. When children understand what the game is, most will say the sounds they know and can say, in a positive and enjoyable learning situation.

*Never let your child feel that they have disappointed you or place them under pressure to produce sounds or words.*

DownsEd has published sound cards and vowel sound practice cards. The cards encourage imitated consonant and vowel sound production and facilitate practice with gesture and pictures.

The sound cards work by giving parents the opportunity to introduce all the sounds in a way that is fun, while also helping their children to listen really well to each individual sound. The method is similar in principle to the methods used in remedial phonological training programmes for children and adults with DS, reviewed in the research overview.

Each sound card provides a picture of an item that makes the sound associated with it. The item in the picture itself does not necessarily begin with the sound – the focus is on the sound that is made by the activity illustrated in the picture – eg the sound of water going down a plug hole (g). Most of the sound pictures are within children’s daily experience, such as a ball (b), a drum (d) etc.

As children get older, it becomes appropriate to move into teaching letter sound recognition by using the alphabet. This will help to link their speech and language activities to their developing literacy skills.

At infant school, phonics schemes used with the whole class will help children with DS to say letter sounds as well as link them to letters. Computerised systems are also available as a complementary way of enabling children to practise sound production, for example, SpeechViewer III. This laptop computer version provides visual feedback so that even young children (3 to 4 years) and certainly older children (7 years and older) can see how close they are getting to making a sound accurately. When they have made the right sounds (or series of sounds, or pairs of sound contrasts like ‘sh’ and ‘s’) they are visually rewarded for doing so. There are visual incentives that help to speed up the saying of single sounds in a series of repetitions, eg with a frog jumping from lily pad to lily pad, every time a sound is said.

**Improving sounds in words**

Repeating the words that children say so that they can hear them correctly spoken and encouraging them to speak in games and through interactive play, with feedback, will develop their speech clarity. *Be careful not to criticise, though, as this may discourage your child from speaking.* Repeating single words back on every occasion may distort the flow of conversation; so try to feed back the correct production of a word in a natural way. If words lose their communicative value and the focus is totally on clarity of production in all situations, this could have a reverse effect and lead to the word being practised less. For example, when a child has asked for a ball you might say, “yes, let’s find the **ball**” (emphasising the word the child said, clearly and quite loudly) or “**park**, that’s right, we are going to the **park**”.

When children talk and are given feedback through interaction, they will continue to develop their phonological system and improve their speech. This is likely to be accelerated when they have been introduced to literacy teaching and if they are in a good language learning environment at home and school.

*But for the majority of children with DS ordinary communication experience alone is not sufficient to lead to the development of clear, intelligible speech in later years* and they can be helped to progress more quickly by focused practice on single sounds, series of single sounds, series of varied sounds, sounds in words, pairs of words with contrasting sounds and additional practice for joining words together in longer combinations.

Practice sessions that are focused on improving phonology and speech production have an advantage over practice during everyday communication, in that the child and parent both know that the game is about how you say the word and it focuses their attention on phonology. When a word can be said in a practice session, then it can be generalised to everyday language, with activities designed for this purpose.

**Choosing sounds and words to practice**

In order to speak clearly, children have to be able to say single sounds, then to join sounds together in a variety of ways to produce clear words of one or more syllables and finally string words together to produce sentences. At each step, the speech-motor planning and control required increases. Most children with DS will be helped by activities for each stage – at the sound level, the word level and the multi-syllable, multi-word or sentence level.

For children who are not able to produce the full range of sounds, words that contain sounds they can say can be targeted for practice, as these are more likely to be achieved. You can use the vocab checklists available from DownsEd to choose words to try with them.

A speech and language therapist will be able to listen to children’s speech and make suggestions for therapy. Gently encouraging a child to practise sounds which are too difficult is fine, but practising words and sounds which are closer to the child’s current skill level will help them to be successful and to gain in confidence. Without a speech and language therapist to help guide and structure the practice, we advise parents and teachers to use the speech sounds and vocabulary checklists available from DownsEd to guide the selection of sounds and words for practice and to record progress. The sound list will help you to choose sounds for sound games and the word lists indicate words that your child can attempt but not yet say clearly.

**Games with individual sounds**

Practising with individual letter sounds in games and speeding up a child’s ability to accurately produce sounds is good practice for all children. Some children will still need vowel sound practice, so use vowel picture cards or combine letters in your language that usually make that sound, ideally with a character or visual reminder as well, or you can choose words that contain the vowel sounds (eyes, ear, mouth, nose and animal sounds: baa, moo etc). Practise letter sounds you are working on (not too many at once) and also practice words (with pictures) beginning with the same letter sounds as a complementary activity. Do not wait for all consonant and vowel sounds to be achieved before practicing words, but choose words that contain some of the sounds your child can say.

Practising words that are important to the child will help him/her gain some control over daily events. Words that your child wants to use to request and comment will be learned the fastest. Next, choose topics of interest to expand vocab such as the farm, animals or – for older children – a project from school. Scrap books can be made with pictures and words to support practice.

The THRASS reading and writing system (<http://www.thrass.co.uk>) teaches groups of letters that make the same vowel sound and is good for teaching children of around 6 years and older.

Various ‘ladder’ games made with pictures and letters can be used to encourage children to practise single sounds and/or words repetitively. Large, clear ladders with characters that physically jump up the ladder rungs can be used for young children as well as letters that jump across markers on a table or grid into a bag or to be ‘eaten’ by a glove puppet.

**Graded Practice**

* Listening and repetition of single sounds (eg p, s, v)
* Listening and repetition of a consonant and a vowel (bee, boo, moo, mee)
* Listening and repetition of a series of single sounds (f, f, f, f, f)
* Listening and alternation of two sounds (try 2 sounds in similar mouth positions first, like p – b, or p –t then gradually get more difficult)
* Listening and repetition of words – repeat one word or repeat a list of words/pictures with the target sound at the start of the word)
* Alternation of word (picture) pairs with contrasts or differences in a part of the word (eg pea, tea)
* Listen and imitate verb list, verb plus –ing, 2 syllables, pictures, clapping or tapping out
* Listen and say sound clusters, with letters on card (eg sl, sk, sn)
* Listening and repetition of words that begin with targeted clusters – same word or mixed words
* Alternation of 3 sounds (eg p, t, k or 3 vowel sounds or mix – consonant, vowel, consonant)
* Alternation of more difficult word pairs
* Words with similar word ending – eg single syllable words with ‘t’ at the end
* Build up syllable practice, 2 syllable words, 3 syllable words
* Single word practice for words in the order they will be joined together with pictures, symbols and words

**Choose words with one letter sound targeted in one position**

For example, choose a list of pictures and words that all begin with ‘b’. Work through groups of words beginning with different letter sounds that you are targeting for practice. Picture resources or books that have vocab items listed alphabetically are useful for this, as they will have pictures and words of the same sound presented together. Please note that clusters such as ‘sl’, ‘tr’, ‘st’ etc need to be practiced separately and are not suitable for practicing the single sounds ‘s’ or ‘t’.

At this stage, you will know which sounds in words are difficult or easy for your child to say, as well as how easily s/he can say sounds in isolation. You may choose to put a difficult word in with a list of easy words for your child to practice. The important thing is to design activities at the easiest level and not make them so difficult that they discourage the child.

**Joining sounds for words and syllables**

Joining one consonant to one vowel, as in ‘key’ or ‘see’, is easier than saying words with more sounds in them (cat, brick, slip) or a multi-syllable word, where many changes in position of the tongue, lip and soft palate are needed.

Make a list of words your child can say clearly and see what similarities there are – in vowel and consonant type and position. Can s/he imitate two or three syllable words? Children’s progress will be affected by how difficult it is for them to make each single sound. The easier this is for them, the more likely they can move from one sound to the next to join the sounds swiftly enough to make a word.

For focusing on the production of the rest of the word, after the initial sound, choose words where your child can say the initial sound, and that have a different ending – eg ‘bun’ and ‘bus’. Do not be too worried about ‘doing it wrong’. Make sure the tasks are fun and designed to help your child to achieve the next step – if they can’t, do more practice at an earlier step. Ideally, you will have a speech and language therapist who can help you. When practising two or three syllable words, encourage your child to tap out the number of syllables, in order to focus their attention on them.

For practising words, one way of deciding what is close to being achieved is to identify what words the child can imitate but is unable to say clearly without a model to copy. The vocab checklists provide a column for you to record these words. Successful imitation indicates that the child can physically say the words and the sounds in the words, but has not yet said them enough to remember how to say them spontaneously. With some extra practice, they will learn to do so.

**Important words**

Another approach for choosing words to practise is to choose words that the child needs or wants to say and to practise these. For example most children at school will need to say number words and will be practising every time they count. They will need to say the names of members of their family or pets’ names, teacher’s name, where they live, how old they are etc, to request their favourite activities or ask simple questions that can get them more information (‘help please’, ‘my turn’) and the more they practise the better they will get. With this approach parents will need to be very accepting of every effort as some words will be very difficult for some children, even though they are motivated to say them. You may need to break words down into smaller parts and practise these, and of course break sentences down into words to practise in turn, just as you do when reading word by word.

**Targeted practice can help at any stage or age**

Children who talk fairly well (or are considered to compared with other children with DS) will still benefit from these types of activities to improve their speech clarity and some examples of more advanced words are included for this reason, for example ‘ch’ words and ‘str’ words.

**Encourage Practice**

* Encourage your child to listen, imitate and try words
* Engage in games, play or real activities to use the target sounds and words
* Include the targeted words learned in everyday language so that the child can use the words they have practised and hear you using them for real
* Use visual supports, pictures, letters, words, objects, books etc to support practice or sounds, words and sentences
* Use quality materials – colourful, interesting, well made (mounted/laminated) pictures that the child can handle are far more likely to hold children’s attention and be used than black and white photocopied line drawings on thin paper

**Joining words together**

Joining words together is more difficult than saying single words on their own and it is typical for children’s clarity to fall back a little when they try to do this. But with practice they get better, although they should be able to say the single word clearly before they are expected to say it clearly in a sentence. You can build up two, three, four and five word sentences, practised with visual prompts, like words and pictures, with a model to copy, which help children to focus on their pronunciation.

**Teaching Vocabulary**

All children learn new vocabulary throughout their school years as their knowledge increases. Vocab size is very important as it reflects the rate at which a child is learning new information about his/her world and it enables (or restricts) the child’s ability to communicate. For children with DS (and many other language delayed children in regular classrooms) teaching vocab should be an explicit targeted activity. Vocab development is central to language development, and speech and language delays will have an adverse effect on progress in reading and writing, and on all other aspects of school learning and social communication opportunities.

**A core vocab**

The vocab covered on the 3 vocab checklists available from DownsEd is a core vocab of over 800 words. It contains a range of nouns, verbs and adjectives that are used in everyday communication and, perhaps more importantly, it contains the other parts of speech necessary to develop sentences and grammar. DownsEd strongly recommends that you complete the vocab checklists in order to identify the gaps in your child’s vocab, even if they have good speech and language skills. Most primary age children will not have a spoken vocab of over 800 words and the checklists will help you identify the words that your child is not yet using in order to teach them.

Do not limit your vocab teaching to words from the checklists. Add any words for activities that your child is interested in, or that your child is covering in project work at school. This means you might choose the vocab to work on a project covered at school (eg ‘the beach’) or that you choose to work on the words in categories such as shapes, colours, animals, food – or later fruit, vegetables , birds, fish.

**Choosing vocab to teach**

While vocab is being learned during every day learning opportunities at home and school, children with DS need more structured help. In the early years of primary school, using modeling (you name the object, picture, event or action) and imitation (you encourage your child to repeat the word with you) may still be necessary.

Choose 2 sets of words: one set for **comprehension** activities from the words that your child does not yet understand and one set for **production** activities from words that your child understands but does not yet say.

First complete the appropriate vocabulary checklists to identify the words that your child understands and the words that s/he uses in speech or in sign and complete the speech sounds checklist. (Start with Vocab Checklist 1, even for an older child, just to be sure that s/he does understand, and use all these early words, and then Vocab Checklist 2). Choose to work with words that you feel your child will be interested in and that you can use naturally in play or daily activities – or by making a topic book.

**Choosing comprehension targets**

From the checklist, choose 5 words that your child does not yet understand and that you think they will be interested in learning. As your child learns to understand the words on the list, mark their success on the checklists and choose new words to work with. You may find it helpful to put the words up in the kitchen or on a notice board to remind everyone in the family or the class to help you to teach the words.

These lists of target words will help you to make a planned effort to extend your child’s vocabulary, but you will also be teaching them other new words during your daily talk with them at home and at school, so remember to update the checklist by reviewing it from time to time. If you keep a notebook handy you can note down words that your child is saying and understanding as you observe them.

**Choosing Vocab Beyond the Core Vocab**

The vocab in the checklists is only a core vocab provided for guidance. Even before they have all these words, many children will be learning other words related to their experiences and interests, therefore choose any additional words to teach that are relevant to children’s daily lives.

In school, new vocab will be needed for literacy and numeracy work and most of this can be anticipated in advance from curriculum guidance. A ‘word box’ can be made to hold flashcards with the new vocab to be learned for reading, number or topic work that is planned. More than one word box may be useful – one for reading, one for maths and one for project work, for example. Picture materials may need to be devised to help children to learn the meanings of new words.

**Games for vocab learning**

All sorts of games can be played to support vocab learning, including finding, matching, sorting real objects and picture cards. Picture books or dictionaries are also good. These activities provide the opportunity to give children many more opportunities of hearing a word and associating it with the correct meaning than will occur naturally during the course of the day. However the natural opportunities for learning language and vocab in everyday life are equally important. Speak clearly to children at all times, describing what they are doing or interested in and involve them in the conversation. When teaching vocab, remember to teach some verbs, adjectives, pronouns as well as nouns so that the child can develop sentences and grammar. Remember that comprehension comes before production, especially for children with DS. It is very important to expand the number of words that children understand, even though they cannot say them, if we do not want to hold back cognitive development, that is, world knowledge, thinking and reasoning and remembering.

The child’s understanding can be checked by asking them to choose the right picture or object from a choice of items for verbs and adjectives, place things correctly for prepositions and demonstrate the action for verbs. It is important to proceed at the child’s pace and to be sure that s/he is really understanding and responding at each step. Plenty of fun repetition from playing games, singing rhymes and reading stories will help the learning process.

**Matching, selecting and naming**

Matching, selecting and naming activities with real objects, toys or pictures are a very effective way to teach new words and concepts. These activities can be used for many years to teach new words and concepts such as colours, shapes and numbers. These games are included because some primary age children will still need this kind of support for their learning while others will be able to learn new vocabulary from ordinary classroom activities, topic work and reading.

**Matching** – this simply involves having two identical objects, words or pictures and showing your child how to find the one that is the same though we would not use that instruction at first. We would say ‘can you put the square with the square?’ or ‘the red circle with the red circle?’ and help the child so that they get it right while they are listening to and learning the words.

**Selecting** – the next step is to ask your child to select the picture or object that you name – eg ‘can you give me the square?’, ‘can you show me the red circle?’. When s/he can do this you know they now associate the word with the right object – they understand the word.

**Naming** - the last step is to ask the child ‘what is this?’ or ‘what’s this called?’ as you point to an object or picture. The child can respond with a sign or a picture, though you should always say the word as you point to it.

Your child will progress from matching, to selecting then to naming, maybe taking several weeks at each stage when starting to learn words. S/he will be able to show you, by selecting, that s/he understands many more words than s/he can name.

DownsEd recommends that you use real objects, toys and pictures to teach vocab. Most children with DS do not need to be introduced to picture symbol systems – they will learn in the ordinary way from everyday experiences, play with toys and from pictures and picture books. However, if you have a child who is more delayed and having difficulty in learning words, then the use of symbols might help.

Like signs, symbols need to be used both at school and home with thought and planning, based on individual needs and not used indiscriminately. Many symbols have no advantage over actual pictures of the object, action or event, which occur in the everyday environment and in books. Most symbols have to be specially learned, their meaning is not obvious, so it’s a bit like teaching Chinese symbols and you need to be clear why this is helpful and why you are not moving straight to printed words if you need a visual language.

**When teaching words:**

* Remember to make all of the activities fun
* Take turns at the game to show your child the correct response
* Prompt your child, if necessary, to ensure success
* Do not create anxiety, pressure or a ‘lesson’ atmosphere

**The importance of books**

Reading books together is one of the most valuable activities that you can engage in with any child to assist their language learning. Books provide pictures to help you to teach new words and ideas but they also give practice at sentences. As you read even short stories, you are using grammatically correct sentences with expression and intonation. Favourite stories are read over and over, allowing your child to learn from the repetition (as they do from favourite games and singing rhymes).

Many people who study children’s language learning emphasise that the main way in which children learn language is when it is *embedded in familiar contexts*, with all the familiar emotions and associations that go with them. We cannot over-emphasise this point – it also applies to the language you use at bath times, mealtimes, when greeting and so on. The language is learned because it is experienced over and over in situations where the child can *see what you mean*. Stories in books provide another opportunity for learning in a situation of emotional warmth, closeness and sharing enjoyment of the story together. New information and the activities of characters outside daily experience can be shared from books.

Please find time to read with your child daily, at home and at school. If you can, join a children’s library. Children’s librarians are experts on the current books available for children of different ages and stages. Here we are stressing the benefits of being read to and listening to language in the context of reading together. Later, we will discuss the benefits of teaching your child to read. Your child will probably have preferences, but it is an idea at first to choose books that are not too long and have clear, simple pictures.

You can teach vocab from books, but do not do this instead of reading the story together or your child may miss out on the pleasure of the story and the flow of the language as the story is read. Perhaps go back to talk about the pictures after reading the page first. At this point, try asking your child to point to certain objects or to people doing activities. In addition, you could try asking him/her to point to people, events or activities in the pictures. It is also important to give your child an opportunity to initiate speech as well as doing things as directed by you. So as well as asking her/him to name pictures and tell you what people are doing, give her/him space to comment without your direct questioning. Expand your child’s comments. Books are also a way of seeing that they are generalising the language they are learning in other situations and adapting them to new situations.

**Imitation with expansion**

One of the best ways to help your child make the transition from the one and two-word combinations to sentences is to use imitation with expansion. To do this you imitate and expand what s/he has said, stressing the key words.

For example, your child may say “school?” while getting on his/her coat and you may respond with “Are we going to school? Yes”. Or your child may point and say “train” and you say “Yes, there’s a train”. Another example is, your child says “more” and you expand to “do you want *more juice*?”.

**Using visual and motor cues**

Libby Kumin suggests the use of a *pacing board* to provide a visual and tactile reminder of the number of words your child is trying to use. A pacing board can consist of two coloured dots on a piece of cardboard, or two teddy bear blocks put next to each other, or anything else that your child likes. As you use two words point to each spot on the board as you do so. She suggests that helping your child to put their hands on the spots as they say the word will prompt them to recall the number of words that they need and to help them increase their combinations to two, three and four word sentences.

Encouraging your child to continue sign as s/he speaks may also act as a prompt as they begin to join words. It seems that if they sign each word they may well be able to recall the signs in sequence and this will act as a prompt for the words they need. However, remember that at this stage we do not want signs to be used without an explicit reason for them, so you might use signs to model a two word utterance but not use the same signs in other contexts where the child can understand and use the words without help. It will also be apparent that the use of printed words can also help the child to produce multi-word sentences.

**Reading**

The teaching of reading and the use of print to support practice should begin in the preschool years for children with DS, therefore children should enter primary school with a ‘sight vocab’ (printed words that s/he can read). If children have not yet started to read, we would expect them to be able to match and select pictures, for example when playing a picture lotto game, and to name some of the pictures. They can then be introduced to learning printed words by playing matching, selecting and naming games as described in *Reading and writing development for children with DS (5-11 years).*

Researchers worldwide agree that children with DS are visual learners. Their visual discrimination and visual memory skills are strengths, while their auditory discrimination and auditory memory skills are a weakness. We have been teaching children with DS to read from the age of two years for the past twenty years. Progress will vary, but many children make surprisingly fast progress and the words that they see in print soon emerge in their spontaneous spoken language. Furthermore, children who start early – at 2 or 3 years of age – make the greatest gains in both spoken language and reading skills. They are often reading at an age appropriate level at 8 or 9 years and have very good comprehension and use of spoken language. We would speculate that we are taking advantage of a period when the brain is most receptive to language learning and that we really are *using print as a way into spoken language for these children*. Please look at the programme in the reading module and make maximum use of reading to help your child.

**The benefits of teaching reading to teach talking**

* Children with DS have difficulty in learning their first language from listening
* They 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 two years of age to support language learning
* Many children with DS can begin to learn to read from this early age and are able to remember printed words with ease
* 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 activities, at home and in the classroom, teach new vocab and grammar
* Reading enables the child with DS to practise complete sentences – teaching grammar and supporting correct production
* Reading can help speech at the level of sounds (phonemes), whole word production and sentence production
* Reading to children with DS and teaching them to read, may be the most effective therapy for developing their speech and language skills from infancy right through school years

**Symbols**

Picture symbol systems are often advocated for use with children and learning delays and children with DS. These are often associated with sign systems such as Makaton signs, but we do not recommend that they are used unless your child is having particular difficulty with learning to talk or to read. We always use ordinary printed words to teach children to read, from as early as two years of age. If properly taught, almost all children will learn the words as easily as symbols. In school situations, placing the word cards around the environment – with picture clues if necessary – will be far more likely to teach children to read than putting symbols everywhere. Like spoken words, the more often a printed word is seen *in a context where you can see what it means* the faster a child will learn and remember it.

If symbols are used in an unplanned way, learning symbols and then print is like learning two languages. A further problem with the use of sign and symbol systems is that they cannot teach English grammar, unless adapted to do so. Written English is essentially the same as spoken English.

Symbols can be used to *support reading and writing of print* if used in a planned way. For example, symbols can help to prompt the grammatical words or new words in sentences. Symbols can also be used to interest a child in reading and writing, when the child has already experienced failure and is not keen to try reading activities. Then a symbol-supported system, particularly used on the computer, may motivate the child because it looks like something new rather than something already disliked.

**Two and three words together**

Some children with DS will be talking in short sentences when they start at primary school but many will be using two and three keywords together. Examples of the range of two and three word phrases that children use is set out in the *Sentences and grammar checklists and record sheets*. Most children will have comprehension at the three keyword level and will probably be ready to move to using three word combinations to communicate.

For both 2 and 3 word phrases one way of encouraging children to move on and to string 3 words together is to engage in imaginative play. Playing games with your child gives you many opportunities for encouraging choices that require comprehension or production of 3 words or more, such as “put the cat in the box”, or “put the red car on the big box”.

Once your child has comprehension at the 3 word level, you can encourage expression by playing with your child and getting your child to instruct you to carry out the activities, so reversing the roles of teacher and pupil. Libby Kumin draws attention to ‘carrier phrases’ such as ‘I want’, ‘I like’, ‘I can’ and identifies that these can be readily taught requiring the child only to add a new third word.

Prepositions such as ‘in’, ‘on’ and ‘under’ are learned at this three word stage and it is easy to devise games asking children to put something in or on a box or a table or a chair.

Making simple books on a theme such as ‘I like’ or ‘I can’ and developing reading activities will help your child to expand the sentences that they understand and use.

**Teaching grammar**

 All evidence shows that few children with DS will learn grammar easily from simply listening to everyday conversations, even though this is how other children learn grammar. The main reason for this may be the slow development of the verbal short-term memory span. Learning grammar involves the processing of sentences rather than single words and this will be very difficult for most children with DS. There are many ways in which various aspects of grammar can be taught using games but we would argue that reading is the most powerful way to teach sentences and grammar once children have reached a two-word stage in comprehension.

Your child is learning grammar all the time you are talking to them in natural sentences. One simple rule will be effective once your child begins to put two and three words together and that is: *listen to your child’s key words and expand them into the shortest complete sentence.* For example “Jenny gone” to “Jenny has gone”, “Cat sleeping” to “The cat is sleeping”. “Play ball” to “Can I play with the ball, please?”

You will already be using these expansions naturally as you talk to your child during the day at home or at school. This simple approach will also ensure that you teach using examples that are relevant to your child and that they can use when they want to communicate in real situations.

You can use the same strategy when thinking about making simple books. Words that you wish to teach from the vocab lists, such as prepositions and joining words will also give you ideas for sentences to practise in games or with reading activities. For example “Put the book on the table”, “The shoe is here, not over there”, “If you get your coat, we can go out”, “We need our coats on because it is raining”.

You can make use of an observation diary to help you observe and encourage your child’s grammatical development and ability to use longer sentences. Keep a note pad handy and note down the phrases and sentences that your child is using, both in imitation and spontaneously . This will help you to be aware of exactly how s/he is putting words together and it will help you to follow the guidance on expansion above.

**Conversation diaries**

A conversation diary is a personal book, which your child can take between home and school. In the book, write a sentence about something that your child has done or is going to do, that he or she would like to tell his/her friends/teacher about – using the words that s/he would normally use. For example, “Last night, I watched TV”, “I am going on holiday tomorrow to Spain”, “Mum and I will go to the park tomorrow”, “Mrs Andrews helped me on the computer today. We made a book about electricity”, “Ben and I played football in the playground”.

The conversation diary will help your child to say complete sentences and to be able to share their experiences with family and friends. If s/he can read, they will be able to write (perhaps with help) their own sentences and read them. If s/he is not yet able to read and write, then you should read the sentence and help your child to imitate it (at home and at school).

The conversation diary will serve two useful purposes. It will support your child’s development of spoken language, sentences and grammar and it will enable him/her to tell everyone what they do at home and at school. When a child has limited communication skills, they are not able to tell their carer what they did at school today and they are not able to tell their teacher or friends about the important experiences that they have out of school. The conversation diary can bridge that gap and enable everyone to talk with them about their daily lives. It is important that the child is actively engaged in choosing what s/he wants to tell using the conversation diary. It is one of the times when you will use expansion to decide on what to write. Ask your child what s/he wants to tell and make the shortest correct sentence from their keywords. For example, if the child says “played drum”, you write “I played the drum today”.

**Syntax and grammar**

While we know that most children with DS have difficulty mastering all the grammar and using it in their speech, there have been almost no intervention studies to provide guidance on the best ways to help them. We know that both speech production difficulties and auditory short-term memory difficulties play a part, so speech work will help and so will reading activities. We encourage the use of an observation diary in which you simply note down how your child does try to express themselves in order to see how to help them progress, using expansions as described above, in speaking to the them and in writing activities.

Grammar will be being taught also in all the reading and project activities that you are engaged in across the curriculum.

Grammar can be discussed under two headings: syntax and grammar.

**Syntax** refers to understanding the way word order changes meaning, for example, “Pat hits Mary” does not mean the same as “Mary hit Pat”. Similarly “Daddy has gone to work” changes from a statement to a question if we change the word order to “Has Daddy gone to work?”

**Grammar** refers to the ‘bound morphemes’, the word endings that change meaning (for example, ‘ed’, ‘ing’, or ‘s’) and the ‘function’ or joining words such as ‘a’, ‘the’, ‘is’, ‘if’. The function words seem to be the most difficult for children with DS, though this is also true for other children with speech and language impairments.

**Syntax**

 Children begin to understand and use word order rules in the 3 and 4 keyword sentences and they then move onto question forms and more complex sentences.

**Question forms**

Your child will display understanding of questions such as “What’s that?”, “Who is coming?” from quite early and they will ‘ask’ questions at the one and two word stage by pointing – but use of question forms in spoken language will come later. Remember to use them as you talk to your child – and to use ‘can’ and ‘will’ – “Can you come here please?”, “Could you go and look for your shoes, please?”, “Will you take this to dad please?”

It is possible to model questions and answers to encourage your child, for example, “Why are we putting our coats on? Because it’s raining” or “When are we going out? When Granny comes”. In your observation diary, keep a note of the way in which your child ‘asks’ questions and her/his use of question words. You will also be marking them on the vocabulary lists.

**Negatives**

As all parents soon find out, from quite early on children understand and use ‘no’ when they do not want something or they do not want to do something! Children can be helped to understand negatives in a wider range of uses with simple games such as placing objects in a bag, with one odd one out – eg 4 cars and an animal – and saying: “is it a car?” as you take out each one, then “yes, it is a car” or “no, it is not a car, it is a dog”.

Picture materials can also be used to teach negatives, for example “He has his glasses on”, “He hasn’t got his glasses on”. Games to encourage your child to use negatives can be played, eg: “Have you got a hair band on?” and the answer modelled “No, Jenny hasn’t got a hair band on?” This game can be played in front of a mirror with a hat, for example. In your observation diary, keep a note of the way in which your child indicates negatives and his/her use of ‘negative’ words. You will also be marking them on the vocab lists.

**Grammar**

When your child has some 250 to 300 words in her/his vocab, s/he will begin to use some of the grammatical markers (eg plurals or tenses) and more of the function words in their sentences, until they talk in grammatically complete sentences. When you begin to work with vocab checklist 3, you will use these markers on the words used in sentences.

**Plurals**

The use of ‘s’ on the end of a word to indicate a plural is a grammatical rule that is learned early in typical development and simple games can be played to show one or more than one item and use the plural ‘s’ form. Children with DS may understand the plural but not be able to put the ‘s’ on the words they say because of speech sound production difficulties. There are a number of plural words that are irregular such as feet and teeth. These just have to be learned and some of the most common ones are in the vocabulary checklists. In your observation diary, keep a note of the way in which your child indicates ‘more than one’ and the words that s/he is using. You may be marking some of them on the vocab lists. When s/he uses the ‘s’ on words, record this on the Sentences and Grammar checklist.

The use of plurals in sentences also requires the use of the correct auxiliary with the very, eg ‘the boy is running’, ‘the boys are running’.

**Possession**

The use of ‘s’ on the end of a word to indicate possession is also learned early. Here again, children with DS may clearly demonstrate comprehension of the possessive form but not be able actually to sound the ‘s’ on a word when speaking. They may use possessive pronouns such as ‘mine’ before using ‘s’ on words. In your observation diary, keep a note of the way in which your child indicates ‘possession’ and the words that s/he is using. You will also be marking some of them on the vocab lists. When s/he uses the ‘s’ on words, record this on the Sentences and Grammar checklist.

**Function words**

**Prepositions**

Some of the first grammatical words children master are prepositions, such as ‘on’, ‘in’, ‘under’. Games to teach the meanings of these are not difficult to plan. More difficult pronouns such as beside, below, above may not be understood by children of primary school age. These can be used in sentences and acted out by children in games. In your observation diary, keep a note of the way in which your child indicates ‘place’ and the prepositions that s/he is using. You will also be marking them on the vocab lists.

**Pronouns**

Pronouns are a little tricky to demonstrate, especially ‘I’, ‘you’ and ‘me’. Games played in front of a mirror can help, pointing to yourself while modeling ‘I’ and helping your child to do the same. Children usually refer to themselves using their own name or ‘me’ before using ‘I’. The use of ‘carrier’ phrases, such as ‘I like …’ or ‘I see …’ and their use in home-made books with photos of your child can help.

In your observation diary, keep a note of the way in which your child indicates ‘person’ and the pronouns that s/he is using. You will also be marking them on the vocab lists.

**Articles**

The use of the articles ‘the’ and ‘a’, and others such as ‘some’, takes a while to develop. These words and the auxiliary verbs such as ‘is’ and ‘are’ may be difficult because they add little to the meaning of the sentence. They are also not stressed in normal talk and therefore may be difficult to hear and to process in the flow of words. In our experience, children with DS do not easily learn to use them in their language and reading them in sentences will help them.

In your observation diary, keep a note of the way in which your child is talking and note down any use of articles. You will also be marking them on the vocab lists. When you have heard the use of ‘a’ and ‘the’ consistently, tick and date the checklist.

**Tenses**

There are many tenses but we have simplified them to present, future and past tenses. To use many tenses properly an auxiliary or ‘helping’ verb is used, for example ‘he *is* going’, ‘he *has* been’, ‘they *are*  running’. It takes most children with DS a number of years to master the use of auxiliaries and some individuals never learn to use them. However, most children do learn to use present, present progressive and simple past and future tenses to convey these meanings appropriately.

Children use the present tenses of verbs first, eg ‘push’, ‘jump’, ‘sleep’ and this is the way most of the verbs appear in the vocab checklists.

**Present progressive tense**

The next tense children learn is the present progressive ‘ing’ form, for example ‘pushing’, ‘jumping’. To use this form correctly in sentences they need to use auxiliary verbs – eg ‘I am pushing’, ‘they are sleeping’. You will note that the auxiliaries change with the pronouns (I am, he is) and with singular/plural agents (he is, they are). However, children will use the ‘ing’ form of the verb on its own before they begin to use the auxiliaries. When you hear your child using ‘ing’ on verbs, tick and date the checklist.

**Past tenses**

The past tense of verbs comes in two forms, regular and irregular. The regular form is the ‘ed’ form, for example, jumped and pushed. The irregular forms are all different and have to be learned individually, for example, slept and ran.

Children learn a number of irregular past tense forms before they use the ‘ed’ form. Early ones might include ‘broke’, ‘came’, ‘cut’, ‘drank’, ‘fell’, ‘gave’, ‘had’, ‘made’, ‘ran’, ‘sat’, ‘saw’, ‘took’, ‘were’, ‘went’. A further list of irregular past tense verbs is included in the Sentences and Grammar checklist.

**Use of the ‘ed’ ending**

In typically developing children, there is a stage when they seem to realist that ‘ed’ on the end of a word creates a past tense and they ‘over use’ it – saying ‘buyed’ or ‘goed’, for example. In the authors’ experience, children with DS rarely do this.

In your observation diary, keep a note of the way in which your child indicates past events and his/her use of the ‘ed’ ending. In order to use the past tense and to help your child understand, a wall chart for the week or the month can be a great help. Mark significant events on the chart, then you can look at it with your child and say “yesterday we went to the park”, “last Saturday, we went to Grandma’s” etc.

There are other past tense constructions such as ‘we have been’, ‘he might have been there before’, but we suggest that you leave these to develop through reading and writing activities. If at the stage your child is learning to read, you help him/her to keep a simple ‘conversation’ diary, you will find that you begin to use these constructions.

Children with DS will understand the language more quickly if the examples used refer to their own activities and actions, rather than to characters in a book – hence the value of keeping a diary.

In your observation diary keep a note of the way in which your child talks about past events and think of ways to expand her/his own combinations to fully grammatical sentences for practice.

**Future tenses**

The future tense comes next, but again needs the use of auxiliaries and the verb ‘go’, for example, ‘we are going to Grandma’s house’, ‘Daddy is going to work today’, ‘you are going to school tomorrow’.

The wall planner for the week or the month will help you to use future tenses and to encourage your child to do so. Mark the future events in the next week and talk to your child about them. As your child gets older, you can extend the planner to cover the year – and teach days of the week, seasons, months, weather, time words (tomorrow, today) and time concepts (next week, last month), all with reference to events on the wall planner that your child takes part in.

In your observation diary, keep a note of the way in which your child talks about future events and think of ways to expand her/his own sentences to fully grammatical ones for practice.

**More advanced structures**

There is a lack of research into the emergence of more complex structures in children’s language and even less research on effective ways to teach children to use them. However, the evidence does suggest that both modelling by expanding your child’s utterance to the correct sentence and getting your child to imitate by copying you or by reading, are both important strategies. Most children with DS will be using 3 and 4 keyword sentences by 5 years of age, some will be further ahead and some more delayed. Therefore, most children will not use complex sentences until they are in primary school or even later. Young adults with DS often continue to improve their spoken language through their twenties.

The examples included here are those that will be needed in primary school, such as comparatives for understanding quantity.

**Comparatives**

Once children have some understanding of words such as big and small, they move on to understanding that size can be relative: big, bigger, biggest, eg Daddy is taller than Mummy. Many children with DS will be in junior school or older before they really understand comparatives.

**More complex sentences**

There are many more complex sentence constructions such as embedded clauses, passives and the use of ‘but not’, for example. You may not feel that your child needs to be able to use these but they are included to provide further development for children who are making good progress and are reading and writing at junior school level or above (8 years and older). Many complex sentence forms will be used in children’s reading books at this level and children’s ability to understand what they read will be undermined if their grammatical knowledge is very limited.

**Embedded clauses**

For example, ‘the dog **chasing the cat** is black’ and ‘the boy **who is hungry** is getting his dinner’. A child who can understand ‘the dog is chasing the cat’ and ‘the dog is black’ as two separate sentences, may not understand the compound sentence. Picture material can be used to help children to understand these expressions. For children with DS reading them in order to support learning will help, as their limited verbal short term memory skills may make these sentences very difficult to listen to and process.

**Passive sentences**

For example, ‘Sally is being teased by her brother’, ‘the cat is being chased by the dog’. Many typically developing children do not master passives until they are in school and reading from books. If you wish to teach this construction to older children, again use their everyday experiences to make teaching materials. They can act out, for example, ‘Jenny is brushing Mummy’s hair’ to ‘Mummy’s hair is being brushed by Jenny’ – and then write the two examples down under a picture of the action. ‘Billy is cleaning the car’ or ‘the car is being cleaned by Billy’.

 **‘But not’**

For example, ‘it is windy, but not raining’, ‘Billy has fallen over but he is not crying’.

These are just some examples of complex sentences that we all use. However, we would remind you that if you listen to what your child wants to talk about and then expand their utterances into correct sentences, you will teach them all the useful grammar that they need and that they will be able to use in real situations. Always try to teach using examples that are relevant to your child and that they will be able to use when they want to communicate for real.

**Overview**

This module has been written to encourage you, as a parent or teacher, to make a carefully planned effort to accelerate your child’s speech, language and communication skills. We hope you have found the checklists, the advice and activities useful and relatively easy to use. We realise that we have provided a large amount of information and have asked you to spend some weeks learning about communication and assessing your child in order to make use of the programme.

We have included this amount of information and detailed guidance because we think that it is impossible to exaggerate the importance of speech and language development for every aspect of your child’s social and mental development.

Remember that you are helping your child to progress all day every day, at home and at school, as you talk naturally to them – the extra activities will help but are an addition to all the language learning that is occurring naturally. Remember to speak clearly and to encourage eye contact with your child in these everyday conversations. They need to be looking and listening. They will also be helped by visual cues in sign or picture. Remember also that background noise will make listening much more difficult for them if they have any hearing loss. Small rooms help, turn off the TV and radio at home and sit children near the front of the class in school.

Your primary age child will also benefit from as much social experience at clubs and activities with non-disabled children as possible to offer a range of experience and communication opportunities.

**Speech and language therapy**

It is clear that children with DS will benefit from speech and language therapy during their primary school years. In many countries this will not be a possibility and parents and teachers will need to use these materials without expert help. Parents in this situation might find working together in a small group helpful.

The way in which services are offered obviously depends on the availability of speech and language therapists. It is important that therapists have some specialist training and knowledge of the specific needs of children with DS and access to the research literature and appropriate resources. Experience of working with children with moderate to severe learning difficulties is not an adequate basis for working with children with DS.

A typical level of service to children included in mainstream schools in the UK will be a visit to school by a speech and language therapist a couple of times each term to assess the child’s progress and set targets for activities. The aim of this expert therapy should be to assist the parents and teachers or classroom assistants to become experts themselves by setting appropriate targets with them for speech, language and communication work and then modelling effective activities and interactions for them, to enable them to help their child all day every day during ordinary daily routines and through planned play and teaching.

We have found that classroom assistants and parents appreciate being shown how to do the activities by watching the speech and language therapists work with their child, rather than just having the activities explained. It is also helpful if the speech and language therapist can help to set appropriate targets for reading, writing and spelling work based on the child’s language comprehension level and expressive speech needs. It is especially helpful if the therapist is able to build the child’s speech work and language work into the daily curriculum of the classroom.

In some areas, group sessions are offered to children with DS who meet up with children from other schools for speech and language therapy. These groups may also have other goals such as helping to develop age appropriate behaviour and to provide the social opportunity to mix with other children with DS, to interact with others at a similar developmental level, to develop play skills and to explore over time their understanding of having DS.

At the present time, there is no ideal model of service that is universally agreed upon and, of course, each child with DS should receive a service based on specific individual needs, not on the diagnosis. As inclusion develops it is likely that speech and language therapy services will move to being school based, making the level of service available to each child much more frequent and appropriate. This will lead to the speech and language therapist being a full member of the school team and to make a much more significant contribution to the curriculum and the speech, language and communication environment in school.

Source: this information is a summary of “Speech and language development for children with Down syndrome (5 – 11 years)” by the Down Syndrome Educational Trust, Sue Buckley and Gillian Bird (2001). The full publication and the checklists referred to are available to purchase from the following link

<http://www.down-syndrome.org/information/language/childhood/>