



# Speech and Language Therapy

---

## The role of the Speech and Language Therapist for primary school aged children who have Down's syndrome

---

Date: July 2021

---



Language underpins all aspects of learning and social development. Access to speech and language therapy services for primary school aged children who have Down's syndrome is vitally important. However, type and frequency of speech and language therapy provision varies significantly across England, Northern Ireland and Wales. There is also significant variation in the knowledge levels of speech and language therapists.

The typical speech, language and communication profile of children who have Down's syndrome has been well researched. Speech and language skills are usually delayed compared to nonverbal learning skills. The speech and language profile includes an uneven pattern of strengths and challenges. For example, many primary school aged children who have Down's syndrome will understand more words than they can say, and may present with strengths in social communication skills. Spoken speech and language skills may develop more slowly.

There will be different rates of progress and significant individual differences within the typical profile. Some children will present with a greater gap between their understanding of language and expressive language; some children will present with more complex speech sound difficulties; some children will experience social communication difficulties.

It is essential that every primary school aged child who has Down's syndrome receives a programme of speech and language therapy intervention that is specifically designed to target his individual profile of strengths and challenges.

**Most primary school aged children who have Down's syndrome will need direct speech and language therapy intervention to support the below areas of development:**

### Attention

Your child may find it difficult to direct and maintain his attention, and to transfer his attention between tasks. A neurologically driven difficulty in controlling attention means that your child may not consistently engage in learning activities without individual support.

### Working memory

Your child may experience a specific impairment in short-term memory for verbal information (i.e. the phonological loop). This means that your child may find it difficult to remember and process verbal information, and may not easily learn from listening.

### Understanding of language

Understanding vocabulary is a relative strength for many children who have Down's syndrome, and your child may understand more words than he can say. However, it may be more difficult for your child to understand longer sentences, and to learn new concepts. There is evidence that children who have Down's syndrome have specific difficulties in understanding grammar. Your child's ability to understand language may be inconsistent across different settings. In the classroom setting, with greater attention processing demands, your child may rely on contextual or visual cues to support his understanding of spoken language.

### Expressive language

Your child may be steadily learning new vocabulary words (spoken or signed) but may experience difficulties formulating sequentially accurate and grammatically correct phrases and sentences. Your child's expressive language may be further constrained by difficulties in speech production.

### Speech clarity

Your child's speech may not be clear. He may have difficulties pronouncing certain sounds, or combinations of sounds. A number of factors may affect his production of sounds and words. This may include:

- impairment of the phonological loop component of working memory. Phonological (sound) awareness difficulties and weak auditory memory (difficulties in remembering what he hears) will affect your child's ability to identify sounds and syllables within words, and to remember the sequences of sounds that make up a word. This impacts on your child's ability to 'store' words correctly, and then to accurately recall and say words.
- difficulties discriminating between similar sounding words.



- difficulties planning, organising and using oral-motor movements (movement of the jaw, tongue, lips, palate, cheeks), and fluctuating muscle tone, which may impact on your child's ability to move his oral muscles with the speed and precision required for clear speech production.

### Social communication skills

The ability to understand and use language is a vitally important component of social development. Children use language to interact socially: to greet others, make requests and comments, refuse, talk about their feelings, thoughts, worries and experiences, build and maintain relationships, control their behaviour. Many children who have Down's syndrome present with a relative strength in understanding and using nonverbal communication skills and gesture. Some children who have Down's syndrome will meet the criteria for autism, and may need additional support in this area.

### Dysfluency

Some children who have Down's syndrome experience a degree of dysfluency (stammering). This may be particularly evident when your child attempts to express more complex ideas and concepts. It may be related to difficulties in word retrieval, sentence construction, and the segmental and suprasegmental (rate, rhythm, stress, tone, intonation) levels of speech, as well as to the perception and expectations of his listeners.

### Eating and drinking

Children who have Down's syndrome may need support in developing eating and drinking skills. Your child may experience difficulties in chewing, drinking from a cup or straw, self-feeding, mealtime participation, oral sensory processing differences (e.g. oral aversions, gagging, overstuffing the mouth). Some children may be tube fed.

**Your speech and language therapist will take into account your child's hearing and vision status, and will adapt her advice and resources as appropriate.**

### Vision

All children who have Down's syndrome will experience visual impairment in the domain of visual acuity (detail vision). This impairment to your child's vision will be present even if he wears glasses to correct long or short sightedness. Your child's speech and language therapy programme will accommodate his visual support needs (e.g. using large, bold learning materials).



### Hearing

Up to 80% of children who have Down's syndrome will experience hearing loss. This may be conductive hearing loss, often caused by otitis media (glue ear), or sensorineural hearing loss, which is caused by differences in the inner ear or auditory nerve. Your child's hearing will be monitored regularly, so that any difficulties can be detected and treated at the earliest opportunity. Ongoing hearing loss will affect your child's listening skills, his awareness of sounds, and other aspects of his speech and language development.

## Your child's speech and language therapy provision

- Your speech and language therapist will access specialist training related to working with primary school aged children who have Down's syndrome, such as the online training provided by the Down's Syndrome Association: <https://www.downs-syndrome.org.uk/our-work/services-projects/training/>
- Your speech and language therapist will demonstrate up to date knowledge of relevant research literature and effective therapies and interventions for primary school aged children who have Down's syndrome.
- Your speech and language therapist will deliver speech and language therapy to your child in school on a monthly basis, as a minimum. Many children who have Down's syndrome will need more frequent intervention.
- Your speech and language therapist will work with your child to support the development of his working memory, including the strategy of 'rehearsal' (recalling in the sequence heard); understanding of language; expressive language including use of grammar and vocabulary; speech clarity; social communication skills; any other areas of clinical need (e.g. eating and drinking, dysfluency, voice). She will set clear targets and will maintain detailed records of your child's progress.
- A member of the school team who knows your child well will attend all speech and language therapy sessions. This person will practise therapy activities with your child every day in school. She will also seek opportunities throughout the school day to practise key strategies and reinforce key concepts. This will promote your child's generalisation of targeted skills. Parents will be invited to attend a therapy session at least once each term, so that targeted skills can also be practised at home.
- Your speech and language therapist will ensure that parents and the school team fully understand your child's current stage of development. She will advise on how to develop a supportive communication environment at home and in school. She will demonstrate strategies and activities which parents and the school team can use to support your child to reach the next stage of development.
- Your speech and language therapist will advise on the use of signing, technology, and reading methods (sight words, simple phrases/sentences, grammar) to support language development. She will advise on the use of other forms of Augmentative and Alternative Communication (AAC) as appropriate for your child.



- Your speech and language therapist will support your child’s school team, to ensure your child’s successful inclusion and progress. This may include:

- o Collaborative setting and reviewing of targets.
- o Advising on inclusion strategies.
- o Advising on differentiation of the curriculum.
- o Advising on classroom and whole school adaptations.
- o Supporting positive behaviour.
- o Recommending and advising on how to access appropriate training.
- o Advising on how to source and implement appropriate resources.



- Your speech and language therapist will contribute to your child’s IEP (Individual Education Plan), and the annual review of his Education, Health and Care Plan (EHCP) or Statement of Special Educational Needs. She will liaise closely with parents, school, and other members of your child’s professional team (e.g. occupational therapist, specialist teacher).

*In these guidelines, we have referred to the child as 'he', and the speech and language therapist as 'she', for the purpose of clarity.*

**These guidelines apply to all primary school aged children who have Down’s syndrome and live in England, Northern Ireland and Wales. They supersede and replace any previous speech and language therapy guidelines for this age group published by the Down’s Syndrome Association.**

## **Further reading**

*Speech and Language Development and Intervention in Down Syndrome and Fragile X Syndrome.* Roberts, J., Chapman, R., and Warren S. (2008). Baltimore: Paul H. Brookes Publishing Co.

*Development of phonological awareness in Down syndrome: A meta-analysis and empirical study.* Næss (2016)

*Language and verbal short-term memory skills in children with Down syndrome: a meta-analytic review.* Næss et al. (2011)

*Down Syndrome International: International Guidelines for the Education of Learners with Down Syndrome* (2020) [ds-int.org/education](https://ds-int.org/education)

*Supporting Feeding and Oral Development in Young Children.* Down Syndrome Ireland and Heart Children Ireland  
[downsyndrome.ie/wp-content/uploads/2018/03/feeding\\_oral\\_development.pdf](https://downsyndrome.ie/wp-content/uploads/2018/03/feeding_oral_development.pdf)