**

# Speech Disorders

# Pupils with Communication and Language Disorders

## Speech Disorders

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| classroom_tip | Classroom-based tips (focus on instructional methods) |

**SPEECH DISORDERS (SD)** are classified into: **Articulation**, **Fluency** and **Voice** Disorders.

**1. In the case of pupils in your class with Articulation Disorders (AD):**

• Accommodate the classroom environment so as to respond to the needs of the pupils with AD. Minimise unnecessary classroom noise distractions as much as possible. Place the pupils in the front seats, close to the teacher to maintain visual contact with them.

• Provide activities promoting acceptance and support by ensuring that each pupil has a role in class activities. Explain the lessons carefully and use dynamic activities that stimulate creativity. Involve the class in supporting the pupils with AD using various teaching methods in order to offer equal learning opportunities.

• Use a slower speech to facilitate the processing of information by keeping visual contact with the pupil. However, it is important that the speech rate is not so slow as to lose the continuity of the message. Speak clearly and concisely and even repeat the information, so as to make sure that the pupils with AD understand the information. Divide the information/concepts into smaller chunks for pupils to understand what is being taught. Give one instruction at a time.

• If you cannot understand a pupil with an AD and you have asked to repeat him or herself, it might help to ask the pupil to show you or say it in a different way. For example, ask the pupil to write the word if they are able to do so.

• If the pupil’s response contains a known sound error, it’s important to repeat what the child said with an appropriate model. For example, if the child says ‘nak’ for snake, you would say, “Oh, you want the snake”. In this way you are not focusing on the error or calling negative attention to the child, but providing an appropriate model.

• Provide opportunities for the use of alternative communication means if available, for pupils with a severe speech disorder.

• Consult the Speech and Language Therapist in order to provide multiple opportunities for pupils to use their speech therapy target sound/s in context during guided practice and provide feedback on their responses. Promote generalisation and maintenance of the speech therapy target sound/s by prompting pupils to use appropriate sound productions. Provide praise and other forms of reinforcement for pupils’ speech efforts and have pupils self-correct / self-assess their speech. Use naturalistic interventions that involve structuring the environment to create numerous opportunities for desired child responses. Effective teaching more closely resembles a conversation than a structured instructional form of lesson.

• Use pictures or photographs to reinforce and review the vocabulary that it is being taught. For example, a child who frequently omits final consonants might be taught to recognise the difference between minimally contrastive words, perhaps by using a set of cards with the words sea, seed, seal, seam, and seat (Hall et al., 2001).

• If you have a pupil who is able to make a sound correctly some of the time when they know an adult is listening, set up a non-verbal cue with that child to let them know that you are listening, for example, tapping your hand on the student’s shoulder, before you call on them to read aloud.

• Highlight words in the pupil’s own writing or in classroom worksheets that contain sounds that s/he is misarticulating.

* Differentiate testing and assessment by providing options according to the case of students (e.g. one-on-one evaluation if needed, alternate response mode in the case of oral evaluation, use of a laptop and/or other assistive technology etc.)

**2. In the case of students in your class with Fluency Disorders (FD):**

• Encourage the students to monitor their own speech by using in class, the fluency techniques introduced during speech therapy (Ryan, 2004).

• Use a slow and relaxed rate with your own speech, but not so slow that you sound unnatural. Using pauses in your speech is an effective way to slow down your speech rate as well as that students.

• Give the student your full attention when they are speaking so that they know you are listening to what they have to say. It is helpful that the child does not feel that they need to fight for your attention. With younger children it is also helpful to get down to their level, placing a hand on their chest as well as using eye contact assures them that they have your attention.

• Ignore the students’ disfluencies and reinforce fluent utterances with frequent praise (e.g., “That was smooth talking!”),(Jones et al., 2005; Koushick& Onslaw, 2009).

• Avoid stressors in communication such as time limits and encourage teamwork. Be patient and calm when the students experience a verbal block, refrain from telling the child to ‘slow down’ or ‘take a deep breath’ and maintain eye contact with the students until they finish speaking.

• Allow the student to complete his/her thoughts without interrupting or completing the sentence for them. It is important not to ask the child to stop or start over their sentence.

• Know what situations cause more stuttering. Stuttering often increases when students are nervous, excited, upset, or are asked to speak unexpectedly. Try to call on the student in class when you feel that they will be successful with the answer (when the student raises his/her hand) versus putting the student on the spot when they have not volunteered information. In addition, new material or complex information may cause the student to feel more stress and thus, increase dysfluencies.

• The teachers are encouraged to keep data about the student’s stuttering.

**3. In the case of Voice Disorders (VD), if you have students whose vocal quality is consistently poor (hoarse, breathy, rough, or they have no voice) or their vocal quality gets progressively worse as the day wears on:**

• Allow them to have a water bottle at their desk for the student to take frequent sips of. (If necessary, use a visual aid for student to track intake - a reward may be needed.)

• Discuss healthy ways for students to use their voices, i.e. drink water, no caffeine, no yelling or making strange noises, or to use a quiet voice, but NOT to whisper.

• Provide a positive comment to a student for using good vocal hygiene, such as not shouting to get attention.

• Place a visual cue on students’ desk (like a picture of someone talking). When you hear vocal misuse, touch the picture on the desk to help remind the student to use good vocal techniques.

• Teach the students to listen to their own voice in order to learn to identify those aspects that need to be changed.

**4. Review available specialized assessments, including the most current speech-language report and the recommendations listed.**

**5. As some students may have to attend speech and language therapy sessions during school time, try to ensure students will not always be missing out on the same subject/activity.**

## 6. Talk with parents about your concerns and share strategies that seem to help.

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| school_tip | School-based practical tips (focus on instructional methods) |

### **Announcement / Sign at School**

**1. Accommodate the classroom environment so as to respond to the needs of the particular pupils.** Place the pupils in the front seats, close to the teacher to maintain visual contact with them.

**2. Equip the classroom with many visual signs and objects to teach different concepts and words.**

### **Class Divisions / Arrangements**

**Keep unwanted noises (e.g., from outside, gymnasium, music room) out of the pupil’s classroom** as much as possible so that the pupil can attend to language within the room. Noise within the classroom can be reduced by placing rubber boots on chairs and laying carpeting or rugs on concrete floors

[Reference: <http://www.education.udel.edu/wpcontent/uploads/2013/01/LanguageDisorders.pdf>]

### **Discipline**

**Keep the focus off behaviours as much as possible if behavioural problems result from the pupil’s frustration with challenges in communication.** Instead, energy should be channelled into aiding the pupil in building language competencies, which should help to eliminate the need for behavioural outbursts.

[Reference: <http://www.education.udel.edu/wpcontent/uploads/2013/01/LanguageDisorders.pdf>]

### **Educational Visits / Field Trips / Camps / School Exchanges / Trips Abroad**

**1. Collaborate with the parents** in order to get information with regards to specific needs of the pupils (e.g. diet, medical care, mood and behavioural information) in order to accommodate the needs of those pupils before the excursion.

**2. Provide the schedule of the excursion one week before** in order for the teacher to be able to communicate this information to the pupil.

**3. Make sure that the pupil will be accompanied by their 1:1 teacher** so as to explain to them the procedure, safety issues during the day.

**4. Inform teachers what they need to be aware about pupils with speech and language impairment** (applicable for the whole spectrum) when they will need to travel (equipment they need to carry with them, the schedule of the day, lunch etc.). They need to know the schedule a week in advance. Make sure that there won’t be any sudden change to their schedule as this will make them feel upset.

**5. Provide teachers/teaching assistants with a communication form and telephone numbers** of parents and caregivers in the case of emergence. Also ask the teachers to contact parents to confirm for special dietary requirements, medical needs and behavioural issues (if needed)

### **Parents / Parents’ Associations**

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**2. Provide the schedule of the excursion one week** before in order for the teacher to be able to communicate this information to the pupil.

**3. Make sure that the pupil will be accompanied by their 1:1 teacher** so as to explain to them the procedure, safety issues during the day.

### **Safety**

**1. Collaborate with the parents** in order to get information with regards to specific needs of the pupils (e.g. diet, medical care, mood and behavioural information) in order to accommodate the needs of those pupils before the excursion.

**2. Provide the schedule of the excursion one week before** in order for the teacher to be able to communicate this information to the pupil.

**3. Make sure that the pupil will be accompanied by their 1:1 teacher** so as to explain to them the procedure, safety issues during the day.

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### **Scheduling Events**

**Include the pupils into school events by asking them to contribute in different roles.** For example: avoid giving them roles that they need to memorize poems and read them aloud in front of large audience. Depending on their talents and ask them to draw something for the school event.

### **School Celebrations / Events / Activities**

**Include the pupils into school events by asking them to contribute in different roles.** For example: avoid giving them roles that they need to memorize poems and read them aloud in front of large audience. Depending on their talents and ask them to draw something for the school event.

### **School Purchases**

**Keep unwanted noises (e.g., from outside, gymnasium, music room) out of the pupil’s classroom** as much as possible so that the pupil can attend to language within the room. Noise within the classroom can be reduced by placing rubber boots on chairs and laying carpeting or rugs on concrete floors

[Reference: <http://www.education.udel.edu/wpcontent/uploads/2013/01/LanguageDisorders.pdf>]

### **Pupil Support**

**1. Assign an individual teaching assistant** for 1:1 support for those pupils.

**2. Assign a Language support teacher** (or language therapist)

**3. Make sure that the pupil will be accompanied by their 1:1 teacher** so as to explain to them the procedure, safety issues during the day.

### **Teacher Professional Development**

**1. Provide training for teachers and SEN teachers from external agencies** (e.g. educational psychologist services) related to the main difficulties of SLI pupils in classes, the signs for early identification and assessment and practical tips for the teachers in order to support those pupils in the class. Focus the training on specific areas such as: Articulation, fluency and voice disorders.

### **Supportive Literature**

**DEFINITION OF SPEECH DISORDERS:** A widely used definition considers **speech** to be impaired *“when it deviates so far from the speech of other people that it (a) calls attention to itself, (b) interferes with communication, or (c) provokes distress in the speaker or the listener”* (Van Riper & Erickson, 1996, p. 110).

Three basic types of **speech disorders** are (a) A**rticulation disorders** (errors in the production of speech sounds), (b) F**luency disorders** (difficulties with the flow or rhythm of speech), and (c) V**oice disorders** (problems with the quality or use of one’s voice).

It is important to keep the speaker’s age, education, and cultural background in mind when determining whether speech is impaired, e.g. a 4-year-old girl who says, “Pwease weave the woom” would not be considered to have a speech impairment, but a 40-year-old woman would surely draw attention to herself with that pronunciation because it differs markedly from the speech of most adults.

1. **Articulation Disorders:**

Four basic kinds of speech-sound errors occur:

• ***Distortions:*** A speech sound is distorted when it sounds more like the intended phoneme than another speech sound but is conspicuously wrong. The /s/ sound, for example, is relatively difficult to produce; children may produce the word “sleep” as “schleep,” “zleep,” or “thleep.” Some speakers have a lisp; others a whistling /s/. Distortions can cause misunderstanding, although parents and teachers often become accustomed to them.

• ***Substitutions:*** Children sometimes substitute one sound for another, as in saying

“train” for “crane” or “doze” for “those.” Children with this problem are often

certain they have said the correct word and may resist correction. Substitution of

sounds can cause considerable confusion for the listener.

• ***Omissions:*** Children may omit certain sounds, as in saying “cool” for “school.” They may drop consonants from the ends of words, as in “pos” for “post.” Most of us leave out sounds at times, but an extensive omission problem can make speech

unintelligible.

• ***Additions:***The addition of extra sounds makes comprehension difficult. For example, a child might say “buhrown” for “brown” or “hamber” for “hammer.”

**Source:** Howard, W. L. (2013). *Exceptional children: An introduction to special education*. Pearson College Div.

1. **Fluency Disorders:**

Typical speech makes use of rhythm and timing. Words and phrases flow easily, with certain variations in speed, stress, and appropriate pauses. A fluency disorder is an “interruption in the flow of speaking characterised by atypical rate, rhythm, and repetitions in sounds, syllables, words, and phrases. This may be accompanied by excessive tension, struggle behaviour, and secondary mannerisms” (ASHA, 1993, p. 40).

* STUTTERING: The best-known (and in some ways least understood) fluency disorder is stuttering, a condition marked by rapid-fire repetitions of consonant or vowel sounds, especially at the beginnings of words, prolongations, hesitations, interjections, and complete verbal blocks (Ramig & Pollard, 2011). Developmental stuttering is considered a disorder of childhood. Its onset is usually between the ages of 2 and 4, and rarely after age 12 (Bloodstein & Bernstein Ratner, 2007).
* CLUTTERING: A type of fluency disorder known as cluttering is characterised by excessive speech rate, repetitions, extra sounds, mispronounced sounds, and poor or absent use of pauses. The clutterer’s speech is garbled to the point of unintelligibility. “Let’s go!” may be uttered as “Sko!” and “Did you eat?” collapsed to “Jeet?” (Yairi & Seery, 2011). Whereas the stutterer is usually acutely aware of his fluency problems, the clutterer may be oblivious to his disorder.

1. **Voice Disorders:**

A voice disorder is characterised by “the abnormal production and/or absences of vocal quality, pitch, loudness, resonance, and/or duration, which is inappropriate for an individual’s age and/or sex” (ASHA, 1993, p. 40).

A voice is considered normal when its pitch, loudness, and quality are adequate for communication and it suits a particular person. A voice—whether good, poor, or in between—is closely identified with the person who uses it. Voice disorders are more common in adults than in children. Considering how often some children shout and yell without any apparent harm to their voices, it is evident that the vocal cords can withstand heavy use. In some cases, however, a child’s voice may be difficult to understand or may be considered unpleasant (Sapienza, Hicks, & Ruddy, 2011).

Dysphonia describes any condition of poor or unpleasant voice quality. The two basic types of voice disorders involve phonation and resonance.

1) A phonation disorder causes the voice to sound breathy, hoarse, husky, or strained most of the time. In severe cases, there is no voice at all. Phonation disorders can have organic causes, such as growths or irritations on the vocal cords; but hoarseness most frequently comes from chronic vocal abuse, such as yelling, imitating noises, or habitually talking while under tension. Misuse of the voice causes swelling of the vocal folds, which in turn can lead to growths known as vocal nodules, nodes, or polyps. A breathy voice is unpleasant because it is low in volume and fails to make adequate use of the vocal cords.

2) A voice with a resonance disorder is characterised by either too many sounds coming out through the air passages of the nose (hypernasality) or, conversely, not enough resonance of the nasal passages (hyponasality). The hypernasal speaker may be perceived as talking through her nose or having an unpleasant twang (Hall et al., 2001). A child with hyponasality (sometimes called denasality) may sound as though he constantly has a cold or a stuffed nose, even when he does not.

Source: Howard, W. L. (2013). Exceptional children: An introduction to special education. Pearson College Div.

### **Websites and EU Reports**

<http://www.asha.org/public/speech/disorders/>

<https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/communication-disorders/understanding-language-disorders>

http://www.asha.org/PRPSpecificTopic.aspx?folderid=8589935336&section=Treatment <http://www.stutteringhelp.org/Portals/English/teacher_book_2008.pdf>

http://www.asha.org/public/speech/disorders/voice/ https://voicefoundation.org/health-science/voice-disorders/overview-of-diagnosis-treatment-prevention/treatment-of-voice-disorders/

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Baker, E., & McLeod, S. (2011). Evidence-based practice for children with speech sound disorders: Part 1 narrative review. *Language, Speech, and Hearing Services in Schools*, *42*(2), 102-139.

Dodd, B. (2013). *Differential diagnosis and treatment of children with speech disorder*. John Wiley & Sons.

Flippin, M., Reszka, S., & Watson, L. R. (2010). Effectiveness of the Picture Exchange Communication System (PECS) on communication and speech for children with autism spectrum disorders: A meta-analysis. *American Journal of Speech-Language Pathology*, *19*(2), 178-195.

Lerner, J. W., & Johns, B. (2011). *Learning disabilities and related mild disabilities*. Cengage Learning.