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Welcome to...

Phonology Day 1
Training




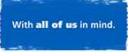
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Aims of the day

- **How** and **when** speech sounds develop
- **Where** sounds are made in the mouth
- **Pure sounds** and **properties** of sounds
- The **Speech Chain**
- Sound screening **assessment**
- **Referral** to Speech and Language Therapy
- General **strategies** to help in the classroom
- **Attention and Listening** levels
- **Quiz**






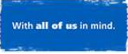
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Purpose of the training

- To give background knowledge
- Enable you to start and use activities and strategies
- Part of a child's treatment
- Enables you carry out regular practice
- Opportunity to work with hard to reach children





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Icebreaker

- Have you ever met anyone famous?
- What's something nice that's happened to you this week?
- What's the last thing that made you laugh out loud?

With all of us in mind.

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Speech not language... Sounds not letters...

- Speech is how we say things, not what we say.
- We also call speech sounds 'phonology'
- Remember the sounds in words are not always the same as the written word.

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Sounds not letters PRACTICAL

What sounds are in the following words....
















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Acquisition of Speech Sounds

- Speech development from birth
- Order of speech sound development




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Speech Development from Birth

- Complex process
- Starts from birth
- Born with 'in-built' abilities
- Cry - range of cries
- Cooing - increase noises
- Babble - experimenting with sounds
- Words - parents model words



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Order of speech sound development

- **Practical activity** – look at the sounds and decide when they start to emerge for children!!

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Typical errors...

What would a child say for these words...

- red =
- sun =
- four =
- watch =

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Delay or disorder

- **Delay:** Children making common speech errors, e.g. replacing difficult sounds with easier sounds.
- **Disorder:** Children making unusual errors, not typically seen in younger children.

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Speech sound articulation

- Where sounds are made in your mouth
- Articulation places: Teeth, lips, alveolar ridge, hard palate, soft palate
- Tongue is not a place of articulation

Practical Activity – work out where sounds are made in your mouth!!

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Pure Sounds

- The 'pure forms' of sounds need to be used
- The 'pure form' emphasises the 'properties' of a sound

**Practical-
saying pure sounds!!**

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Pure sounds

Say the following as pure sounds:


P	V
B	S
T	CH
F	J

Practice saying the following using the 'pure form' of each sound:

Sat	Book
Jump	Fish

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Properties of Sounds


Group discussion

- What is the difference between
 - d/g
 - t/s
 - p/b

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Properties of Sounds




The properties of sounds that need to be considered are :-

- Loud or Quiet: whether the sound is voiced or voiceless
- Front or Back: where the sound is made in the mouth
- Long or Short: The length of the sound



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Properties of Sounds



- 1) Long or short?
- 2) Loud or quiet?
- 3) Front or back?


B =

M =

S =


CH =

K =



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Properties of Sounds




• The properties of different sounds can be emphasised when we use the 'pure form' of a sound

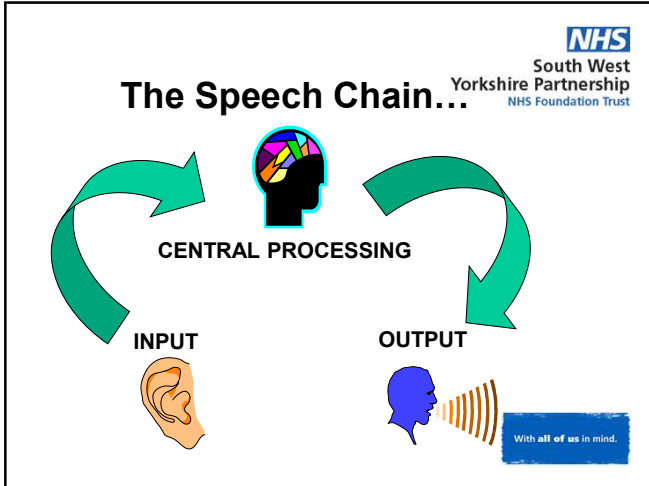
For example - make an 's' really long, and a 'p' really short

• Children often confuse properties of sounds

For example - a child may replace long sounds with short ones e.g. 's' → 't'



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The Speech Chain

- **INPUT** – Hearing, discrimination, listening
- **CENTRAL** – Knowledge about the word- sound and meaning
- **OUTPUT** – muscles, speech rate, volume

• **Practical– what can go wrong at each of these levels?**

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More about central processing

Phonological representation of the word – sounds in the words (beginning, middle and end) syllables, rhyme group
e.g. pen = 'p' to start, 'e' middle sound, 1 syllable, rhymes with ten

Semantic representation - word meaning
e.g. pen = stationery, use for writing, plastic, long, has ink

Grammatical representation- type of word, where in sentence
e.g. pen = noun, plural is pens

Orthographic representation – how the word is written remember sounds and letters are not always the same

Motor programming sequence - instructions to send to your mouth on how to say the word *e.g. 'p' (front, short, quiet) > 'e' (vowel) > 'n' (front, long, loud)*




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Possible Causes of Breakdown

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- **INPUT** – poor attention, glue ear, permanent hearing loss, poor discrimination (refer to the glossary) 
- **CENTRAL** – learning difficulties, poor phonological awareness, slow processing / poor memory, localised brain trauma in language centres in the brain, poor sound programming (*dyspraxia*) 
- **OUTPUT** – immaturity, developmental delay, cleft lip/palate, weak muscles (*dysarthria*) poor co-ordination of muscles, poor under developed dentition, prolonged dummy and bottle use 

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Speech Sound Screening Tool

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- Identify children with speech sound difficulties
- Supports referrals
- Monitor progress
- Can be repeated

Practical– speech screen practise!!

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Using the screening tool


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- Each picture links to 1 sound in at the beginning or end of a word.
- Pig = 'p' initial Zip = 'p' final
- Monkey = 'm' initial Worm = 'm' final
- **NB. Bib = listen for both 'b' initial and final on this**
- Don't need to listen for 'w' final, 'ng' initial, 'h' final, 'r' final, 'y' final. Not part of our local speech system.
- Tick if you hear the sound clearly. If not write in the sound you think the child used.
- If the sound is missing use symbol

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Mia 3;6 years




- **Stopping** – z>d, f>p, s>t, sh>t, v>b (but some sounds are emerging eg. f, s, v in final word position)
- **Gliding** – /r>w sound
- **Cluster reduction** – sw>w, fr>f, br>b
- **Another pattern** is sh>s (very typical in children)

- Refer back to speech norms
- Mia is falling into normal limits for her talking as between 3-4 years s, f sounds are still developing.
- Sounds t, d, k, g, p, b, n, m, w, h in place.
- Showing signs that f, s, and even v, z are developing.
- No need to refer Mia.




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Erin 4;6 years




- **Fronting:** Erin is replacing back sounds with front sounds. k - t tea (key) tot (sock), g - d dirl (girl) bad (bag)
- **Voicing errors:** d - t wet (red)
- **Stopping:** Erin is using short sounds for long ones f - p, v - b, s - t.
- **Final Consonant Deletion:** keys > dee, five > bye

- Refer back to speech norms Erin has a speech delay
- Needs to be referred to the SLT department but the likelihood is that with some help she will make progress.
- Likely that Erin will need advice and some practise in a short episode of care.




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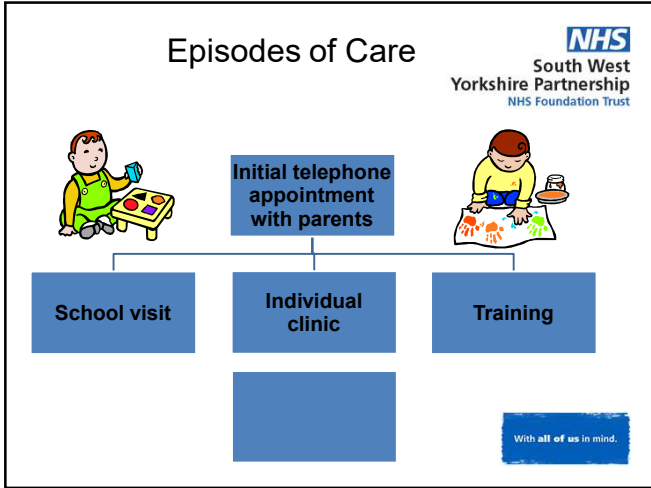
Rosie 4;6 years



- 'd' substitution for a wide range of sounds – k,g, s,f, sh, v, z, j, ch
- Significant final consonant deletion
- Severe intelligibility issues as many words sound the same and there are fewer contrasts between words
- Initial sound deletion – initial 't'
- Vowel errors e>a and air>ar
- Rosie has a speech sound (phonological disorder)
- She would need a referral



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Tour of our website

www.barnsleyspeechtherapy.co.uk

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Golden rule!!

- Model word back accurately
- Do not correct:
'it's not tat it's cat, say cat'

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Are children just lazy?

Practical

1) Replace 't' with a 'k' in the following sentence: *I went to a party*

2) Replace 's' with a 'd' in the following sentence: *On Saturday we are doing swimming*

Now try replacing 't' with a 'k' in...

- Your full name, age, address, job
- Your favourite film, song, food

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General Strategies

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Attention and listening

- Attention and listening skills are crucial for speech sound development
- Need to be able to listen to discriminate sounds (hear the difference between sounds)
- May need to work on attention and listening before you can work directly on speech sounds
- There is a developmental order of development which we use.

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Order of development



Stage 1 (0-1 year): extreme distractibility, listens to the most dominant auditory stimulus

Stage 2 (1-2 years): concentrates on a concrete task of his own choosing, not tolerate any intervention by an adult (whether verbal or visual).

Stage 3 (2-3 years): Listening skills are single channelled as he cannot listen to an adult's direction whilst he is playing.

Stage 4 (3-4 years): still single channelled but child is able to shift his own attention from doing to listening

Stage 5 (4-5 years): Listening now become part of a two-channelled process, child can simultaneously listening and do


Stage 6 (5-6 years): Listening is multi-sensory system in which a child can listen well whilst doing another activity.

(Available on handout)



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Practical – match the strategy to the stage



Give child time to complete own choice of activity
Use the child's name and/or a physical prompt to gain their attention


Find out what motivates the child
Use the child's interests and incorporate these into play

Use visual prompts to gain attention
Tell the child it is time to listen
Encourage the child to carry on working whilst listening to you e.g. practice this using colouring activity

Say the child's name before giving any instructions or expecting a response

Use an introductory phrase or gesture
Give information in a clear order
Praise good listening

Encourage active listening and processing of information



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Attention and Listening: What can we do to help?



- Sound CD's
- Simon Says
- Listening walks
- Listening to instruments
- Stop/go activities
- Copying rhythms
- Apps






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Attention and listening



Quiet  Good sitting 


Good Looking  Hand up before Speaking 

Good listening 

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Quiz



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Summary



Sound development Articulation

Pure Sounds Properties of Sounds

Speech Chain Screening Tool

Website and referral to service Classroom Strategies

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