

# Speech Screening by Teachers and Psychologists

These notes relate to the three slide shows here

[http://www.speech-language-therapy.com/index.php?option=com\\_content&view=article&id=46:speechax&catid=9:resources&Itemid=117](http://www.speech-language-therapy.com/index.php?option=com_content&view=article&id=46:speechax&catid=9:resources&Itemid=117)

## 1. Expectations of Intelligibility

Age	% Intelligibility to parents	Age	% Intelligibility to strangers
By 18 months	25%	12 months	25%
By 24 months	50-75%	24 months	50%
By 36 months	75-100%	36 months	75%
By 48 months	100%	48 months	100%

[http://www.speech-language-therapy.com/index.php?option=com\\_content&view=article&id=29:admin&catid=11:admin&Itemid=117](http://www.speech-language-therapy.com/index.php?option=com_content&view=article&id=29:admin&catid=11:admin&Itemid=117)

## 2. The 'Wow! Oh no! Really?' Test

- Teachers and psychologists are skilled at decoding young children's speech.
- Frequent 'Wow! Oh no! Really?' responses may signal significant intelligibility difficulties.
- If you constantly respond to what a child says and THEN try to figure out what s/he said, or observe other adults doing so, be on the alert!

## 3. Developmental and family history

Red flags

[http://www.speech-language-therapy.com/index.php?option=com\\_content&view=article&id=15:flags&catid=11:admin&Itemid=101](http://www.speech-language-therapy.com/index.php?option=com_content&view=article&id=15:flags&catid=11:admin&Itemid=101)

## 4. General presentation

- Unduly shy
- Unduly "silent"
- Speech that is difficult to understand

## 5. Particular speech characteristics

- Backing
- Glottal Replacement
- Initial Consonant Deletion
- Final Consonant Deletion past 2 yrs 10 months (FCD should be gone by 3;3)
- Few consonants / few vowels / "unusual" vowels
- Many consonant errors
- Many vowel errors

### Ask yourself

1. How adequate is the student's intelligibility?  
Recall that by 4;0 children should be fully intelligible. There should be no need for parents to "interpret", for any listener, the speech of a school-aged child.
2. Am I giving many 'Wow! Oh no! Really?' responses? Do I sometimes pretend to understand?
3. Is there relevant history?
4. What is the student's general presentation?
5. Are there notable speech characteristics?

The following record form has no phonetic symbols. An alternative form with the target words transcribed phonetically is available: [www.speech-language-therapy.com/pdf/QS4t-form.pdf](http://www.speech-language-therapy.com/pdf/QS4t-form.pdf)

**SINGLE-WORD SCREENING SAMPLE USING THE METAPHON STIMULUS VOCABULARY**

Dean, E., Howell, J., Hill, A., & Waters, D. (1990). Metaphon Resource Pack. Windsor, Berks: NFER Nelson

<b>Date of Birth</b>	<b>Observer(s)</b>
	<b>Examiner / Phone</b>

① completely intelligible ② mostly intelligible ③ somewhat intelligible ④ mostly unintelligible ⑤ completely unintelligible

#	TARGET WORD	STUDENT'S PRONUNCIATION	C	CC	#	TARGET WORD	STUDENT'S PRONUNCIATION	C	CC
1	cup		2		23	jam		2	
2	gone		2		24	house		2	
3	knife		2		25	path		2	
4	sharp		2		26	door		1	
5	fish		2		27	smoke		3	
6	kiss		2		28	bridge		3	
7	sock		2		29	train		3	
8	glass		3		30	chair		1	
9	watch		2		31	red		2	
10	nose		2		32	spoon		3	
11	mouth		2		33	plane		3	
12	yawn		2		34	fly		2	
13	leaf		2		35	sky		2	
14	thumb		2		36	sun		2	
15	foot		2		37	wing		2	
16	toe		1		38	splash		4	
17	snake		3		39	tent		3	
18	van		2		40	salt		3	
19	fast		3		41	crab		3	
20	girl		2		43	sweet		3	
21	stairs		3		43	sleeve		3	
22	big		2		44	zip		2	
Vowel Errors Y N					Consonants correct /100 =				
Comment									

C = number of consonants in the target word CC = number of consonants correct in the target word

## Five Key Indicators for Speech-Language Pathology Referral

### 1. NOTE INTELLIGIBILITY (SPEECH CLARITY)

RATING 1 2 3 4 5

① completely intelligible ② mostly intelligible ③ somewhat intelligible ④ mostly unintelligible ⑤ completely unintelligible

COMMENT

### 2. RUN THE 'WOW! OH NO! REALLY?' TEST

DO YOU HAVE TO RELY ON 'CLUES' TO KNOW WHAT THE STUDENT SAYS?

DO YOU RESPOND AND THEN TRY TO FIGURE OUT WHAT THE STUDENT SAID?

DO YOU OBSERVE ANYTHING "UNUSUAL" ABOUT THE STUDENT'S SPEECH?

### 3. NOTE HISTORY

STUDENT'S DEVELOPMENT (CONSIDER ASKING PARENT(S) IF THIS INFORMATION IS NOT ON FILE)

SPEECH PATHOLOGY REFERRAL / ASSESSMENT / TREATMENT IN THE PAST?

THE STUDENT'S FAMILY (CONSIDER ASKING PARENT(S) IF THIS INFORMATION IS NOT ON FILE)

### 4. NOTE GENERAL PRESENTATION

UNDULY QUIET / RETICENT / SHY / RELUCTANT TO TALK TO PEERS / ONLY TALKS TO ADULTS / ETC

### 5. NOTE PARTICULAR SPEECH CHARACTERISTICS

Glottal replacement (bottle = bo-oo)

Backing (g in place of d; k in place of t; g and k in place of other sounds)

Initial Consonant Deletion (sun = un; nose = ose; tree = ee; etc)

Final Consonant Deletion (bike = by; ten = te; same = sa; etc)

Cluster reduction

Small phonetic inventory (few consonants)

Vowel errors (bird = bored; cat = cut; toy = tie)

PCC < 50%

Persistent speech errors at > 6 year 9 months

Record other observations of speech, fluency, voice and language (including pragmatics and literacy).  
Consider the Risk and Protective Factors identified by Harrison & McLeod (2010) - see top of page 8.

## Communicating with parents before screening

- Let parents know beforehand that you are going to do the screener
- Ask if they would like to observe
- This creates an opportunity to ask 'history questions' if appropriate.
- Parents may ask: Why do you want to screen \_\_\_'s speech? Is there a problem?  
"We look for certain indicators, and if they are present, we suggest screening."
- Parents may then ask, "What are the indicators?"
  - Student's overall speech clarity (intelligibility rating)
  - Ease of communication with student (Wow! Oh no! Really?)
  - History of late speech (<50 words at 24 months) or speech difficulties
  - The student's presentation: shy, quiet, avoids talking, not talking in class, etc
  - Student's particular speech characteristics
- Then they may ask, "What are these speech characteristics?"
  - Many speech sound errors
  - Low PCC in any school-aged child ("should" be intelligible by 4;0)
  - Glottal replacement
  - Initial Consonant Deletion
  - Backing
  - Final Consonant Deletion
  - Few consonants
  - Vowel errors
  - Any speech errors beyond 6;9 (except 'th')
- They may follow this up by asking, "What did you notice about \_\_\_'s speech?"
  - "Paul's speech is difficult to understand."
  - "Tran omits the first consonant in words."
  - "Some of Samantha's vowels are unusual."
  - "Leah is only using a few consonants."
  - "Iain is not saying any consonant clusters."
  - "Marco is nearly 7 and his PCC is below 50%."
- The next question might be, "What does screening involve?"
  - Pictures of everyday words are shown to the child, and the child says the words.
  - The person doing the screening records the child's pronunciation and notes the overall clarity of the child's speech.
  - A percentage of consonants correct (PCC) is calculated.
  - "Would you like to observe?"
- Parents might then ask, "Where will the results go?"
  - Parents are given a copy to keep.
  - Parents get extra copy if a speech pathology assessment is advisable.
  - Parents can give the extra copy to the speech pathologist if desired.
  - The person who did the screening keeps a copy for his or her own information. This may be useful in discussion with the SLP/SLT.

## Communicating with the Speech-Language Pathologist / Speech and Language Therapist

- It can be helpful for the SLP/SLT to talk to a referring teacher before assessing a child's speech. Permission should be obtained from parents before doing so, and their confidentiality respected. When organising a phone conversation, allocate enough time and a 'good' time for both you and the SLP/SLT. Your observations will be valuable to the SLP/SLT. Your concerns, as a teacher or psychologist or other professional, are important.
- Put it in writing (just a brief summary).