

# SUGAR

## Sampling Utterances and Grammatical Analysis Revised

Robert Owens & Stacey Pavelko

### Verbal Techniques to Elicit Language Samples

#### Communicative Interactional Style

1. Match the length of your child's turn  
If your child only says a few words at a time, don't overwhelm him with a long turn.
2. Match your child's pace  
Give your child time to think about what to say. Wait (5 seconds), if needed.  
If your child is active, you may need to pick up the pace to keep his attention
3. Match your child's interest  
Pay attention to what the child wants to talk about.
4. Cue your child to take a turn
  - a. Body language
  - b. Make a comment

#### Reducing one-word or Minimal Responses. Avoid the following:

1. As many yes/no or product (one-word answer) questions as possible
2. Questions that test the child's knowledge
3. Questions that are too hard for the child to answer
4. Questions that answer themselves

#### Encouraging Complex Syntax

1. Ask process questions
  - How did/do...
  - What happened
  - Why did
  - More than one-word 'why' questions  
Not appropriate for children under 4.5 years
2. Use 'Tell me...' or 'I wonder...' statements.
3. Use Turnabouts  
Comment + cue for child to talk
4. Use Narrative Elicitations
  - Build on what the child says or what you know
  - Begin with  
*Your mom says you... that sounds like fun. Tell me what happened*  
*I know that you... Tell me what happened*  
*Did you ever... Tell me what you did*

## Transcription Procedures

1. Transcribe the sample directly into a word processing program.
2. Only transcribe the child's utterances.
3. Before transcribing, turn on the "numbering" function.
4. Stop transcribing at 50 utterances.

## Utterance Rules

An utterance is an expression of thought and can be indicated by

- Intonation (falling for declarative sentences; rising for questions)
- Pausing for more than two seconds
- Ceasing to speak
- Utterance interruption
- Abandoning an utterance

Use standard English spelling

- Do not embellish the child's utterance. Type exactly what the child says.
- Only include the fullest form of the utterance for analysis. Delete all else.
  - Example: "He uh... he uh... he wanted... he wanted to go to the store"  
Becomes... "he wanted to go to the store."
- Only include repeated words if they are for emphasis. Otherwise, delete repeated words.
  - Example: "He went down down down in the cave".
- If three or more words are unintelligible, do not number the utterance or include in analyses.
- If a word is unintelligible, type 'XX' in place of the word.
- Highlight all utterances that are imperative or elliptical so when you analyze each you will know that some information has been omitted by the child.
- If an utterance contains more than two clauses joined with *and*, consider it a run-on sentence and divide as follows:

*We went to the circus and I saw clowns and there were elephants and I got this sweet sticky stuff.*

Becomes...

*We went to the circus and I saw clowns.*

*There were elephants and I got this sweet sticky stuff.*

Do NOT do this with other conjunctions. Note in the previous example that the 'and' was omitted in the beginning of the second utterance.

## Guidelines for Calculating SUGAR Metrics

### Total Number of Words

1. Turn off the "Numbering" function
2. Nothing else should be on the page except the child's 50 utterances.
3. Word count is on the tool bar at the bottom of your screen.
4. Record the number of words

## Mean Length of Utterance in Morphemes (MLU<sub>SUGAR</sub>)

- One Morpheme
  - Ritualized reduplications
  - Irregular past tense verbs
  - Diminutives
  - Auxiliary verbs
  - Irregular plurals
  - Each word in proper names
  - Meaningful sounds, such as uh-huh
  - Common compound words
  
- Two Morphemes
  - Contractions (*don't, I'd, he's, we'll, they've*)
  - "hafta", "wanna", and "gotta"

Morpheme	Examples
<i>-ing</i>	
adjective	Smiling girl
gerund	I love hiking
progressive verb	He is jumping
<i>-s</i>	
plural	Cats
possessive	Mommy's shirt
third person singular	He walks
<i>-ed</i>	
adjective	Is this powdered sugar
regular past tense	He scared me
<i>dis-</i>	Dislike
<i>-er</i>	
comparative	Bigger, Faster, Older
<i>-est</i>	
superlative	Biggest, Easiest
<i>-ful</i>	Thoughtful, Spoonful
<i>-ish</i>	Foolish, Bluish
<i>-ly</i>	Really, Mostly, Usually, Accidentally
<i>-ment</i>	Entertainment
<i>re-</i>	Redo, Refill
<i>-sion</i>	Discussion, Mission
<i>-tion</i>	Constellation, Invitation, Audition
<i>un-</i>	Unhappy, Unlock
<i>-y</i>	
adjective	Bumpy, Bouncy

- Three morphemes
  - "gonna"

### MLU<sub>SUGAR</sub> Analysis

1. Separate all bound morphemes with a space
2. Record the number of morphemes (word count at the bottom of the screen)
3. Double the word count and add two decimal places.
4. Example

Word Count = 203

$203 \times 2 = 406$

MLU<sub>SUGAR</sub> = 4.06

### Words per Sentence (WPS)

1. Delete all utterances that are NOT sentences
  - A sentence contains a subject and the accompanying verb:  
Example: *Mommy walked*
  - A sentence may have more than one subject/verb combination  
Example: *Mommy walked but I ran*
  - The critical element in a sentence is a VERB
2. Ensure the numbering function is off
3. Once the transcript has only sentences represented, record the total words from the word count section on the toolbar at the bottom of the screen
4. Switch on the “Numbering” function again.
5. Divide the total number of words (from step 3) by the number of sentences (step 4)
6. Example

Total Words = 203

Total Sentences = 32

WPS = Words/Sentences  $203/32 = 6.34$

### Clauses per Sentence (CPS)

1. Use the WPS transcript
2. Divide the sentences into clauses
3. A sentence may have only one clause or may have several clauses
  - A clause contains a subject and the accompanying verb:  
Example: *Mommy walked*
  - A sentence may have more than one subject/verb combination, resulting in several clauses  
Example: *Mommy walked but I ran*  
One sentence: *Mommy walked but I ran*  
Two clauses: *Mommy walked*  
*but I ran*
4. Once all sentences have been divided into clauses, record the total number of clauses
5. Divide the total number of clauses by the total number of sentences (step 2 of the WPS analysis)
6. Example

Total Clauses = 36

Total Sentences = 32

CPS = Clauses/Sentences  $36/32 = 1.13$

A fuller description of rules and additional examples can be found at [www.sugarlanguage.org](http://www.sugarlanguage.org)