SUGAR
Sampling Utterances and
Grammatical Analysis Revised

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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 <u>NOT</u> 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

SUG*A*R

Mean Length of Utterance in Morphemes (MLU$_{SUGAR}$)

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

- Three morphemes
  - "gonna"

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MLU$_{SUGAR}$ 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 x 2 = 406

        MLU$_{SUGAR}$ = 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