Easy Discourse Measures Scoring Sheet

words_____   #CIUs _____   Time _____
%CIUs _____   words/minute _____   CIUs/minute _____

Count the # of words

- Omit statements made before or after the narrative tasks.
- Omit non-words and unintelligible words.
- Copy the text into a word processor and use the word count tool.

Count the # of Correct Information Units (#CIUs)

- A CIU is a word that is **intelligible, accurate, relevant, and informative** about the picture or topic.
- Special rules for what counts as a CIU:
    - An ungrammatical word can be a CIU, if it meets the criteria.
    - A CIU can be a paraphasia, as long as the production would be intelligible as the target word in context (ex. "school" for "stool").
    - Only consider the final attempt in a series of attempts to correct a sound error.
    - If several people are involved, but the patient only mentions one, do count it.
    - Count informal terms if they convey information about the content of the picture or topic (ex. "Yup", "nope", "uh-huh", "un-uh").
    - Embellishments, if they add to the events portrayed or express a moral.
    - Words that express legitimate uncertainty.
    - An auxiliary verb and the main verb are two separate CIUs.
    - Contractions as two separate CIUs.
    - Count each word separated by hyphens as separate CIUs.
- Don't count the following as CIUs:
    - Words that are unintelligible or not relevant.
    - The word "and" is never counted as a CIU.
    - Grammatically incorrect words if they lead to misunderstanding or uncertainty about the meaning.
    - Repeated attempts to produce a word (only the final attempt is considered).
    - Dead ends, false starts, or revisions that are uninformative.
    - Repetition of words or ideas that don't add new information and aren't necessary for cohesion or grammatical correctness.
    - First use of a pronoun if the antecedent hasn't been established.

- Vague or nonspecific words that aren't necessary for grammatical completeness if a more specific word or phrase could have been used.
- Conjunctions, qualifiers, and modifiers used indiscriminately as filler words (ex. "so', "then", "I think that", "it looks like", "apparently", "of course", "sort of").
- Filler words, interjections, and tag questions.
- Commentary about the task, the patient's own performance, or personal experience.

Measure the length of the sample (Time)

- Time how long it took your patient to complete the task.
- Don't include the time you spent in providing instructions or cues.
- Don't include non-relevant statements made before or after the tasks.

Calculate %CIUs (a measure of informativeness)

- % CIUs = # of CIUs / # of words x 100
- In other words, take the number of CIUs and divide by the number of words. Then multiply by 100 to get the percent CIUs.

Calculate words/minute (a measure of efficiency)

- Assuming the time isn't in even minutes, convert the time to seconds.
  - Multiply the minutes by 60 and add the seconds.
- Divide the number of words by the number of seconds.
- Then multiply by 60 to get the final words/minute measure.
- Ex: https://penandthepad.com/calculate-words-per-minute-reading-7563359.html

Calculate CIUs/minute (a measure of efficiency)

- Follow the same instructions for calculating words/minute, but simply use the number of CIUs instead of the number of words.

For full instructions and examples, see:

Nicholas, L. E., & Brookshire, R. H. (1993). A system for quantifying the informativeness and efficiency of the connected speech of adults with aphasia. *Journal of speech and hearing research*, *36*(2), 338–350. https://doi.org/10.1044/jshr.3602.338