Supplemental Material S1. Additional resources for language sample analysis

Resources listed are not exhaustive. The references here may be a starting point for SLPs interested in studying certain topics in depth.

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Section 1: Recommendations for Language Sample Elicitation

Materials for Recording Language Sample

- Invest in a video camera or a high-quality digital recorder.
- Consider using a microphone that can be clipped to the client's shirt, especially for younger clients who are likely to move around a lot during the language sample.
- If you need to collect a certain number of utterances (e.g., 50 utterances), a handheld tally counter can be helpful to ensure you obtained enough utterances for your analysis.

Elicitation Recommendations

General Recommendations

- Be encouraging, warm, and positive during the interaction.
- For children who are shy, a warm-up period may be appropriate.
- Be patient and give the child plenty of time to respond. If the child is hesitant to talk, do not overwhelm the child with questions.

Elicitation Recommendations for Play

- Select toys and toy sets that are likely to elicit high-quality communication. Make sure you have enough of each toy so that both you and the child can play collaboratively. Some options are puppets, dolls with clothes and accessories, toy barn set with animals, tea party set, play kitchenette with food, and action figurines.
- Avoid toys that are loud. If an electronic toy makes noise (e.g., the classic Fisher Price toy barn set), remove the batteries before collecting the language sample.
- Follow the child's lead during play. This means play with the same toys the child is playing with and in the same way the child is playing with them.
- Avoid close-ended questions. These types of questions are likely to elicit a very short response from the child. If the examiner uses too many close-ended questions, the child's MLU may be artificially lowered.
 - \circ $\;$ Examples of close-ended questions:
 - Is that a pig? (likely response: yeah)
 - What does the baby want? (likely response: a bottle)
 - What are the animals doing? (likely response: eating)
- Instead, use open-ended questions and comments to keep the communication going.
 - I wonder how all the animals got out of the barn.
 - Why do you think the baby is crying?
 - \circ $\;$ This baby doll needs her diaper changed. I wonder how to do that.

Elicitation Recommendations for Conversation

- It is helpful to know the child's interest beforehand. Stick to topics that the child is interested in discussing and will be familiar to the child.
- Avoid close-ended questions. These types of questions are likely to elicit a very short response from the child. If the examiner uses too many close-ended questions, the child's MLU may be artificially lowered.
 - Examples of close-ended questions:
 - Do you like to paint? (likely response: yeah)
 - What grade are you in? (likely response: 3rd grade)
 - What do you do after school? (likely response: watch TV)
- Instead, use open-ended questions and comments to keep the communication going.
 - What do you like best about being a big brother?
 - You told me earlier that you like playing baseball. What's so fun about playing baseball?
 - I wonder if you know how to cook anything on your own.
- Provide neutral prompts to extend the conversation.
 - o "Tell me more"
- Consider using Hadley's sampling protocol (Hadley, 1998), which is a structured conversation and is designed to elicit a variety of discourse types using specific prompts (e.g., "what is your favorite part of _____ grade? Tell me why you like _____ so much).

Elicitation Recommendations for Narratives

• There are many different types of narratives, including story generation, story retell, and personal narrative generation. Pick the narrative task that you feel is most appropriate for your assessment.

Personal narrative

- Child tells their own made-up story.
- Child is asked to tell a true story that happened to them.
 - Can be helpful to give a model along with a prompt.
 - When I was your age, I fell during recess and hurt my ankle (tell story with appropriate level of detail). Has something like that ever happened to you? Tell me about it.
- Use neutral prompts like "tell me more" or "what else do you remember?" to elicit a longer sample.

Story retell

- Wordless picture books are often used for the child to retell a story.
 - Mercer Mayer's *Frog, Where Are You* is commonly used in language sample analysis.
- Child is told a short story and asked to retell the story.
- Use neutral prompts like "tell me more" or "what else do you remember?" to elicit a longer sample.

 Resources: Language Dynamics Group produces a set of criterionreferenced narrative language assessments as part of their CUBED assessment. These stories can be used to elicit a narrative retell sample and are currently free for download from the Language Dynamics Group website at

https://www.languagedynamicsgroup.com/products/cubed/cubed_down load/

Section References

Hadley, P. A. (1998). Language sampling protocols for eliciting text-level discourse. *Language, Speech, and Hearing Services in Schools*, 29(3), 132-147. doi: 10.1044/0161-1461.2903.132.

Section 2: Supplemental Language Analyses for Preschool Children

In the article, we described basic analyses that could be automatically computed for preschool children's language samples (MLU, TNW, and NDW). Here, we describe three other analyses for assessing preschool children's language: percent grammatical utterances, developmental sentence scoring, and index of productive syntax. The latter two analyses can be completed automatically using CLAN, although clinicians should verify the accuracy of automatic coding.

Percent Grammatical Utterances

Table S1.1

Percent grammatical utterances (PGU; Eisenberg & Guo, 2013) is a broad measure of children's grammaticality. Clinicians indicate whether each child utterance in a language sample is grammatical or ungrammatical, and calculate the percentage of utterances marked grammatical out of the number of total included utterances. PGU is relatively simple to code and has good diagnostic accuracy in the age ranges studied so far (see Table S1).

Eisenberg and Guo (2016) describe detailed criteria for scoring PGU. Broadly, categories of ungrammatical utterances include tense marking, pronoun, grammatical morpheme, and argument structure errors. Other nonspecific errors in syntax (i.e., word order) and semantics (i.e., word choice) are also counted as ungrammatical. In conversation samples, utterances that lack a subject or verb should be excluded from the total number of utterances. In narrative samples, only utterances that lack a subject are excluded.

PGU is best used to indicate an overall weakness in grammatical skill. If PGU is low for a child's age, clinicians are encouraged to further analyze the language sample for potential goals (e.g., increase accuracy of first person singular –*s* morpheme) rather than to target PGU itself as a goal (e.g., increase PGU to 60%; Eisenberg & Guo, 2016). Cutoff values for PGU and their associated sensitivity and specificity values are listed in Table S1.1 below.

Age	Sample type	PGU Cutoff	Sensitivity	Specificity	Source
		Score			
3	Picture description	58%	100%	88%	Eisenberg & Guo 2013
4	Narrative	54.04%	83%	96%	Guo et al. 2018
5	Narrative	79.10%	100%	82%	Guo et al. 2018
6	Narrative	83%	90%	82%	Guo & Schneider 2016
7	Narrative	85.40%	92%	88%	Guo et al. 2018
8	Narrative	91%	88%	84%	Guo & Schneider 2016
9	Narrative	88.42%	90%	90%	Guo et al. 2018

PGU Cutoff Scores, Sensitivity, and Specificity Values by Age

Currently, SALT, CLAN, and SUGAR do not contain built-in options for coding PGU. However, SLPs can easily create unique utterance codes (e.g., [U] for ungrammatical and [G] for grammatical). SLPs can then tally the codes in each category using the following methods:

- CLAN: use the FREQ command to count the frequency of codes
- SALT: use the Word and Code List feature in the Explore menu
- SUGAR: use the Find command in Word to count the occurrence of each code

From there, PGU can be calculated as (#G / [#U + #G]) * 100 (that is, the number of grammatical utterances divided by the combined number of ungrammatical and grammatical utterances, then multiplied by 100).

Developmental Sentence Scoring

Developmental Sentence Scoring (DSS; Lee, 1974) is a procedure for evaluating the grammatical complexity of young children's spontaneous language samples. In this method, eight different grammatical categories are evaluated: indefinite pronouns, personal pronouns, main verbs, secondary verbs, negatives, conjunctions, interrogative reversals, and wh- questions. For every utterance in the sample, the child is given a point value between 1 and 8 for each of the syntactic categories used within the utterance. Lower point values are assigned to simple, early-acquired grammatical forms and higher point values assigned for more complex, later-acquired grammatical forms. For example, the coordinating conjunction *and* is awarded 3 points, while the more complex subordinating conjunction *when* is awarded 8 points. Additionally, each utterance that meets adult standards (from a semantic and syntactic standpoint) earns one extra "sentence point". An average DSS is then calculated for the utterances in the sample. Only utterances that are complete, (i.e., the utterance contains a subject and verb), unique, and intelligible are scored using this procedure. An example DSS for two utterances can be found in Table S1.2. Coders may want to transfer child utterances to a spreadsheet (set up similarly to Table S1.2) to make tallying DSS easier.

The clinical use of DSS has many advantages and despite being over 40 years old, DSS still maintains its utility as a tool for measuring developing language skills (Hughes, Fey, & Long, 1992). The procedure continues to be used widely for assessing the language skills of children who are typically developing and children with developmental language disorders (e.g., Souto, Leonard, & Deevy, 2014).

Clinicians may also find DSS useful for planning intervention. One of the benefits of DSS is that it offers detailed information on eight different grammatical categories. Clinicians can analyze the DSS output to see which grammatical categories their clients are having the most challenges with and use this information for selecting targets for intervention. DSS also provides a developmental framework to help clinicians determine which grammatical structures are likely to emerge sequentially.

Table S1.2Example DSS for Two Utterances

Utterance	Ind. Pro	Pers. Pro	Main Verb	Sec. Verb	Neg.	Conj.	lnter. Rev	Wh- Q	Sentence point	Total
l kicked it.	1	1	2						1	5
Can you help us?		1, 3	4				6		1	15

Index of Productive Syntax

Index of Productive Syntax (IPSyn; Scarborough, 1990) is another measure of a child's grammatical skills. In IPSyn, a language sample between 50 and 100 utterances is analyzed for the presence of 56 different grammatical structures falling into four categories: noun phrases, verb phrases, questions/negation, and sentence structures. For each of the 56 different grammatical structures evaluated in IPSyn, the child is assigned a score of 0 (child did not use that grammatical form), 1 (child used the grammatical form once), or 2 (child used the grammatical form two or more times). Therefore, the maximum IPSyn score a child can receive is 112. IPSyn was recently revised to facilitate more accurate scoring (Altenberg, Roberts, & Scarborough, 2018). A sampling of the grammatical structures assessed for each of the four grammatical categories can be found in Table S1.3.

IPSyn is useful for clinicians who are working with children with grammatical deficits. Diagnostically, ISPsyn scores have been used to differentiate children with language disorders from children with typical language development (Condouris, Meyer, & Tager-Flusberg, 2003; Rescorla, Dahlsgaard, & Roberts, 2000). From an intervention standpoint, IPSyn can also be used to help clinicians select appropriate targets for intervention. If a child uses a particular grammatical form twice within the sample, that grammatical structure is considered to be within the child's productive repertoire.

Table S1.3

Examples of Grammatical Structures Assessed					
Two-word noun phrases, plural noun, pronoun					
Progressive –ing, regular past tense, past tense copula					
Negation of copula, wh- question + verb, Yes/No question with					
inverted copula					
Conjoined phrases, relative clause, subject-verb-object utterance					
-					

Example Grammatical Structures by IPSyn Grammatical Categories

Section References

- Altenberg, E. P., Roberts, J. A., & Scarborough, H. S. (2018). Young children's structure production: A revision of the Index of Productive Syntax. *Language, Speech, and Hearing Services in Schools*, 49(4), 995-1008.
- Condouris, K., Meyer, E., & Tager-Flusberg, H. (2003). The relationship between standardized measures of language and measure of spontaneous speech in children with autism. *American Journal of Speech-Language Pathology, 12*, 349-358.
- Eisenberg, S. L. & Guo, L. (2013). Differentiating children with and without language impairment based on grammaticality. *Language, Speech, and Hear Services in Schools*, 44(1), 20-31. doi: 10.1044/0161-1461(2012/11-0089).
- Eisenberg, S., & Guo, L.-Y. (2016). Using language sample analysis in clinical practice: Measures of grammatical accuracy for identifying language impairment in preschool and schoolaged children. *Seminars in Speech and Language, 37*(2), 106-116. doi:10.1055/s-0036-1580740
- Guo, L.-Y., & Schneider, P. (2016). Differentiating school-aged children with and without language impairment using tense and grammaticality measures from a narrative task. *Journal of Speech, Language, and Hearing Research, 59*(2), 317-329. doi:10.1044/2015_JSLHR-L-15-0066
- Guo, L.-Y., Eisenberg, S., Schneider, P., & Spencer, L. (2018, November). Percent grammatical utterances from age four to age nine: Reference data and diagnostic accuracy.
 Presented at the annual convention of the American Speech-Language-Hearing Association, Boston, MA.
- Hughes, D. L., Fey, M. E., & Long, S. H. (1992). Developmental sentence scoring: Still useful after all these years. *Topics in Language Disorders, 12*(2), 1-12.
- Lee, L. (1974). Developmental sentence analysis. Evanston, IL: Northwestern University Press.
- Lively, M. A. (1984). Developmental sentence scoring: Common scoring errors. *Language, Speech, and Hearing Services in Schools*, 15(3), 154-168. doi: 10.1044/0161-1461.1503.154.
- Rescorla, L., Dahlsgaard, K., & Roberts, J. (2000). Late-talking toddlers: MLU and IPSyn outcomes at 3; 0 and 4; 0. *Journal of Child Language*, *27*(3), 643-664.

Scarborough, H. S. (1990). Index of productive syntax. Applied Psycholinguistics, 11(1), 1-22.

Souto, S. M., Leonard, L. B., & Deevy, P. (2014). Identifying risk for specific language impairment with narrow and global measures of grammar. *Clinical Linguistics and Phonetics, 28*(10), 741-756.

Section 3: Resources for Language Sample Analysis with Adolescents

Older elementary students and adolescents use more complex language in narrative, expository, and persuasive tasks than in everyday conversation (Nippold, Hesketh, Duthie, & Mansfield, 2005). Narrative, expository, and persuasive tasks are also academically relevant, and assessing these tasks can lead to language goals that directly address essential curricular skills. Here, we summarize three recent articles on language sampling with older children and adolescents:

- Miller, Andriacchi, and Nockerts (2016) provide a tutorial for using SALT software to assess expository and narrative language in two adolescent language samples.
- Adolescents can also create written language samples. Price and Jackson (2015) describe procedures for eliciting narrative, expository, and persuasive writing samples and analyzing them using SALT, Microsoft Word, or holistic scoring.
- Brimo and Hall Mills (2018) measured language complexity in adolescents with the percentage of complex sentences and clausal density (the average number of clauses in each sentence). For spoken samples, adolescents used more complex syntax in persuasive than in expository tasks. For written samples, language was more complex in writing than speaking for expository samples, but language was equally complex in writing and speaking for persuasive samples.

Section References

- Brimo, D., & Hall-Mills, S. (2018) Adolescents' production of complex syntax in spoken and written expository and persuasive genres. *Clinical Linguistics & Phonetics*. Advance online publication. doi: 10.1080/02699206.2018.1504987
- Price, J. R. & Jackson, S. C. (2015). Procedures for obtaining and analyzing writing samples of school-age children and adolescents. *Language, Speech, and Hearing Services in Schools*, 46(4), 277-293. doi: 10.1044/2015_LSHSS-14-0057
- Nippold, M. A., Hesketh, L. J., Duthie, J. K., & Mansfield, T. C. (2005). Conversational versus expository discourse: A study of syntactic development in children, adolescents, and adults. *Journal of Speech, Language, and Hearing Research, 48*(5), 1048-1064. doi:10.1044/1092-4388(2005/073)
- Miller, J. F., Andriacchi, K., & Nockerts, A. (2016). Using language sample analysis to assess spoken language production in adolescents. *Language, Speech, and Hearing Services in Schools*, 47(2), 99-112. doi: 10.1044/2015_LSHSS-15-0051.

Section 4: Getting Started with CLAN

Resource for getting started:

 Bernstein Ratner, N., & Brundage, S. B. (2018). A Clinician's Complete Guide to CLAN and PRAAT. Available at <u>https://talkbank.org/manuals/Clin-CLAN.pdf</u>

First steps:

- Download CLAN (Mac or Windows version) for free at http://dali.talkbank.org/clan/. Watch the "Installing CLAN" screencast for step-by-step instructions https://dali.talkbank.org/clan/.
- Open a new transcript and enter header information. Watch "template" screencast for step-by-step instructions <u>https://talkbank.org/screencasts/template.mp4</u>
 - Note: after you make one header, you can copy it to use again with other transcripts. Pay careful attention to case (e.g., type "eng" for language, not "ENG") and to use of tabs vs. spaces.
- Add the speakers in your sample (e.g., *CHI for child and *SLP for speech–language pathologist). Watch the "addID" screencast for step-by-step instructions <u>https://talkbank.org/screencasts/addID.mp4</u>
- Optionally, link a video or audio file to your transcript:
 - See p. 6 in the Clinician's Guide to CLAN for how to link an audio or video file. Make sure that your media file is in the same folder as your CLAN transcript file (ends in .cha).
 - You may choose to add "bullets" to each line, which will allow you to play the audio or video for each utterance individually. Watch the "F5bullets-1" screencast for instructions for adding bullets <u>https://talkbank.org/screencasts/playback.mp4</u> and the "playback" screencast for instructions on playing the audio or video for each bullet <u>https://talkbank.org/screencasts/playback.mp4</u>
- Optionally, you may also use the "Walker Controller" feature to aid in transcribing, described further in Section 5 below.
- Transcribe the sample according to instructions in the Clinicians Guide to CLAN (pages 12–20). Each line must begin with a speaker ID (see the Tiers menu for keyboard commands to automatically insert IDs for each speaker).
- Check the file for errors (instructions in the "check-1" screencast at https://talkbank.org/screencasts/check-1.mp4
- Before analyzing the file, you must run the MOR command. See the "MOR-download" screencast at <u>https://talkbank.org/screencasts/mor-download.mp4</u>, the "MOR-xb" screencast at <u>https://talkbank.org/screencasts/mor-xb.mp4</u>, and the "MOR-chain" screencast at <u>https://talkbank.org/screencasts/mor-chain.mp4</u>
- Analyze the file by running the KIDEVAL command. See the KIDEVAL-1 screencast for instructions on running the command <u>https://talkbank.org/screencasts/kideval-1.mp4</u>

and the KIDEVAL-2 screencast for instructions on interpreting the spreadsheet results <u>https://talkbank.org/screencasts/kideval-2.mp4</u>

Where to go for more support:

- Reference the CLAN manual for detailed information on using the CLAN program and completing analyses: <u>https://talkbank.org/manuals/CLAN.pdf</u>
- Reference the CHAT manual for detailed information on transcription conventions (e.g., utterance division, word codes, shortened words, etc.): <u>https://talkbank.org/manuals/CHAT.pdf</u>
- For troubleshooting specific errors, try searching or posting on the "chibolts" group: <u>https://groups.google.com/forum/#!forum/chibolts</u>

Section 5: Getting Started with SALT

Resource for getting started:

• Miller, J. F., Andriacchi, K., & Nockerts, A. (2015). *Assessing language production using SALT software: A clinician's guide to language sample analysis.* SALT Software, LLC: Middletown, WI. (PDF included with SALT software download)

First steps:

- Purchase SALT clinical version at http://saltsoftware.com/products/software/salt-18-clinical-software-and-pdf-reference-book
- Install and activate the software following SALT's instructions at http://saltsoftware.com/support/software-installation
- Open SALT and choose "New" to create a new transcript. For a step-by-step screencast on starting a new transcript see https://www.youtube.com/watch?v=A91ZlhU5GLA
- Enter relevant header information in the dialog box. Make sure to include the correct sampling context if you're planning to compare your sample to those in the SALT database.
- Transcribe the sample using SALT conventions (summarized at <u>https://www.saltsoftware.com/salt/TranConvSummary.pdf</u>). See SALT's free, self-paced online courses for more details on transcribing samples <u>http://saltsoftware.com/training/self-paced-online-training</u>
- Check the transcript for errors using the "Check" menu options.
- Use the "Analyze" menu options to get analysis results for the transcript. Use the "Database" menu options to compare the analysis results to those of other children in the SALT reference database.

Where to go for more support:

- Search answered questions or ask a new question at <u>https://saltsoftware.com/faq/salt-forum-posts/</u>
- Contact SALT customer support at support@saltsoftware.com or 608-841-1393
- Report software problems at http://saltsoftware.com/support/http-saltsoftware-com-customforms-newforms-customformid-4

Section 6: Getting Started with SUGAR

Resource for getting started:

 Owens, R., & Pavelko, S. L. (2018). SUGAR: Sampling Utterances and Grammatical Analysis Revised. Retrieved from <u>https://www.sugarlanguage.org/</u>

First steps:

- Open a new Microsoft Word document.
 - Note: SUGAR requires basic word processing features. If you don't have access to Microsoft Word, other free options like Google Docs can work.
- Transcribe only the child's utterances using SUGAR guidelines. See <u>https://www.sugarlanguage.org/s/Latest-SUGAR-Procedures-11-19-18.docx</u> for transcription procedures and <u>https://youtu.be/EzWxJKmExzl</u> for a video explanation.
- Complete desired analyses (total number of words, mean length of utterance, words per sentence, and clauses per sentence) following SUGAR guidelines. See <u>https://youtu.be/9XbFpPBAiRI</u> for a video explanation.
 - Note: transcripts cannot contain identifying information or analyses results because the word processing program will count these words. Try saving the file name with identifying information (e.g., "CJ_conversation_11.30.18.docx") and entering analysis results into a separate document or spreadsheet.

Where to go for more support:

<u>https://www.sugarlanguage.org/contact/</u>

Section 7: Using Technology to Save Time on Transcription

Using speech-to-text software:

Speech-to-text software is commonly available. A downside is that the software may not pick up voices from audio recordings and may not accurately transcribe the speech of children with speech or language impairments. One workaround is for the SLP to listen to a sample recording with headphones and repeat the child's utterances aloud. Instructions for this method include:

- Choose a speech-to-text software, such as Dragon NaturallySpeaking or Google Docs's voice typing feature.
- Plug in headphones and play the language sample recording.
- As you listen, repeat verbatim what you hear into a microphone (either the computer's built-in microphone or an external microphone connected to the computer). You may find that playing the recording at a slightly reduced speed is helpful, especially for more talkative children.
- If necessary, listen to the recording a second time to edit the transcript.
- The resulting transcript can then be copied and pasted into the language sample analysis program of choice and coded according to program instructions.

Using transcription software:

Even quick typists can rarely transcribe language samples without frequently pausing and rewinding the video or audio file. Pedal transcribers made this process quicker by pausing and rewinding the file with the transcriber's hands still on the keyboard. Now we can use software to emulate features of a pedal transcriber with keyboard commands.

- Use the Walker Controller feature in CLAN:
 - Watch a step-by-step screencast for setting up the Walker Controller in CLAN at https://talkbank.org/screencasts/walker-1.mp4
 - Watch a step-by-step screencast for transcribing using the Walker Controller in CLAN at https://talkbank.org/screencasts/walker-2.mp4
 - *Note*: Walker Controller relies on function keys (like F5). Mac users will need either to hold the Fn key or adjust keyboard settings (System Preferences > Keyboard) to use function keys for CLAN analyses.
- Similar features are also included in free software like InqScribe (<u>https://www.inqscribe.com/</u>). You can copy and paste the text from InqScribe to use in SALT or SUGAR.

Section 8: Resources for Language Sample Analysis with Bilingual Children

Language sampling is frequently recommended as a nonbiased way to assess the language of bilingual children (Arias & Friberg, 2017). SALT includes database samples for a small set of bilingual children (Spanish-English bilinguals who completed narrative samples). CLAN can analyze samples in 49 languages but currently includes database samples for only English. A small sample of further resources for bilingual language sample analysis are listed here:

- Ebert and Pham (2017) provide considerations for integrating information from standardized tests and narrative language samples for school-age Spanish-English bilingual children, complete with a detailed case study.
- Gutiérrez-Clellen, Restrepo, Bedore, Peña, and Anderson (2000) describe in detail considerations for choosing measures of Spanish grammar and conclude with an overview of assessment decisions for Spanish-English bilingual children.
- Potapova, Kelly, Combiths, and Pruitt-Lord (2018) describe two measures for Spanish-English bilingual preschoolers, tense marker total and tense and agreement productivity score. They include case illustrations using these measures.
- Kapantzoglou, Fergadiotis, and Restrepo (2017) compare language sample measures for story generation vs. story retelling for Spanish-English bilingual preschoolers.

Section References

- Arias, G. & Friberg, J. (2017). Bilingual language assessment: Contemporary versus recommended practice in American schools. *Language, Speech, and Hearing Services in Schools*, 48(1), 1-15. doi: 10.1044/2016_LSHSS-15-0090.
- Ebert, K. D. & Pham, G. (2017). Synthesizing information from language samples and standardized tests in school-age bilingual assessment. *Language, Speech, and Hearing Service in Schools, 48*(1), 42-55. doi: 10.1044/2016_LSHSS-16-0007
- Gutiérrez-Clellen, V. F., Restrepo, M. A., Bedore, L., Peña, E., & Anderson, R. (2000). Language sample analysis in Spanish-speaking children: Methodological considerations. *Language, Speech, and Hearing Services in Schools*, 31(1), 88-98. doi: 10.1044/0161-1461.3101.88.
- Kapantzoglou, M., Fergadiotis, G., & Restrepo, M. A. (2017). Language sample analysis and elicitation technique effects in bilingual children with and without language impairment. *Journal of Speech, Language, and Hearing Research*, 60(10), 2852-2864. doi: 10.1044/2017_JSLHR-L-16-0335.
- Potapova, I., Kelly, S., Combiths, P. N., & Pruitt-Lord, S. L. (2018). Evaluating English morpheme accuracy, diversity, and productivity measures in language samples of developing bilinguals. *Language, Speech, and Hearing Services in Schools*, 49(2), 260-276. doi: 10.1044/2017 LSHSS-17-0026.