EXAMINING LANGUAGE ELICITATION METHODS IN DUAL LANGUAGE LEARNERS

by

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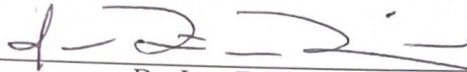**Master of Science**

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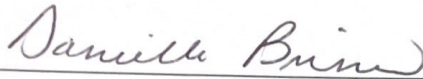EXAMING LANGUAGE ELICITATION METHODS IN DUAL LANGUAGE LEARNERS

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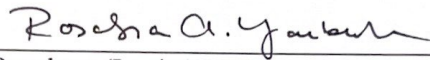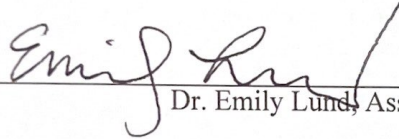Natalie M. Blandon

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Table of Contents

List of Tables

Chapter I

Introduction

The United States of America's demographic is exponentially growing and undergoing a significant transformation. With this growth, there has been an increase of culturally and linguistically diverse (CLD) family structures establishing themselves in the United States. These structures represent a shift away from the White monolingual English-speaking household to a CLD family structure. According to the 2020 census, 38.4 percent of the population identifies as a different race and/or ethnicity other than White, and 21.6 percent of homes in the United States speak another language other than English (Bureau, 2022). Of this linguistic diversity, Spanish speakers account for 13.2 percent, making it a predominant non-English language spoken in many homes (Bureau, 2022). The Hispanic or Latino population in the United States has emerged as the most rapidly expanding ethnic group in the United States, constituting 18.7 percent of the total population (Bureau, 2022).

The growth in CLD, specifically Hispanic/Latino Spanish speaking, populations is well reflected in young and school-age children. For many CLD children, the public school system represents their first interaction with the mainstream culture in United States (Rodriguez et al., 2014; Yamasaki, 2018). For a portion of these young and school-age children, they are not only introduced to a new mainstream culture, but a new language: English. Within the public-school systems, approximately 5 million of the students are considered English Language Learners. For the scope of this research, English language learners (ELLs), English learners (ELs), Emergent bilinguals (EBs), etc. as referred to in other articles and sources, will be referred to as Dual-Language Learners (DLLs) who are children that are acquiring two languages, usually one at home and within their community (e.g., Spanish) and one at school (e.g., English). The cultural

and linguistic diversity and DLLs within the school systems play a crucial role in highlighting

the importance of enabling equal access to both general and special education services that

maximize the cognitive and linguistic abilities of each child.

Speech-Language Pathologists (SLPs) are amongst the interprofessional team responsible

for meeting the needs of this young and school-aged population. In the 2022 end-of-year Profile

of ASHA Multilingual Service Providers, only 5 percent of the 213,115 ASHA certified

professionals indicated they are Spanish-language service providers (ASHA, 2023). While

providing culturally and linguistically responsive assessments and services does not exclusively

fall on this percentage of individuals, the demographic profile highlights the limitations in

accessing a Spanish-language service provider. With only a small percentage of practicing SLPs

identifying as Spanish-language service providers, DLLs are disproportionally under and over

identified with speech and language impairments due to a variety of reasons; some being lack of

appropriate resources, unconfident clinicians, and lack of awareness of cultural implications

(Gutierrez-Clellen, 2009; Muñoz, 2014).

Moreover, most standardized assessments utilized by Speech-Language Pathologists

(SLPs) for evaluating Hispanic/Latino Spanish-speaking populations are developed with norms

based on primarily English-speaking demographics (Soto-Boykin, 2021). This represents a

critical challenge as there are limited amounts of culturally and linguistically tailored materials

for evaluating and diagnosing language disorders in bilingual children. With the increasing

Hispanic/Latino population in the United States, it is imperative that the profession of SLP be

able to provide culturally and linguistically appropriate assessments. This research aims to

contribute to the development of effective and appropriate assessment methods by comparing

three language elicitation methods (personal narrative telling, narrative book retelling, and

narrative short video retelling) to identify the most suitable method for assessing Spanish

language skills in Spanish-English DLLs.

Chapter II

Literature Review

Assessing Dual Language Learners' Language in Schools

Assessment Procedures in Schools

Speech and language evaluations are comprised of a variety of components that support SLPs in completing comprehensive and thorough assessment procedures when qualifying a child. The evaluation and assessments of a child should include the following such components: a case history, a patient/client/student, teacher and caregiver/family interview, a review of auditory, visual, motor and cognitive status, formal (e.g., norm-referenced) and/or informal (e.g., criterion-referenced or language sampling) assessments of speech and language, and, if necessary, subsequent follow-up evaluation services (ASHA, n.d. ; ASHA, 2004).

All evaluations and assessments should be tailored to align with the child and family's unique needs, identities, cultural and linguistic background, SES, and other identities. School-based assessments should include similar protocols, components, and considerations to assess a child in a comprehensive manner. SLPs must take into consideration and follow the specific guidelines in the Individuals with Disabilities Education Act, IDEA, as well as their state and local guidelines when assessing a child to follow what is dictated as best practice (ASHA, n.d.). Although best practice for assessment and evaluation has been indicated by ASHA, IDEA laws, state and local government and school districts, the implementation of these guidelines for assessment often falls short of being as detailed and thorough as required (ASHA, n.d.). There have been variety of potential reasons why school-based SLPs cannot provide such thorough assessments. Some examples include lack of time, large caseloads, and lack of appropriate materials (ASHA, n.d.; Katz et al.,2010). Yet, there are practices that can be adapted to many

circumstances to be able to provide a more comprehensive and adaptive evaluation such as language sampling.

Language Sampling

Language sampling allows for a clinician to observe an example of a child's discourse and lexical abilities that have not been fragmented artificially and is beneficial in a clinical assessment protocol to get a comprehensive view of a child's functional speech and language in a more naturalistic environment (Hadley,1998; Pavelko et al., 2016). The elicitation method of a language sample can vary due to reasons such as but not limited to, the age of the child, the grade level, the language development of the child, their discourse abilities, and the sample desired by the clinician. Popular formats of language sampling are conversation, story generation and story retelling (Hadley,1998; Pavelko et al., 2016; Kapantzoglou et al., 2017). Language sampling via conversation, as the term suggest, involves a clinician facilitating conversation to assess the child's verbal communication skills. As for narrative generation and narrative retell, narrative generation is often done to view the child's abilities to independently create a grammatically coherent narrative based on verbal prompting while narrative retelling can be prompted verbally but is often elicited with the use visuals such as books or videos accompanied by a predetermine narrative protocol (Rojas & Iglesias, 2009).

Advantages and Limitations of Language Sampling

Language sampling can provide accurate information that supports appropriate diagnosis of a child due to how this assessment measure can be adjusted to be culturally sensitive and flexible to different situations (Stockman, 1996; Gutierrez-Clellen, 2009; Pavelko et al., 2016). Language sampling is easily accessible by a clinician whether be used during formal testing or in observation of the child. In employing language sampling, clinicians may engage the child in

discourse that allows for comprehensive observation and analysis of their language abilities and any potential breakdowns in connected speech. Varying the discourse type being requested and adjusting the type depending on age and skill of the child will support a clinician's observation to see if there is any variability within the child's abilities and provide the clinician with more data (Hadley, 1998; Pavelko et al., 2016). Language sampling can be an asset in making clinical decisions and providing direction for later intervention (Guiterrez-Clellen, 2009).

Despite its benefits, language sampling remains underutilized. The rationale behind why clinicians may not use language sampling in the assessment practices are numerous. Some of the apprehensions in the use of language sampling are the time investment required to collect and analyze a language sample, the lack of knowledge and skills of the clinician and lack of knowledge of reimbursement providers of the clinical importance of language sampling (Guiterrez-Clellen, 2009; Klatte, et al., 2022). Clinicians often rely on informal procedures for language sample collection, for example using personal judgement of the child's language and performing immediate transcription, deviating from evidence-based practices (Stockman, 1996; Hadley, 1998; Pavelko et al., 2016). These practices highlight the importance of continual education and professional development of practicing clinicians on the elicitation and analysis of language sampling (Pavelko et al., 2016).

Challenges Faced by Dual-Language Learners (DLLs)

A majority of school based SLPs utilize norm referenced assessments to qualify or disqualify children from services (Gutierrez-Clellen, 2009). Norm-referenced speech and language assessment measures elicit language in a decontextualized manner, which may not accurately represent a child's true linguistic capabilities (Pavelko et al., 2016). This could lead to a child's scoresto be non-representative of the child's speech and language skills. (Pavelko et al.,

2016). Children from CLD backgrounds and DLLs are facing these problems head on with an underrepresentation of CLD children and DLLs in services such as speech and language therapy in early elementary years and an overrepresentation in late elementary years (Arias, 2017; Yamasaki, 2018). This continues to happen although the recommended practices to assess DLLs are to provide a comprehensive assessment in both languages following unbiased procedures (Goldstein, 2006).

DLLs are often identified as underperforming in language assessments compared to their monolingual peers in school settings, leading to referrals to SLPs who oversee explaining the why these children are not meeting academic standards (Rojas & Iglesias, 2009). To address these, clinicians are advised to collect comprehensive information from multiple sources and conduct assessments in both child's languages to provide a well-rounded evaluation (Goldstein, 2006; Rojas, R & Iglesias, 2009). Language sampling has been emphasized across the literature as an essential diagnostic method due to its capability to highlight the child's strengths and weaknesses across samples and provide information whether the child is in the process of second language acquisition, presenting with language difference or has a disorder that needs to be addressed (Castilla-Earls et al., 2020). Yet, the manner or frequency of the application of these practices is variable; negatively impacting the assessment and diagnosis of DLLs (Goldstein, 2006; Rojas, R & Iglesias, 2009; Pavelko et al., 2016; Arias, 2017; Yamasaki, 2018).

Relevance of Language Sampling in Dual Language Learners (DLLs)

Language sampling is especially crucial when assessing DLLs, as it allows for the observation of their functional language in a more naturalistic setting. It is vital to allow DLLs to showcase their entire language repertoire, including the freedom to code-switch between languages like English and Spanish and not limiting the DLL only to their repertoire in a

language they have not yet mastered (Arias, 2005; Rojas, & Iglesias 2009). Through accessing

and observing a DLLs full language repertoire, a clinician can more accurately analyze the

child's language through different measurements such as Mean Length of Utterance in Words

(MLUw) and Total Number of Different words (NDW) to determine their eligibility for services

and, if needed, provide direction to the clinician about treatment (Kapantzoglou et al., 2017;

Castilla-Earls et al., 2020). MLUw and NDW can provide a view of the structural and content

aspects of language (Castilla-Earls et al., 2020). MLUw provides a quantitative measure of

syntactic complexity, which can be used to capture the developmental level and for the

comparative analysis of the child's language skills (Kapantzoglou et al., 2017; Castilla-Earls et

al., 2020). As for NDW, this metric can offer insights on the range of different words used, or the

vocabulary skills of the child (Castilla-Earls et al., 2020). A language sample should ideally

contain a minimum of 50 to 100 utterances for a reliable analysis of MLUw. For NDW, a sample

containing 100 words is often considered a minimum for young children but collecting samples

with 200 to 300 words can provide a more reliable measure of lexical diversity. Practicing SLPs

need to understand the importance of accessing both languages for DLLs, the metrics that can be

properly extracted when their full repertoire is accesses and be aware of the cultural variables

present to collect accurate data and help prevent a misdiagnosis.

Language sampling stands as a best practice for a holistic view of a child's linguistic

abilities, particularly when assessing DLLs (Arias, 2017). By giving the opportunity to a DLL to

provide a language sample during a diagnostic evaluation, it can further provide information that

can supplement and/or clarify results from standardized assessments (Rojas, R. & Iglesias

2009). Additionally, language samples and parental concerns have been able to accurately

discriminate a child who needs speech and language services versus those who do not (Gutierrez-

Clellen, 2009). However, the practice needs to be more widely adopted and adapted to consider the complex interplay of cultural and linguistic factors that influence language development for its then assessment (ASHA, n.d.; Arias, 2005; Rojas, R. & Iglesias 2009; Pavelko et al., 2016; Arias, 2017; Kapantzoglou, 2017). By examining the amount of MLUw and NDW measurements, this study ensures that the chosen language elicitation methods are capable of generating adequate samples for a comprehensive assessment of Spanish language skills in DLLs. This critical examination not only supports the identification of the most suitable assessment method but also enhances the study's contribution towards developing more effective, culturally, and linguistically attuned assessment practices for bilingual children.

Cultural and Linguistic Diversity in Language Assessment

Considerations for Culturally and Linguistically Responsive Assessment

As the Hispanic/Latino population in the United States continue to thrive both culturally and linguistically, SLPs must take into consideration the cultural variables that come in to play when working with a child from this background. Culture is not homogenous, culture is a dynamic construct, varying based on external influences and individual adaptations (Ronderos, 2021). For example, parents can influence a child's linguistic and cultural identity through their own choices (Kummerer, 2012). A parent/family may choose to encourage their child to assimilate to mainstream American culture or may choose to introduce a child to a minority language (L1) like Spanish at home. Expanding on this, language bridges together a portion of the Hispanic/Latino identity. The Spanish language is represented by variations in proficiencies, accents, and dialects in the United States, all impacting DLLs language development.

Early linguistic development and language acquisition is influenced by a child's environment which includes their familial and cultural contexts (Hammer et al., 2012;

Kummerer, 2010). Although Hispanic/Latino culture has a significant influence on parental beliefs and values, as previously stated, culture is not homogenous, and each Hispanic/Latino child will have a unique experience despite having a similar identity on paper (Ronderos, 2021). Environment, geographical location, socio-economic status (SES), health/health literacy, cultural practices, home language, community, and an abundance of other factors will all influence a DLL. The nature and frequency of parent-child conversations, interactions, and daily routines significantly influence a child's language development (Kummerer, 2010; Ronderos, 2021). Cultural factors play a crucial role in shaping these interactions, affecting both their quality and quantity.

Although the Hispanic/Latino ethnicity makes up a large portion of the population and Spanish is spoken throughout many homes in the United States, the Hispanic/Latino community is considered a minoritized culture in the 2020 United States Census, and Spanish non-mainstream within the school systems. While certain regions of the United States have a strong Latino heritage and culture as well as dual-language classrooms to support children who are learning English, generally within the public school system, the mainstream culture places a higher value on the white-American culture and English creating disparities for minorities (Yamasaki, 2018; Anderson et al., 2020). Additionally, this creates barriers for parent involvement for such minority groups due to the lack of consideration of cultural variables and language barriers (Anderson et al., 2020). As a profession, it is essential to aide in the discontinuation of these barriers. Although ASHA explicitly states the importance of cultural responsiveness, there are still plenty of barriers within the field for the assessment and treatment of DLLs.

Addressing Bias in Assessment Practices

English Centrism refers to the predominant focus on terms and labels that are normed on white, English-speaking monolinguals, thereby reflecting the biases of mainstream culture (Soto-Boykin, 2023). This orientation is notably evident within the field of speech-language pathology, where current research disproportionately represents English-speaking populations and prioritized the English language even when researching linguistically minoritized communities (Lee et al., 2012; Soto-Boykin, 2021). The prevalence of terminology that refers to an underlying preference for English regardless of the cultural and linguistic background of the person such as "non-English speakers" or "English-Language Learners" has impacted research to be English-centric (Soto-Boykin, 2021).

In mainstream public education, children from CLD backgrounds are expected to assimilate (i.e., adopting and shedding original culture) to the mainstream white American culture although this is not the cultural or linguistic background they may identify with. These preferences create an environment of cultural imposition, where mainstream White American culture is imposed on those of differing cultural and linguistic identities. Additionally, the use of ELLs and ELs places the emphasis on English and not the child's L1.

As professionals committed to holistic care, our aim should be to encourage children to embrace, rather than suppress, their cultural and linguistic diversity (Kremin et al., 2016). This involves integrating cultural and linguistic considerations into every facet of the therapeutic process. Spanish-English bilingual SLPs need to be able to access appropriate measures of assessment for DLLs because they have the right to be given the same opportunity for success as their monolingual English peers. By providing the resources to successfully engage a DLL it will help prevent over-diagnosis of language deficits when in fact they are language differences (Soto-Boykin, 2021; Rojas, R. & Iglesias 2009). This research seeks to affirm the value of

bilingualism and cultural diversity, moving beyond the English-centric paradigms that have

historically influenced assessment practices. By identifying the most suitable method for

evaluating Spanish-English DLLs, this study contributes to creating a more inclusive and

equitable framework for the field of SLP, thereby helping to prevent the misidentification of

differences as deficits.

Role of ASHA Guidelines in Cultural Responsiveness

The ASHA's Scope of Practice in Speech-Language Pathology outlines SLP's roles and

responsibilities as a professional. Pertinent to the assessment of individuals requiring speech and

language services is ASHA's emphasis on the utilization of culturally and linguistically tailored

assessment protocols and the use of a variety of assessment procedures that allow for SLPs to get

an accurate and appropriate overview of the client (ASHA, n.d.). Additionally, ASHA highlights

the importance of cultural responsiveness, cultural competence, and cultural humility to support

best practices (ASHA, n.d.). These principles collectively inform professional conduct, holding

ASHA-affiliated professionals to a standard that integrates cultural variables and self-awareness

concerning cultural and linguistic diversity and biases.

Despite the fact that ASHA clearly outlines the roles and responsibilities of SLPs in

regards to cultural responsiveness, cultural competence, and cultural humility, history of clinical

practices and research indicate otherwise (e.g., Rojas, R. & Iglesias 2009; Muñoz, 2014; Pavelko

et al., 2016; NCLD, 2021; Soto-Boykin, 2021). Although ASHA emphasizes that clinicians'

assessments and interventions should be guided by cultural competency, the application and use

in practice needs improvement. Therefore, cultural competencies will be taken into consideration

to indicate which culturally and linguistically appropriate language sampling protocol can

provide appropriate linguistic information on DLLs so that practicing SLPs can more confidently assess DLLs.

Purpose

The purpose of this research is to compare three language elicitation methods (personal narrative telling, narrative book retelling, and narrative short video retelling) to identify the most suitable method for assessing Spanish language skills in Spanish speaking DLLs.

In this study, the variables under investigation include both independent and dependent factors. The independent variables are the type of language sample elicitation method (personal narrative, narrative book retelling, and narrative short video retelling) and the language (Spanish and English). The dependent variables are the Mean Length of Utterance in Words (MLUw) and Total Number of Different Words (NDW). MLUw provides a quantitative measure of syntactic complexity, capturing the developmental level of a child's language skills. It can reveal whether a particular elicitation method encourages more complex language structures, which is crucial for assessing language development. Second, lexical diversity measures the range of different words used, offering insights into a child's vocabulary skills. A method that elicits a more diverse set of words is likely to provide a more comprehensive view of a child's lexical knowledge. Together, these measures offer a balanced view of both the structural and content aspects of language, making them ideal for evaluating the effectiveness of different language sample elicitation methods.

Research Question

This research answered the following question:

(a) Is there a significant difference in the effectiveness of the language sample elicitation methods, personal narrative telling, narrative book retelling and narrative short video retelling, in enhancing Mean Length of Utterance in Words (MLUw) and Total Number of Different Words (NDW) in a Spanish language sample among preschool-aged Spanish-English Dual Language Learners?

Chapter III

Methodology

Participants

Eleven DLL preschoolers were enrolled in this study, meeting the following inclusion criteria: (a) speaking Spanish and English, (b) participating in a preschool program, (c) obtaining a standard score of at least 85 on the Expressive One-Word Picture Vocabulary Test Fourth Edition: Spanish-Bilingual Edition (EOWPVT-4), and (d) obtaining a standard score of at least 90 on the Primary Test of Nonverbal Intelligence (PTONI). The Woodcock-Muñoz Language Survey III (WMLS III) was used to determine language proficiency. All children presented language proficiency in Spanish and limited language proficiency in English. This was corroborated through a language sample collected before the procedure of the research started.

General Procedures

The study was approved by the Institutional Review Board at Texas Christian University, and parental consent was obtained. Spanish-English bilingual-speaking examiners assessed the children who qualified using EOWPVT-4, PTONI, WMLS III and collected the language sample in a quiet room at a Head Start center. The examiners participating in the data collection were given scripts and requested to practice these scripts for each language sample elicitation method, so narration was natural when interacting with the child. Additionally, the examiners had guidelines of what verbal prompts were acceptable versus unacceptable to give the child (See appendix A). All children were randomly assigned and then administered by the examiners the three elicitation methods (personal narrative telling, narrative book retelling, and narrative short video retelling) in Spanish and English. The examiner spoke only the assigned language to the

child during the day of the intervention. Language sample elicitation methods were counterbalanced. The children received the opportunity to respond to each elicitation method in the respective language administered. Children were not penalized if they spoke another language than what the examiner was speaking or if the code switched. Only one language elicitation method was administered per day. The methods elicitations lasted around 10 minutes, 5 minutes for the clinician lead elicitation method and 3-5 for the retell or narrative from the child.

Language Sample Elicitation Methods

For all three of the methods, the examiner and child interacted freely together for 2 to 5 minutes to act as a "warm-up". To end the "warm up", the examiner would turn on the video recording device and provide information to the camera outlined by the researchers. Following this, in all methods, the examiner would introduce a puppet, tell the child the puppet is going to take a nap, hide the puppet, and tell the child they will wake the puppet up later to tell them about their conversation, story or video. The puppet was used to employ theory of mind by showing a child's ability to understand the mental states of others and how mental states differs across individuals, or in this case, differs from child and examiner to puppet (Miller, 2006). The puppet interaction was used in all methods.

In the **personal narrative telling** elicitation, the examiner told a scripted culturally relevant story to tell the child in Spanish or English about something that theoretically happened to the examiner while the puppet was hidden. The examiner would then wake the puppet with the child, bring the puppet back and prompt the child to tell the puppet and the examiner a story similar to the one provided. The examiner, puppet and child would then have a conversation about the given topic (See appendix B).

It is to be noted that for the personal narrative telling method, the research incorporated culturally relevant themes, reflecting the diverse experiences and values central to Latino communities (e.g., family, family activities, going to the market, receiving a gift, etc.). Language use within the elicitation tasks were carefully aligned with the specific Spanish dialects familiar to the child. Additionally, contextual supports were chosen for the children facilitating a more intuitive and engaging interaction. Efforts were made to avoid stereotypes (e.g., Sombrero, Spicy food) and ensure a genuine representation of Latino cultures. The method was designed with the flexibility to adapt to various socioeconomic backgrounds and family dynamics, recognizing the broad spectrum of experiences among Latino children, making the assessment more engaging and relevant.

In the **narrative book retelling**, the examiner read a book (i.e., Frog, where are you?, Rana, dónde estás?) through a pre-scripted narrative story in Spanish or English while the puppet was hidden. Once the examiner had finished reading the book to the child, they would wake the puppet, bring back the puppet and the examiner would prompt the child to tell the puppet what happened during the story (See appendix C).

In the **narrative short video retelling**, the examiner played a 5-minute video (i.e., Piper Short) in Spanish or English to the child while the puppet was hidden. When the video was over, the examiner and child would wake the puppet, bring back the puppet and the examiner would prompt the child to tell the puppet what happened during the video (See appendix D).

Language Sample Analysis

Language samples were digitally recorded then transcribed by six trained Spanish speaking undergraduate students studying Communication Sciences and Disorders at Texas

Christian University and coded with Systematic Analyses of Language Transcripts (SALT; Miller & Iglesias, 2008) by two of those students.

The training for the transcription of language samples for the six Spanish-speaking undergraduate students in the Communication Sciences and Disorders program at Texas Christian University was divided into two steps, with a focus on Spanish language proficiency:

Step 1: Training for Transcribers (See appendix E)

    (a) Training Manual: Students were given a manual detailing digital recording and transcription processes, with specific guidance for Spanish language samples.

    (b) Spanish Proficiency Assessment: The training began with an evaluation of each student's Spanish language skills to ensure they could accurately transcribe bilingual samples.

    (c) Transcription Practice: The students practiced transcribing Spanish language samples, aiming to apply transcription rules consistently.

    (d) Inter-rater Reliability for Transcription: To standardize transcription practices, students transcribed the same Spanish samples, and their work was compared to identify and resolve discrepancies.

The training for the coding of language samples for the two Spanish-speaking undergraduate students in the Communication Sciences and Disorders program at Texas Christian University was based on the SALT guidelines provided on the SALT webpage:

Step 2: Training for Coders

    (a) SALT Software Demonstrations for Spanish Data: Trainees learned to use the SALT software, with a focus on coding Spanish samples.

(b) Ethical Guidelines for Spanish Data: The training covered ethical management of Spanish language data, emphasizing confidentiality and responsible handling.

(c) Coding Practice: Students coded transcribed Spanish samples using SALT, focusing on accurate and consistent rule application.

(d) Inter-rater Reliability for Coding: To ensure coding consistency, students independently coded the same Spanish transcripts. Comparisons of coded data helped standardize coding practices for Spanish language data.

All the language samples collected were analyzed to determine the most effective language sample elicitation method for dual Spanish-English language learners based on MLUw and total number of different words (NDW).

Reliability

The six Spanish speaking undergraduate students were trained using the transcription manual made by the leading clinicians of the study. The transcription manual outlined what the undergraduate students needed to know for this extent of the study. The undergraduates were given practice transcriptions followed by feedback sessions to improve their accuracy. The students were allowed to use automatic transcription software, but all transcriptions were verified for accuracy by the students.

The first transcriptions were completed by the undergraduate students with more than 80% of accuracy. To calculate the inter-rater reliability, multiple students (or raters) transcribed the same speech samples independently. Their transcriptions were then compared to each other to calculate the percentage agreement.

After the transcription process was completed, two Spanish speaking undergraduate students were trained to codify the transcriptions for later analysis in the Systematic Analysis of

Language Transcripts (SALT) software. The SALT software was used for the segmentation

process. Segmentation involves breaking down the continuous stream of speech into analyzable

units. In the case of verb coding, segmentation would involve isolating individual verbs from the

speech samples.

Specifically, the average inter-rater reliability score for the transcription process was 88%, while

for coding in SALT, was 92% for the first attempt in comparing the same transcribed language

sample between all 6 trained students or the same coded language samples between the 2 trained

students

Chapter IV

Results

The purpose of this research was to compare three language elicitation methods (personal narrative telling, narrative book retelling, and narrative short video retelling) to identify the most effective method for assessing Spanish language skills in Spanish-English Dual Language Learners. Table 1 and 2 display the results of the language samples divided by the elicitation method. The following sections provide the statistical analysis for both dependent variables, Mean Length of Utterances in Words and Number of Different Words.

Mean Length of Utterances in Words

A repeated measures ANOVA was conducted to determine the effect of elicitation methods on MLUw scores for 11 children across three conditions: personal narrative telling, narrative book retelling and narrative video retelling. The means and standard deviations for MLUw were as follows: personal narrative telling (M = 5.69, SD = 1.59), narrative book retelling (M = 5.90, SD = 2.90) and narrative video retelling (M = 5.19, SD = 1.37). The multivariate tests indicated no significant effect of condition on MLUw scores, with Pillai's trace showing a value of .127, $F(2, 9) = .657$, $p = .542$, and partial $\eta^2 = .127$.

Mauchly's test of sphericity was not significant, $\chi^2(2) = 1.050$, $p = .592$, indicating that the assumption of sphericity had been met. As such, no corrections were applied to the degrees of freedom. The within-subjects effects were also not significant, $F(2, 20) = .541$, $p = .590$, with a partial $\eta^2 = .051$, suggesting that there were no differences in MLUw scores between the three elicitation methods.

The tests of within-subjects contrasts did not indicate any significant linear, $F(1, 10) =$ .063, $p = .807$, or quadratic trends, $F(1, 10) = 1.449$, $p = .256$, in MLUw scores across the conditions. The between-subjects effects for the intercept were significant, $F(1, 10) = 139.132$, $p < .001$, partial $\eta^2 = .933$, confirming the presence of variability in MLUw scores across individuals.

Estimated marginal means for MLUw scores were 5.69 (SE = .48) for the personal narrative telling condition, 5.90 (SE = .87) for the narrative book retelling condition and 5.19 (SE = .41) for the narrative video retelling condition. The grand mean MLUw score across all conditions was 5.59 (SE = .47), 95% CI [4.54, 6.65].

Table 1. Mean Length of Utterance in Words (MLUw) across all elicitation methods for all participants in the study.

Mean Length of Utterance in Words (MLUw)

Column Label	Personal Narrative Telling	Narrative Book Retelling	Narrative Short Video Retelling
Participant 1	3.42	4.17	3.67
Participant 2	6.75	4.06	5.12
Participant 3	6.78	5.54	5.75
Participant 4	5.78	3.64	4.61
Participant 5	4.59	3.56	2.56
Participant 6	3.98	6.54	4.00
Participant 7	8.08	11.30	6.47

Participant 8	6.30	6.41	5.33
Participant 9	5.62	6.35	5.79
Participant 10	5.17	9.00	5.87
Participant 11	2.80	6.00	7.43

Number of Different Words Analysis

In an analysis of variance (ANOVA) comparing the effectiveness of three elicitation methods (personal narrative telling, narrative book retelling and narrative video retelling) on the number of different words (NDW) scores among 11 children, no significant effect of condition was found, $F(2, 20) = .018$, $p = .982$, partial $\eta^2 = .002$. Descriptive statistics indicated that the mean NDW scores were similar across the personal narrative telling ($M = 51.64$, $SD = 24.36$) narrative book retelling ($M = 50.09$, $SD = 14.33$) and narrative video retelling ($M = 50.00$, $SD = 29.40$) conditions.

Mauchly's test of sphericity indicated that the assumption of sphericity had not been violated, $\chi^2(2) = 4.287$, $p = .117$. Therefore, no corrections to degrees of freedom were required. Furthermore, tests of within-subjects contrasts revealed no significant linear, $F(1, 10) = .060$, $p = .812$, partial $\eta^2 = .006$, or quadratic trends, $F(1, 10) = .007$, $p = .936$, partial $\eta^2 = .001$, across the conditions.

The grand mean NDW score across all conditions and subjects was 50.58 ($SE = 4.41$), 95% CI [40.76, 60.40]. The estimated marginal means for each condition did not differ significantly from one another, and the effect size was negligible. These findings suggest that the type of elicitation method used did not significantly influence the NDW scores in this sample.

Table 2. Number of Different Words (NDW) across all elicitation methods for all participants in the study.

Number of Different Words (NDW)

Column Label	Personal Narrative Telling	Narrative Book Retelling	Narrative Short Video Retelling
Participant 1	83	47	10
Participant 2	61	51	53
Participant 3	93	71	46
Participant 4	29	38	64
Participant 5	57	42	21
Participant 6	45	76	26
Participant 7	53	53	59
Participant 8	45	61	84
Participant 9	27	40	35
Participant 10	65	43	112
Participant 11	10	29	40

Chapter V

Discussion

The purpose of this research was to compare three language elicitation methods (personal narrative telling, narrative book retelling, and narrative short video retelling) to identify the most suitable method for assessing Spanish language skills in Spanish-English Dual Language Learners. The results of this study indicate the lack of significant differences in dependent variables, Mean Length of Utterance in Words (MLUw) and the total number of different words (NDW), across the three language elicitation methods in DLLs. These results suggest that all three language elicitation methods can be as equally effective in eliciting a representative language sample once the materials have been adjusted to be culturally and linguistically relevant to the child.

Comparative Analysis of Language Elicitation Methods for Dual Language Learners

Each elicitation method has its unique advantages and considerations. All elicitation methods used were adapted and adjusted to take into consideration the cultural and linguistic diversity of the children, the Latino culture influence and the language development of a DLL. Additionally, all elicitation methods were designed to encourage the child to narrate a story while offering varying levels of visual and auditory support such as the static visual support and scripted narrative provided by the illustrated book, the dynamic visuals of the video paired with the narrative, and the conversation's purely auditory experience. The data collected from the children in study suggest no difference between of each type of method, but the variability of success of each method with each individual child.

Personal narrative telling offered a natural environment for children to use spontaneous language, drawing on personal experiences such as family outings or personal anecdotes, which

may closely reflect their everyday speech. Personal narrative telling is distinct in that it involves the child engaging in a more spontaneous and interactive form of storytelling. This method does not require the child to retell a previously presented story but instead encourages them to generate their own narrative. It taps into autobiographical memory and may involve more personal and expressive language use, as the child is not constrained by a pre-existing story framework but can draw from their own experiences and emotions. This method required careful scripting and a strong rapport between the clinician and child to effectively assess language nuances and encourage engagement. As for the other two methods, narrative book retelling and narrative short video retelling, these involve the child retelling a story that they have been exposed to through a book or a video, respectively. These methods rely on the child's ability to recall and reconstruct the narrative structure, sequence of events, and details from the stories they have heard or seen, utilizing both memory and language skills. Narrative book retelling provided a structured approach through visual narratives, aiding in the assessment of comprehension and memory recall. However, its reliance on the child's familiarity with books could affect the expressiveness of the elicited language, making clinician awareness of the child's reading exposure crucial. Narrative video retelling engaged children with dynamic content, potentially enhancing attention and comprehension due to its alignment with contemporary media consumption habits. This method necessitated standardized video selection to ensure relevance and effectiveness in language elicitation.

The results of this study have supported that the three methods, personal narrative telling, narrative book retelling and narrative short video retelling, have no notable statistical discrepancies. When choosing a language sample elicitation protocol for a DLL, the clinician must understand the importance of a comparative analysis of the advantages and disadvantages

of the elicitation methods as well as take into consideration the age of the child, the grade level, the language development of the child, their discourse abilities, their cultural and linguistic background and the sample desired by the clinician. These factors will allow a clinician to make a clinically informed decision to obtain reliable data to add to a comprehensive assessment of a DLL.

In Table 1and Table 2 individual variations are observed, with some DLL children demonstrating a preference for one method over others in terms of higher MLUw or NDW. These findings warrant deeper investigation in subsequent studies.

A preference for a method within an individual participant could potentially be attributed to several factors. The personal narrative telling in the study was adjusted to be culturally and linguistically relevant to the child, which could have facilitated the conversation between the clinician and certain children. By providing conversation topics that allow the child to relate to their cultures, they may have the opportunity to show their linguistic capabilities. On the other hand, personal narrative telling may not be fitting for every child as this method provides the least amount of external support, the child must formulate a narrative from their memory and the child must be intrinsically motivated to communicate with the clinician. If they do not want to converse with the clinician or have difficulty with remembering and structuring the narrative, the language sample can be short and unrepresentative of the child's discourse abilities. As for the narrative book retell method used in the study, the script provided represents a common storyline in children's books that may be familiar to the child which could potentially benefit their knowledge of story retelling and their comfort with the activity during testing yielding a representative sample. Yet the use of a narrative imagery from "Frog, where are you?, Rana, dónde estás?" may be perceived as outdated by today's children, potentially limiting their

engagement and vocabulary production. Differently, the narrative short video retells stimulus used in the study is representative of contemporary media consumption habits and may better capture children's interest. In today's digital age, where screens are pervasive in children's lives, video-based elicitation methods may hold greater appeal and relevance, thereby enhancing children's motivation and attention during language sampling tasks. Though it is important to note, the dependence on screen-based stimuli can potentially be met with adverse opinions depending on the school districts, administrators, and caregivers/parents' opinions on the use of technology with preschool-aged children in assessment.

The language sample outcomes observed across different elicitation methods in this study underscores the importance of considering multiple factors in the assessment process. These factors are crucial maintaining a child's focus and maximizing their language output, ultimately leading to a richer and more diverse vocabulary repertoire in a sample. By leveraging these insights and factors, speech-language pathologists can effectively tailor language sampling procedures to individual children's needs, ultimately enhancing the accuracy and clinical utility of language sample assessment outcomes.

The implications for assessment planning that this research study highlights supports the notion that language sampling provides a comprehensive view of a child's language skills providing supplementary information for the assessment of a CLD and/or DLL child (ASHA, 2004; Rojas & Iglesias, 2009; Castilla-Earls et al., 2020). Additionally, these findings underscore the importance of incorporating any of the three elicitation methods - personal narrative telling, narrative book retelling and narrative video retelling - into the assessment process for an understanding of both the structural and content aspects of language in a sample (Kapantzoglou, 2017). When language sampling is incorporated in assessment procedures, it can capture the

variability of language for a child, therefore enhancing the validity and reliability of this assessment protocol and provide SLPs with a holistic understanding of a child's language skills that may include vocabulary, syntax, pragmatics and discourse abilities. As for DLLs who may exhibit variability in language development due to exposure to multiple languages and cultures, language sampling provides a culturally responsive approach to assessment.

The results of this study emphasize the investment of time is worthwhile for obtaining a comprehensive assessment of a child's language skills. Despite the logistical challenges associated with conducting language sampling, particularly in a school setting, language sampling supplements standardized assessment procedures and enriches the assessment process by provided a more nuanced understanding of the child's language abilities. Ultimately, the implications of this research study highlight the importance of incorporating language sampling into the assessment process for CLD children, particularly DLLs, in order to ensure equitable and effective speech and language services.

Influence of Cultural Factors on Language Production

When discussing the implications of the results this study, it must be taken into consideration the intersectionality between the mainstream American culture and the home culture of the children. The influence of the home culture, the Hispanic/Latino culture, on language production is multifaceted shaped by a variety of factors such as familial influences and broader social contexts. Parents play a pivotal role in shaping their child's cultural identity and linguistic production. Hispanic/Latino parents/caregivers when teaching their children language, tend to place an emphasis and importance on interdependence, respect towards authority and good behavior (Peredo, 2020; Ronderos et al, 2021). This refers to having more directive conversation lead by the adult and the child following the lead of the adults. Although not all

Hispanic/Latino-caregivers fall into this category and many may take on a more mainstream American approach which emphasizes independence and responsiveness in language production and communication, this cultural difference can have an influence on how the child may use language with those in a position of authority. Adding to this idea, when a child is taken for speech and language assessment, they are introduced to a new authoritative figure, the speech-language pathologist who may be asking a lot from the child during assessment. By understand how parents/caregivers interact with their children, a clinician can provide culturally adjusted measures that do not reprimand a child for doing something that is considered culturally appropriate at home. Additionally, parents/caregivers will influence language proficiencies; and accents and dialects may have an impact on a DLL's linguistic growth and development. Culturally responsive assessments are paramount in battling the under and over identification of DLLs needing services for speech and language therapy and the notion of these children being behind their English-speaking peers (ASHA, n.d.; Goldstein, 2006; Arias, 2017; Yamasaki, 2018). By embracing the cultural diversity and advocating for inclusive practices, SLPs can better support the CLD populations of DLLs, ultimately enhancing their communication outcomes and over all well-being within the school systems (ASHA, n.d.; Gutierrez-Clellen, 2009; Yamasaki, 2018; Castilla-Earls et al., 2020).

Importance of Culturally and Linguistically Appropriate Assessment

Culturally and linguistically appropriate assessment in SLP is paramount when evaluating DLLs. These children represent a diverse population with unique linguistic and cultural backgrounds that must be taken into consideration for accurate assessment and intervention.

Firstly, culturally and linguistically appropriate assessment acknowledges the CLD contexts in which children develop communication skills. Language is deeply intertwined with

culture which can significantly influence language development. By incorporating culturally

relevant assessment tools and procedures, SLPs can gain a more comprehensive understanding of

a child's language abilities within their cultural context.

Moreover, culturally and linguistically appropriate assessment promotes equity and

reduces biases in the evaluation process. Standardized assessments may not accurately capture

the language skills of DLLs, as these tools are often developed and normed on the mainstream

monolingual English-speaking populations. Using assessments that are sensitive to the cultural

and linguistic diversity of DLLs ensures that all children have equal opportunities to demonstrate

their communication abilities, regardless of their background.

Additionally, culturally and linguistically appropriate assessment fosters trust and rapport

between SLPs, children, and their families. When assessments are conducted in a manner that

respects and validates the child's language and cultural identity, families are more likely to feel

understood and supported throughout the evaluation process. This collaborative approach

enhances communication between SLPs and families, leading to more meaningful assessment

outcomes and culturally responsive intervention plans.

Furthermore, culturally and linguistically appropriate assessment allows SLPs to

accurately differentiate between language differences and language disorders in DLLs. Many

DLLs exhibit variations in language use that are perfectly normal for their second language

acquisition and cultural and linguistic background but may be misinterpreted as language

disorders by SLPs who are not familiar with their linguistic diversity. By understanding the

linguistic features typical of second language development and first language influence, SLPs

can make more accurate diagnostic decisions and provide appropriate intervention strategies.

By considering the linguistic and cultural backgrounds of DLLs, SLPs can ensure equitable, unbiased, and accurate evaluation of their language skills, leading to more effective intervention and support for their communication development.

Clinical Implications and Recommendations for Speech-Language Pathologists

The relationship between an assessment procedure such as language sampling and the diagnostic criteria for eligibility of services within schools is essential to highlight. A clinician must look at diagnostic criteria to guide in their assessment and treatment to be appropriate and individualized. A language sample is a vital component of a speech and language assessment providing unique insights into a child's discourse and lexical abilities in a more naturalistic environment that supplement the use of standardized assessment (Gutierrez-Clellen, 2009; Rojas R & Iglesias, 2009; Castilla-Earls et al, 2020). Additionally, language sampling may be tailored to the child's linguistic capabilities and needs as well as their cultural and linguistic background. By providing an assessment that is relevant and meaningful to the child, the data collected can better guide the clinician's judgement when determining eligibility and possible therapy goals (ASHA, n.d.; ASHA, 2004). Although school-based clinicians may face challenges when assessing a child such as time constraints and lack of appropriate materials, language sampling offers a flexible and adaptive method that can be adjusted to be easily incorporated in an assessment to view a child's functional language abilities. The results of this study support the selection of a language sampling protocol be based on clinician judgement of the child's linguistic capabilities, the amount of support the child may or may not need during the sample and the cultural and linguistic appropriateness of the materials being used in the elicitation method. Language sampling plays a crucial role in the assessment process for determining eligibility for services in schools as it complements other assessment components as well as

aligns with the legal and professional guidelines and provides a naturalistic view of a child's

speech that can be further used during treatment (ASHA, n.d.; Castilla-Earls et al., 2020).

Understanding that SLPs in the United States are facing practical limitations such limited

time, the previous and current research at hand highlights the importance of incorporating

language sampling into assessments of children, specifically DLLs (ASHA, n.d.; Rojas &

Iglesias, 2009; Castilla-Earls et al., 2020). Based on this research's findings that all methods can

potentially yield the comprehensive results, SLPs should not sway away from the use of

language samples and prioritize conducting language samples with DLLs. To optimize

efficiency, SLPs can streamline the assessment process by selecting a method and stimulus that

aligns with a child's age and grade level; and possibly their interests. Additionally, utilizing

culturally and linguistically relevant materials can enhance engagement within a diagnostic task

and facilitate a more natural language sample from the child. SLPs should consider leveraging

technology, if available, to facilitate data collection and analysis, such as using video recording

devices or transcription tools. Moreover, if the clinician is not a bilingual service provider,

collaboration with interpreters can help ensure accurate interpretation of the cultural and

linguistic components collected through the sample. By implementing these practical

recommendations, SLPs can better weigh the benefits and drawbacks and maximize the utility of

language sampling is assessing DLLs' language skills effectively.

The findings highlight the necessity of considering individual children's needs and

backgrounds, advocating for a personalized approach to speech and language assessment. By

acknowledging the cultural and linguistic diversity of DLLs and the importance of tailored

assessment and interventions, the study contributes to fostering a more equitable and effective

framework for supporting CLD and DLL children. As we move forward, it is imperative for

SLPs to continue exploring innovative approaches to assessment and treatment that leverage the knowledge we have about working with CLD populations while maintaining ethical standards in the field. By doing so, we can uphold the highest standards of care and support optimal communication outcomes for DLLs and all individuals we serve in speech-language pathology.

Limitations of the Study

With only eleven DLL preschoolers participating, the study's small scale restricts the generalizability of its outcomes. The wide range of dialects, cultural backgrounds, and levels of bilingualism can also affect the generalizability of the findings. This limited sample size, resulting from specific inclusion criteria, may not adequately reflect the diversity present within the broader DLL and CLD preschool populations, thereby affecting the ability to extrapolate these findings to a wider context.

Furthermore, several factors related to protocol administration may have impacted the study's results. Examiner bias, the structured nature of the elicitation tasks, and reliance on screen-based stimuli could have influenced the children's responses and the overall language sample outcomes. Additionally, the use of a consistent puppet across all methods, intended to maintain uniformity, might have introduced a confounding variable affecting the comparability of language samples. The study's design, which involved administering a single elicitation method per session and alternating the order of these methods, could lead to order effects that influence a child's performance based on their prior experiences with the tasks. Lastly, the concise duration of each elicitation method, though beneficial for practical application in school settings, might not have allowed sufficient engagement time for the children to fully demonstrate their language capabilities, potentially limiting the depth and richness of the language samples collected for MLUw and NDW analysis.

Moreover, other factors to take into consideration when working with children is their behavior, fatigue, and the attention span. These three factors may have impacted our results: young children, particularly in a preschool setting, may exhibit fluctuating levels of cooperation and concentration, which can impact the consistency and reliability of language sample collection. It should be noted that these factors hold ecological validity for conducting research within school settings, ensuring that the study's design and implementation align with the natural educational environment of the participants.

Areas for Future Research and Improvement

Future research focused on language sampling in DLLs could benefit from sample size expansion, examiner training and standardization, utilization of technology and validation language sampling. Larger sample sizes could enhance the generalizability of findings and capture the diversity within the DLL preschool and school-aged population more comprehensively. Including a more diverse range of participants in terms of language proficiency levels, cultural backgrounds and socioeconomic status can provide a richer understanding of language sampling outcomes. As for addressing potential examiner bias, more extensive training and the standardization of protocols can enhance the reliability and validity of language sampling procedures. Developing stricter guidelines for examiner interactions, as well as implementing inter-rater reliability checks during administration of protocols, can minimize variability in data collection and interpretation. A potential new avenue for research is exploring the use of technology-enhanced language sampling methods, such as digital storytelling platforms or interactive multimedia applications, that may provide novel opportunities for engaging DLL preschoolers and eliciting rich language samples. Integrating technology into language assessment procedures can enhance ecological validity and promote children's

participation and motivation. Lastly, the validation of language sampling methods measures specifically tailored for DLL preschoolers and school age children can ensure the reliability and validity of assessment outcomes in this population. Developing culturally and linguistically appropriate language sampling protocol and norms can support accurate diagnosis and intervention planning for DLLs. By addressing these areas for future research and improvement, SLPs and researchers can advance our understanding of language development in DLLs and enhance the effectiveness of assessment practice in supporting their communicative and linguistic needs.

Conclusion

All three elicitation methods, personal narrative telling, narrative book retelling, and narrative short video retelling, are equally effective in eliciting language samples from Spanish-English DLLs, without statistically significant differences in MLUw and NDW outcomes. The findings highlight the importance of customizing elicitation materials to the cultural and linguistic backgrounds of individual children, ensuring an inclusive and representative approach to language assessment. By exploring the dynamics of bilingual language assessment and the need for cultural and linguistic sensitivity in educational practices, this research underscores the value of a holistic approach that respects the diversity and complex language profiles of CLD children, contributing to a more nuanced understanding of bilingual language assessments.

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Appendix A – <u>Acceptable versus unacceptable prompts</u>

Prompts

Use open-ended prompts when the child:- is not speaking- says "I don't know.", "Cómo se dice?" - starts listing (e.g., "boy", "dog", "jar")

Acceptable verbal prompts (in the target language) include:

<u>Tell him/her more</u>.Dile más.Just do your best.Haz lo mejor que puedas.<u>Tell him/her about that</u>.Dile sobre eso/esa.You're doing great.Estás haciendolo muy bien. I'd like to hear more about that.Me gustaría oír más sobre eso/esa.Tell me what you can.Dile lo que puedas.That sounds interesting.Eso/Esa suena interesante.<u>What else?¿Qué más?</u>Keep going. Siguele. Dale. Mhm . Uhhuh.

Acceptable nonverbal prompts include:

Smiles and eye contact Nods of affirmation and agreement

Unacceptable prompts include:

What is he doing?¿Qué está haciendo (él)?Where is he?¿Dónde está (él)?Pointing at scenes in the book while promptingWhat's this?¿Qué es esto?What's happening here?¿Qué está pasando/ocurriendo aquí?Avoid asking the "wh" questions, who?, what?, when?, where?

What if the child code switches?

If the child uses an occasional Spanish word in the English sample, just ignore it. However, if the child uses a lot of Spanish words or phrases, prompt the child with "in English, please" or "tell it to me in English" or "tell me the story in English". Similarly, if the child uses a lot of English words in the Spanish sample, prompt the child with "en Español, por favor" or "dimelo en Espanol" or "dime el cuento en Español". Direct the child to use the target language with minimal interruption of his or her story.

Appendix B - <u>Conversation Narrative Elicitation Protocol</u>

On narrative retell, you always tell a story and ask a question (encourage the child to talk about a situation). In comparison to telling stories from wordless picture books or retelling previously-heard stories, personal narratives must be composed by children themselves.

Procedures for book retell and video retell:

1. <u>Warm Up</u> For children unknown to the examiner, it will be important to include a "warm-up". The examiner starts the session by showing the child a book (different from the one use in the assessment). Each introduction should last between 2 – 5 minutes and is timed with a stopwatch.
2. <u>Turn on video recorder</u> Say today's date, child's identification number, and elicitation way (book, video, personal narrative), language (Spanish or English).
3. <u>Language:</u> Do not switch from one language to the other. If the child answer in another language it is fine. But continue in the language of that day (English or Spanish). (See What if the child code switches?)
4. Say to the child, **"I brought my friend (name of the puppet) with me today. I'm going to tell you a story. Listen really carefully. When I am done telling you the story, I want you to tell us a story"** **"Traje un amigo (nombre del muneco) conmigo hoy. Voy a contarles una historia a ustedes. Escucha con atención. Cuando termine de contar la historia, vamos a despertar a "nombre" y tu le vas a contar tu historia a el.**
5. Use the script to tell the child the story.
6. Prompts:

Acceptable verbal prompts include:

<u>Tell him/her more.</u>Dile más.Just do your best.Haz lo mejor que puedas.<u>Tell him/her about that.</u>Dile sobre eso/esa.You're doing great.Estás haciendolo muy bien. I'd like to hear more about that.Me gustaría oír más sobre eso/esa.Tell me what you can.Dile lo que puedas.That sounds interesting.Eso/Esa suena interesante.<u>What else?</u>¿Qué más?Keep going. Siguele. Dale. Mhm . Uhhuh.

Acceptable nonverbal prompts include:

Smiles and eye contact. Nods of affirmation and agreement.

Not Acceptable prompts include:

Where did you go?

What happends next?

How did you get there?

When did you come home?

That must be awful, or great od scary, etc.

Conversation Narrative Elicitation Spanish

Spanish

1.	Yo tengo un perrito llamado colita. Mi perrito es de color blando y amarillo y tenia en sus patas manchitas rosas. Una vez mi perrito se escape y no aparecio por un dia. Un dia aparecio muy sucio (mugroso) y muchas pulgas. Tuvimos que bañarlo para limpiarlo. Tienes alguna mascola (gato, perro)? Alguna vez le ha pasado eso? Cuentame sobre eso. Cuentame que tu haces con _____ (animal)
2.	Una vez mi mama me llevo a Walmart y yo queria comprar una bisicleta pero mi mama no me lo compró. Asi que lloré mucho y mi mama se enojó conmigo. Haz ido con tu mama de compras (Walmart, Fiesta)? Alguna vez le ha pasado eso? Cuentame sobre eso. Cuentame que tu haces cuando tu mama te regaña (se enoja)?
3.	Una vez mi papa me llevo a comer mantecado. El coche se descompuso y comenzo a botar humo. Yo estaba muy asustado. Alguna vez se ha descompuesto (roto) tu coche? Alguna vez le ha pasado eso? Cuéntame sobre eso. Cuéntame que tu haces cuando se rompe tu coche?
4.	Una vez mi papa y yo nos montamos en el auto y yo tenía la mano por afuera de la puerta del auto. Mi papa cerro la puerta muy fuerte y me la aplastó. Comence a gritar y a llorar y mi papa me llevo al doctor. El doctor puso unas vendas en las manos y me dió una medicina muy mala. Al otro dia se me fué el dolor. Alguna vez le ha pasado eso? Cuéntame sobre eso. Cuentame que tu haces cuando vas al doctor

English

1.	I had a little dog named Tails. My dog is white and yellow and had pink little spots on the legs. One time, my little dog escape and did not return for one day. One day he appeared all dirty and had flees. We had to wash him. Do you have a pet (cat, dog)? Has this ever happened to you? Tell me about it. Tell me what do you do with (animal)?
2.	One time my mom took me to a Walmart and I wanted to buy a bicicle but mi mom did not buy it. I cried a lot and my mom got mad at me. Have you ever gone shopping with your mom (Walmart, Fiesta)? Has this ever happened to you? Tell me about it. Tell me what do you do when your mom scolds you?
3.	One time my father took me to eat icecream. The car broke down and smoke starter to come out. I was scared. Has your car ever break down? Has this ever happened to you? Tell me about it. Tell me what do you do when your car breaks down?
4.	One time my dad and I got in the car and I had my arm out the car window. My dad close the door and squashed my hand. I screamed and cried and my dad took me to the doctor. The doctor put on some bandages on my hand y gave me a really bad medicine. The next day I had no pain. Has this ever happened to you? Tell me about it? Tell me what do you do when you go to the doctor?

Appendix C – <u>Narrative Book Retell Protocol</u>

Narrative Language Sampling Narrative language samples should be elicited using a procedure similar to that developed by Strong (1998): story retelling using a wordless picture book, such as Frog, Where Are You (Mayer, 1969). During assessment the examiner should sit across from the child to promote child language, minimize pointing, and encourage use of explicit labels of characters, objects, and actions. While looking at the book with the clinician, the examiner reads a prescripted narrative of the story in Spanish or English. Once finished, the examiner gives the child the book and requests that the child retell the story ("Ahora, cuéntame lo que pasó en este cuento"). The child should use the pictures in the book as an aid in the retelling. The examiner should provide only back-channel responses ("Aha," "Sí") or restate the child's last utterance.

Procedures for narrative book retell:

1. <u>Warm Up</u> For children unknown to the examiner, it will be important to include a "warm-up". The examiner starts the session by showing the child a book (different from the one use in the assessment). Each introduction should last between 2 – 5 minutes and is timed with a stopwatch.

2. <u>Turn on video recorder</u> Say today's date, child's identification number or name, and elicitation way (book, video, personal narrative), language (Spanish or English).

3. <u>Language:</u> Do not switch from one language to the other. If the child answer in another language it is fine. But continue in the language of that day (English or Spanish). (See What if the child code switches?)

4. Say to the child, **"I brought my friend (name of the puppet) with me today. "Name" is going to take a nap.** (hide Puppet). **I'm going to tell you a story. Listen really carefully. When I am done telling you the story, we will wake up "puppet's name" and you will tell "puppet's name" the story."** **"Traje un amigo (nombre del muneco) conmigo hoy. "Nombre" va a tomar una siesta. (seconder el muneco). Voy a contarte una historia. Escucha con atención. Cuando termine de contar la historia, vamos a despertar a "nombre" y tu le vas a contar la historia a "Nombre".**

5. Use the script to tell the child the story. While looking at the book or video with the clinician, the examiner <u>reads</u> (naturally) a prescripted narrative of the story in Spanish or English.
   a. (Book)You control the book (or video) and turn to the first picture.
   b. (Video) Place the iPad in front of the child and play the video.

6. Bring puppet back. **"Now, tell "puppet's name" the story about"** **"Ahora, cuéntame lo que pasó en este cuento"** [Fill in the topic of the story]. <u>Act engaged</u> while the child is telling the story (See acceptable prompts).
   a. If s/he hesitates, you can say, "**Go ahead, you tell him about** [Fill in the topic of the story]." "Vamos, dile que paso aqui"
   b. If s/he hesitates or indicates s/he is finished again, you can say **"Anything else?"** **"Algo más".**

c. If s/he does not appear to not know what to do, you can point at the (book, movies,or pictures) and say, **"Here, tell him the story about** [Fill in the topic of the story]." "Aqui, dile a "nombre" de que trata la historia.

d. If s/he does not start a story, you can start off the story with the first line (see script).

e. If that doesn't work, then you can abandon the task. (Child may not know the language and get frustrated easily).

Spanish

Rana, ¿Dónde estás?
Por Mercer Mayer

Página	Papel
1	Había un niño quien tenía un perro y una rana. El tenía la rana en su cuarto en un jarro grande.
2 - 3	Una noche cuando el niño y su perro estaban durmiendo, la rana se escapó del jarro. La rana se salió por una ventana abierta. Cuando el niño y el perro se despertaron la siguiente mañana, vieron que el jarro estaba vacío.
4 - 5	El niño buscó en todas partes a la rana. Aún adentro de sus botas. El perro también buscó a la rana. Cuando el perro trató de mirar adentro del jarro y no podía sacar la cabeza. El niño empezó a llamar desde la ventana abierta: "Rana, ¿Dónde estás?". El perro se asomó a la ventana con el jarro todavía en la cabeza.
6 - 7	¡El jarro estaba tan pesado que hizo que el perro se cayera de cabeza por la ventana! El niño fue a ver como estaba el perro. El perro no estaba herido, pero el jarro se rompió.
8 – 9	El niño y el perro buscaron a la rana afuera de la casa. El niño llamó a la rana.
10 - 11	El niño llamaba a la rana en un hoyo que estaba en la tierra, mientras que el perro le ladraba a unas abejas en su panal. Una ardilla salió de su hueco y mordió la nariz del niño por molestarla. Mientras tanto, el perro seguía molestando a las abejas, brincaba hacia el árbol y les ladraba.
12 - 13	El panal de abejas se cayó y las abejas salieron volando. Las abejas estaban enojadas con el perro. El niño no prestó ninguna atención al perro. El vió un hueco grande en un árbol y quería ver si su rana se escondía allí. Así que trepó el árbol y llamó a la rana en el hueco para ver si estaba.
14 - 15	De repente un buho salió del hueco y lanzó al niño al suelo. El buho lo vió fijamente y le dijo que se fuera. El perro pasó al niño corriendo tan rápido como pudo porque las abejas lo perseguían.
16 - 17	El buho persiguió al niño hasta una piedra grande. El niño se encaramó en la piedra y llamó otra vez a la rana. Se agarró a unas ramas para no caerse de la piedra.
18 - 19	¡Pero las ramas no eran ramas reales! Eran los cuernos de un venado. El venado levantó al niño con su cabeza. Y el venado empezó a correr con el niño que estaba todavía en su cabeza. El perro también corrió al lado del venado. Se acercaron a un precipicio.
20 – 21	El venado se paró de pronto y el niño y el perro se cayeron por el precipicio.
22 - 23	Había un estanque debajo del precipicio. Aterrizaron en el estanque uno encima del otro. Oyeron un sonido que conocían.
24 - 25	El niño le dijo al perro que se callara. Los dos se acercaron con cuidado y miraron detrás de un tronco de un árbol.
26 - 27	Allí encontraron a la rana del niño. Había con él una rana mamá también. Ellos tenían algunas ranitas bebés y una de ellas saltó hacia el niño.
28 – 29	La ranita quería mucho al niño y quería ser su nueva mascota. El niño y el perro estaban felices de tener una nueva rana y llevarla a casa. Cuando se iban, el niño dijo adiós a la que fue su rana y también a su familia.

English

Frog Where Are You?
by Mercer Mayer

Page	Script
1	There once was a boy who had a dog and a pet frog. He kept the frog in a large jar in his bedroom.
2 – 3	One night while he and his dog were sleeping, the frog climbed out of the jar. He jumped out of an open window. When the boy and the dog woke up the next morning, they saw that the jar was empty.
4 – 5	The boy looked everywhere for the frog. The dog looked for the frog too. When the dog tried to look in the jar, he got his head stuck. The boy called out the open window, "Frog, where are you?" The dog leaned out the window with the jar still stuck on his head.
6 – 7	The jar was so heavy that the dog fell out of the window headfirst! The boy picked up the dog to make sure he was ok. The dog wasn't hurt but the jar was smashed.
8 - 9	The boy and the dog looked outside for the frog. The boy called for the frog.
10 – 11	He called down a hole in the ground while the dog barked at some bees in a beehive. A gopher popped out of the hole and bit the boy right on his nose. Meanwhile, the dog was still bothering the bees, jumping up on the tree and barking at them.
12 – 13	The beehive fell down and all of the bees flew out. The bees were angry at the dog for ruining their home. The boy wasn't paying any attention to the dog. He had noticed a large hole in a tree. So he climbed up the tree and called down the hole.
14 – 15	All of a sudden an owl swooped out of the hole and knocked the boy to the ground. The dog ran past the boy as fast as he could because the bees were chasing him.
16 – 17	The owl chased the boy all the way to a large rock. The boy climbed up on the rock and called again for his frog. He held onto some branches so he wouldn't fall.
18 – 19	But the branches weren't really branches! They were deer antlers. The deer picked up the boy on his head. The deer started running with the boy still on his head. The dog ran along too. They were getting close to a cliff.
20 - 21	The deer stopped suddenly and the boy and the dog fell over the edge of the cliff.
22 – 23	There was a pond below the cliff. They landed with a splash right on top of one another. They heard a familiar sound.
24 – 25	The boy told the dog to be very quiet. They crept up and looked behind a big log.
26 – 27	There they found the boy's pet frog. He had a mother frog with him. They had some baby frogs and one of them jumped toward the boy.
28 - 29	The baby frog liked the boy and wanted to be his new pet. The boy and the dog were happy to have a new pet frog to take home. As they walked away the boy waved and said "goodbye" to his old frog and his family.

Appendix D – <u>Narrative Short Video Retell Protocol</u>

Procedures for narrative short video retell:

1. <u>Warm Up</u> For children unknown to the examiner, it will be important to include a "warm-up". The examiner starts the session by showing the child a book (different from the one use in the assessment). Each introduction should last between 2 – 5 minutes and is timed with a stopwatch.
2. <u>Turn on video recorder</u> Say today's date, child's identification number or name, and elicitation way (book, video, personal narrative), language (Spanish or English).
3. <u>Language:</u> Do not switch from one language to the other. If the child answer in another language it is fine. But continue in the language of that day (English or Spanish). (See What if the child code switches?)
4. Say to the child, **"I brought my friend (name of the puppet) with me today. "Name" is going to take a nap.** (hide Puppet). **I'm going to tell you a story. Listen really carefully. When I am done telling you the story, we will wake up "puppet's name" and you will tell "puppet's name" the story."** **"Traje un amigo (nombre del muneco) conmigo hoy. "Nombre" va a tomar una siesta. (seconder el muneco). Voy a contarte una historia. Escucha con atención. Cuando termine de contar la historia, vamos a despertar a "nombre" y tu le vas a contar la historia a "Nombre".**
5. Use the script to tell the child the story. While looking at the book or video with the clinician, the examiner <u>reads</u> (naturally) a prescripted narrative of the story in Spanish or English.
   a. (Book)You control the book (or video) and turn to the first picture.
   b. (Video) Place the iPad in front of the child and play the video.
6. Bring puppet back. **"Now, tell "puppet's name" the story about"** **"Ahora, cuéntame lo que pasó en este cuento"** [Fill in the topic of the story]. <u>Act engaged</u> while the child is telling the story (See acceptable prompts).
   a. If s/he hesitates, you can say, "**Go ahead, you tell him about** [Fill in the topic of the story]." **"Vamos, dile que paso aqui"**
   b. If s/he hesitates or indicates s/he is finished again, you can say **"Anything else?" "Algo más".**
   c. If s/he does not appear to not know what to do, you can point at the (book, movies,or pictures) and say, **"Here, tell him the story about** [Fill in the topic of the story]." **"Aqui, dile a "nombre" de que trata la historia.**
   d. If s/he does not start a story, you can start off the story with the first line (see script).
   e. If that doesn't work, then you can abandon the task. (Child may not know the language and get frustrated easily).

Video Spanish Retell (Piper) -5 minutes

Turn on the iPad Piper is available in iTunes in iPad

Press the iTunes Store icon > Purchased > Movies > Piper Short Film > Play

Follow the procedure (Procedures for book retell and video retell**)**

Remember to encorage the child (<u>Tell him/her about that.</u>Dile sobre eso/esa; What else?¿Qué más?) to tell (the puppet) the story while watch the video. Do not pause the video.

0:10	Todas las mañanas las lavanderas blancas salen a desayunar en la orilla de la playa. Entre ola y ola corren a cazar caracoles tratando de que el agua no las arrope.
0:50	Piper, la pajarita, se levantaba en la mañana esperando que su mamá le diera a ella desayuno en su piquito negro, como lo hacia siempre. Pero esa manana su mamá quería que la pajarita aprendiera a cazar por si misma.
1:10	La pajarita abrió su pico pensando que su mamá le iba a dar la comida en su pico. Pero esta vez su mamá anima a La pajarita para que fuera a cazar la comida con la bandada de pájaros en la orilla de la playa.
1:35	La pajarita corrió rápidamente donde su mamá, pero esta vez su mama quería que ella atrapara su propia comida. Los caracoles se entierran en la arena creando burbujas y la pajarita esta aprendiendo a atrapar caracoles del mar.
2:00	Todas las aves corren rápidamente para no ser atrapadas bajo el agua. Pero la pajarita se distrae y no se retira a tiempo y es arrastrada por una gigantesca ola.
2:20	Oh no! Pobre pajarita. Esta asustado por las olas. Su mamá la anima a intentarlo nuevamente. Pero ella le tiene mucho miedo a las olas del mar.
2:40	La pajarita tiene hambre. Su panza le suena.
2:55	Al intentarlo de nuevo, La pajarita sale corriendo aterrorizada por las olas del mar.
3:15	La pajarita es arrastrada por unos animalitos naranjas.
3:27	La pajarita ha encontrado un amigo. Es un cangrejito de mar que va a cazar caracoles con sus padres a la orilla de la playa.
3:33	Al ver que su amigo se entierra en la arena, La pajarita se preocupa y corre a ayudarlo.
3:45	Dándose cuenta que el cangrejo no esta en peligro y que su amigo se submerge en la arena nuevamente.
3:55	De momento una la ola gigantesca se dirige hacia ellos y la pajarita decide sumergirse en la arena como lo hizo el cangrejo.
4:12	La pajarita y el cangrejo estan sumergidos bajo el mar. El cangrejo le indica que estan a salvo. Al sumergirse en el agua la pajarita ve algo maravilloso.
4:20	Ella se ha dado cuenta que hay muchisimos caracoles que salen de la arena cuando el agua de la playa los arropa con sus olas.
4:30	La pajarita esta muy emocionada porque aprendió la manera que su amigo el cangrejo atrapa caracoles. Muy contenta, ella comienza a desenterrar todos los caracoles de mar que encuentra en su camino.
5:10	La pajarita aprendió una estrategia nueva. Ella se vuelve una experta cazando caracoles para toda la bandada de pájaros. Su mamá esta muy orgullosa de ella.

Video English Retell (Piper) -5 minutes

Turn on the iPad Piper is available in iTunes in iPad

Press the iTunes Store icon > Purchased > Movies > Piper Short Film > Play

Follow the procedure (Procedures for book retell and video retell**)**

Remember to encorage the child (<u>Tell him/her about that</u>. <u>What else</u>? to tell (the puppet) the story while watch the video. Do not pause the video.

0:10	Every morning the sandpipers hunt for breakfast at a seashore. Between wave after wave they hunt for seashells trying to not get cover by the water.
0:50	Piper, the litthe bird, wakes up in the morning waiting for her mother to give her breakfast in her little beak, like she always does. But that morning, her mother wanted the little bird to learn how to hunt for herself.
1:10	The little bird opened her beak thinking her mom would put foof in her beak. But this time, her mom is encouraging her to hunt food with the flock of birds at the shore.
1:35	The little bird ran fast toward her mother but her wanted her to catch her own food. The seashells bury themselves in the sand making bubbles and the little bird is learning how to catch seashells.
2:00	All the birds run fast so they don't get trapped under the water. But the little bird gets distracted and does not get away in time and gian wave sweeps her.
2:20	Oh no! Poor little bird. She is afraid of the waves. Her mom encourages her to try again. But she is too afraid of the waves.
2:40	The little bird is hungy, her tummy grumbles.
2:55	She tries again, the little bird starts running away terrified of the waves.
3:15	The little bird is carried by small orange animals
3:27	The little bird has found a new fried. Is a small crab that will hunt for seashells with his parents at the seashore.
3:33	When she saw her friend bury in the sand, the little bird got worried y ran to help him.
3:45	She realized that the crab was not in danger as he buried himself in the sand once again
3:55	Suddenly, a giant wave was coming towards them and the little bird decided to bury herself in the sand like the crab.
4:12	The little bird and the crab are now submerged in the water. The crab pokes the little bird to show her all the seashells that have appeared from under the sand.
4:20	She realized was surprised to see all the seashells and how to find them. Ella se ha dado cuenta que hay muchisimos caracoles y de como encontrarlos.
4:30	The little bird, very exited becaused she learned how her friend hunts for seashells. Very happy, she starts to unearth all the seashells around the beach.
5:10	The little bird learned a new strategy. She becomes an expert hunting for seashells for all the flock. Her mom is very proud of her.

Appendix E – <u>Transcription Training Manual</u>

Transcription Manual (Spanish-only)

Preparation

Familiarization

Before diving into the transcription process, transcribers must immerse themselves in the linguistic and contextual nuances of the recordings. This preparatory step is crucial for understanding the idiosyncrasies of child speech, which often includes playful language, inventive words, and evolving syntax that may not adhere to standard rules. Listening to sample recordings helps transcribers attune their ears to the children's speech patterns, intonations, and any recurring themes that may emerge during conversations, storytelling, or descriptions. This step is not merely about getting accustomed to the sound of the children's voices but also involves recognizing the structure of interactions, especially in how questions are posed by the examiner (E) and responded to by the child (C). Understanding the context—whether it's a casual conversation, a structured book retelling, or a narrative constructed from a video—enables the transcriber to anticipate the types of linguistic constructions they might encounter.

Software

The choice of software plays a pivotal role in the transcription process. Word processing software should offer functionality that supports efficient transcription, such as easy navigation through the document, the ability to insert comments or annotations, and formatting flexibility. Transcribers should ensure they are comfortable with the software's interface and features, including keyboard shortcuts, as these can significantly speed up the transcription process.

Equally important is the audio playback software. It should allow for clear playback of recordings with features like adjustable playback speed, which can be slowed down to catch fast speech or sped up for review purposes. The ability to easily rewind or fast-forward to specific segments of the audio is essential for accurate transcription. Some advanced software options offer spectrogram visualizations, which can help in distinguishing between similar-sounding phonemes, a feature particularly useful when transcribing unclear speech.

Set-Up

Organizing the workflow from the outset is vital for efficiency and accuracy. Each participant's recordings should be transcribed in a separate document, named with a unique participant code to ensure anonymity and confidentiality. This approach not only keeps the data organized but also minimizes the risk of data mix-up. The transcriber should ensure that the workspace is set up ergonomically to support long periods of focused work, with the computer, keyboard, and mouse positioned to reduce strain.

Transcription Guidelines

Header

The header of each document serves as a metadata section, providing essential information at a glance. Including the participant's code, the date of transcription, and the transcriber's initials establishes a clear record of the transcription process and accountability. This practice is crucial for maintaining the integrity of the data, especially in studies involving multiple transcribers or longitudinal data collection.

Numbering

Assigning a unique number to each of the three conditions—Conversation (1), Book Retell (2), and Video Retell (3)—helps in structuring the document and facilitates easy reference. This numbering system should be consistent across all participants to maintain uniformity in data organization. It aids in the analysis phase, where researchers may want to compare data across the same condition among different participants.

Formatting

The visual layout of the transcription is not just about aesthetics but plays a significant role in readability and data analysis. Using a standard, legible font like Times New Roman, size 12, ensures that the transcript is accessible to all researchers and analysts involved in the study. Each speaker's turn is marked on a new line with a prefix (C for child, E for examiner), creating a clear dialogue structure that mirrors the conversational exchange. Non-verbal sounds and background noises are annotated in a standardized format (italics and square brackets, respectively), providing crucial contextual information that could influence the interpretation of the spoken words.

Verbatim Transcription

The principle of verbatim transcription is to capture the spoken word exactly as it is, including all the nuances of spoken language that convey meaning beyond the words themselves. This includes hesitations, repetitions, and various discourse markers that children use as they navigate through their thoughts and expressions. Capturing these elements accurately requires a keen ear and a deep understanding of the fluid nature of spoken language, particularly in children whose language skills are still developing.

Clarification

The transcription process inevitably encounters moments of ambiguity due to unclear speech, background noise, or unfamiliar language use. Marking these uncertainties with a question mark allows the transcriber to flag these areas for further review, possibly with enhanced audio equipment or consultation with colleagues. This practice acknowledges the limitations of the transcription process and the importance of striving for accuracy.

Non-Spanish Words

Children, especially in bilingual or multilingual environments, may switch between languages or incorporate words from different languages into their speech. Transcribing these as spoken, with notations for non-Spanish words, preserves the authenticity of the child's speech and provides valuable data on language mixing and code-switching behaviors.

Cultural References

Children's language is deeply embedded in their cultural context, and they may use words, phrases, or references that are specific to their cultural background. Providing explanations for these in footnotes or endnotes helps in understanding the child's world and the meaning behind their words, offering richer data for analysis.

Procedure

Listening

The initial listening phase is about getting a holistic view of the recording, understanding the flow of conversation or narrative, and mentally preparing for the detailed work of transcription. This overview helps the transcriber anticipate challenging sections and familiarize themselves with the content before diving into the minutiae of transcription.

Transcribing

Segment-by-segment transcription allows for focused attention on small portions of the recording, facilitating a more manageable and accurate transcription process. This methodical approach, combined with frequent pauses and rewinds, ensures that the transcriber captures the spoken word as accurately as possible.

Reviewing

Reviewing each transcribed segment with the corresponding audio helps in catching any missed words or phrases and in verifying the accuracy of the transcription. This step is crucial for maintaining the quality and reliability of the transcribed data.

Editing

The editing phase involves refining the transcription, resolving any unclear sections, and ensuring that the transcription adheres to the established guidelines. This may involve listening to sections of the recording multiple times or consulting with colleagues for a second opinion on ambiguous speech.

Final Check

A comprehensive final review of the document ensures consistency in formatting, numbering, and adherence to transcription guidelines. This final check is the last line of defense against errors and inconsistencies in the transcription.

Submission

Once the transcription has been thoroughly reviewed and finalized, it is saved with the participant code as the filename and submitted according to the study protocol. This marks the completion of the transcription process for that particular recording.

Additional Tips

Headphones

Using headphones can significantly enhance the clarity of the audio, making it easier to distinguish words and sounds that may be difficult to hear through standard computer speakers. This is especially important in transcribing nuanced speech or in environments with background noise.

Breaks

Regular breaks are essential for maintaining focus and accuracy in transcription. Transcription is a cognitively demanding task that can lead to fatigue, which in turn can decrease the quality of the transcription. Breaks help in resetting the transcriber's attention and preventing burnout.

Collaboration

Discussing challenging sections with other transcribers or the study coordinator can provide new insights or solutions to transcription dilemmas. Collaboration fosters a team approach to resolving uncertainties and ensures a higher quality of data.

This comprehensive guide provides a detailed framework for transcribing Spanish language samples from children, emphasizing accuracy, consistency, and attention to the nuances of spoken language. By following these guidelines, transcribers will contribute valuable data to the research study, facilitating a deeper understanding of children's language development and use.

Transcription Challenges and Solutions

Dialectal Variations

Children may use words or phrases that are specific to their regional dialect. Transcribers should be familiar with dialectal variations within the Spanish language to accurately interpret and transcribe these expressions. If uncertain about a particular dialectal word or phrase, it's advisable to consult linguistic resources or experts familiar with that dialect.

Overlapping Speech

In conversations, especially with young children, instances of overlapping speech between the child (C) and the examiner (E) are common. Transcribers should use a system to denote overlapping speech, such as parallel lines or a specific notation (e.g., [overlap]), to indicate when two speakers are talking simultaneously. This preserves the natural flow of conversation and provides insights into the dynamics of the interaction.

Emotional Expressions

Children often express emotions vividly through their speech, which can be critical to understanding the context of what they are saying. Transcribers should note emotional expressions, such as excitement, frustration, or hesitation, as these can add depth to the analysis. Using descriptive annotations (e.g., [excitedly], [hesitantly]) can convey the child's emotional state during the conversation.

Pauses and Timing

The length and placement of pauses in speech can convey meaning or emphasis. Transcribers should use standard symbols (e.g., a period for a short pause, ellipsis for longer pauses) to represent these pauses accurately. Additionally, noting significant changes in speech tempo can be important, using annotations like [speeds up] or [slows down] to indicate these shifts.

Phonetic Challenges

Transcribing child speech often involves deciphering unclear pronunciation or incomplete word forms. When transcribing phonetically challenging words, it's important to reproduce the sound of the word as closely as possible, even if it doesn't conform to standard spelling. This can involve using phonetic symbols or creative spellings that capture the child's pronunciation.

Repetitions and Self-Corrections

Children frequently repeat words or phrases or correct themselves mid-sentence. These repetitions and self-corrections are important aspects of child speech and should be transcribed verbatim. They can provide insights into the child's language development and cognitive processes.

Advanced Transcription Techniques

Use of Technology

Advanced software tools can assist in the transcription process. Speech-to-text technology, while not always accurate for child speech, can serve as a starting point for transcription, which can then be meticulously corrected by the transcriber. Audio editing software can enhance the clarity of recordings, making it easier to decipher difficult passages.

Time Stamping

Including time stamps at regular intervals or at the start of new segments can be incredibly useful for aligning the transcription with the audio recording. This practice facilitates easy reference back to the audio for review or clarification and is especially helpful for long recordings.

Peer Review

Having another transcriber review the transcription can improve accuracy and consistency. This peer review process can catch errors or unclear sections that the original transcriber may have missed, ensuring a higher quality of the final transcript.

Ethical Considerations

Confidentiality

Maintaining the confidentiality of the participants is paramount. Transcribers should ensure that all personal identifiers are removed or anonymized in the transcript. The participant code should be the only identifier used.

Accuracy and Integrity

Transcribers bear the responsibility of ensuring the accuracy and integrity of the transcription. It is important to resist the temptation to infer or fill in gaps based on context or personal judgment. If a segment is unclear, it should be marked as such and not transcribed based on assumptions.

Cultural Sensitivity

Transcribers should approach the transcription with cultural sensitivity, especially when dealing with expressions, idioms, or references specific to the child's cultural background. Misinterpretation of these elements can lead to inaccuracies in the transcription and analysis.

Continued Learning and Improvement

Professional Development

Transcribers should continually seek to improve their skills through training, workshops, or courses on transcription techniques, child language development, and Spanish dialectology. This ongoing professional development ensures that transcribers remain proficient and up-to-date with best practices in the field.

Feedback Loop

Creating a feedback loop where transcribers can discuss challenges, share insights, and receive feedback from researchers or language experts can enhance the quality of transcription over time. This collaborative approach fosters a culture of learning and continuous improvement.

Reflective Practice

Transcribers should engage in reflective practice, periodically reviewing their work to identify areas for improvement. This could involve revisiting past transcriptions to compare them with more recent work, noting progress and areas where further development is needed.

By adhering to these detailed guidelines and embracing a mindset of continuous improvement and ethical responsibility, transcribers will significantly contribute to the richness and accuracy of the collected language samples. This meticulous approach to transcription ensures that the data generated from these samples provides a solid foundation for research into child language development and bilingualism.

ABSTRACT

EXAMING LANGUAGE ELICITATION METHODS IN DUAL LANGUAGE LEARNERS

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This study aims to evaluate the effectiveness of three language elicitation methods (personal narrative telling, narrative book retelling, and narrative short video retelling) in assessing Spanish language skills among Spanish-English Dual Language Learners (DLLs). Eleven preschool-aged DLLs, who met specific language fluency and development and cognition criteria were selected for this study. Language samples were collected using the three elicitation methods, transcribed and coded using Systematic Analyses of Language Transcripts (SALT; Miller & Iglesias, 2008). Analysis of Variance (ANOVAs) tests comparing the three elicitation methods revealed no significant differences in Mean Length of Utterance in Words (MLUw) and the total number of different words (NDW) among the methods. The findings indicate that all three language elicitation methods are equally effective in assessing language skills in Spanish-speaking DLLs. Descriptive data demonstrates that some children benefitted more with one time of method that others. This suggests the importance of employing diverse methods for language sample collection, tailored to the children's cultural backgrounds and home language exposure, to ensure equitable language assessment practices. The study underscores the need for SLPs to adapt assessment protocols to the changing demographics and linguistic diversity of the populations they serve.

Keywords: Bilingualism, Dual-Language Learners, Assessment, Language Sampling, Culturally and Linguistically Diverse