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Examining Narrative Elicitation Methods for Young Spanish-English Bilinguals

A thesis submitted in partial fulfillment
of the requirements for the degree of
Bachelor of Science in Speech Pathology and Audiology

by

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ABSTRACT

The National Literacy Panel on Language Minority Children has raised concerns regarding academic performance of English language learners (ELL). Research has demonstrated that ELL children did not meet specific academic standards in fourth grade, and this trend continued through eighth grade (de Jong, 2004). There is a strong relationship between school performance and narrative language ability (Feagans & Applebaum, 1986; Price, Roberts & Jackson 2006; Wellman et al., 2011). Therefore, it is important for educators to monitor English narrative performance of ELLs to help determine academic performance. One way of examining student’s narrative productions is through annual assessments, which measure progress toward the Common Core State Standards in the areas of Reading and Literature (e.g., RL 1.1) and Speaking and Listening (e.g., SL 1.1, SL 1.6) (NGA Center & CCSSO, 2010). However, it may be more beneficial to monitor changes in English narrative performance more regularly to be able to respond to observed incremental changes. One way to measure incremental changes is through regular assessments of narrative productions. There are two main elicitation methods for narratives, namely spontaneous narrative tell and narrative retell. However, it is not clear which of these methods is most representative of English narrative production for ELL students.

The purpose of this study is to determine which elicitation method (spontaneous narrative tell or narrative retell) elicits the most representative English narrative language sample of first grade Spanish English bilingual (SEB) children. Two elicitation methods (spontaneous narrative tell and narrative retell) were used to elicit narrative English language samples of first grade SEB students in a local elementary school.
The performance on each narrative was compared to determine which elicitation method yielded the best narrative language performance results. Results indicated participants yielded higher scores for the Proportion of Story Grammar Episodes (PSGE) Index for the narrative retell compared to the spontaneous narrative tell. Hence, the participants used more story grammar elements on the narrative retell task rather than then spontaneous narrative tell. There was no statistical difference between the spontaneous narrative tell and the narrative retell on theEpisodic Complexity (EC) Index, which measures the ability to impose structure on story grammar elements.
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CHAPTER I
INTRODUCTION

The number of English language learners (ELL) students in American public schools has been steadily increasing over the years. ELL children speak a primary language other than English and are also learning English as a second language. ELL students attending schools in the United States have increased 10% (an estimated 4.7 million students) since 2002 (U.S. Department of Education NCES, 2013). Interestingly, the western part of the United States (i.e., Oregon, Hawaii, Alaska, Colorado, Texas, New Mexico, Nevada, and California) reported an estimate of 10% or more ELL students enrolled in these specified states (Swanson, 2009; U.S. Department of Education NCES, 2013). New York also reported an increase in the ELL population (Swanson, 2009).

In 2009, states created academic standards called the Common Core State Standards (CCSS) that allowed comparisons of student performances across the United States by establishing a single set of academic standards for students in kindergarten through high school. As of February 2014, forty-five states have chosen to adopt the CCSS (NGA Center & CCSSO, 2010). Alaska, Texas, Virginia and Nebraska have chosen not to adopt the CCSS (NGA Center & CCSSO, 2010).

If a state has chosen to adopt the CCSS, students, including ELLs, in that state are expected to meet academic standards set forth in the CCSS (NGA Center & CCSSO, 2010). The CCSS has two major areas of standards, English Language Arts and Mathematic. The English Language Arts CCSS are divided into the following specific standards: Reading (Literature, Information Text, and Foundational Skills), Writing, Speaking & Listening, and Language (NGA Center & CCSSO, 2010). Narratives are under the Reading: Literature and Speaking and
Listening standards. Students are expected to meet Reading: Literature standards such as “retell stories, including key details, and demonstrate understanding of their central message or lesson” (CCSS.ELA-Literacy.RL1.1) and “describe characters, settings, and major events in story, using key details” (CCSS.ELA-Literacy.RL1.3).

Stein and Glenn (1979) defined narratives as real or imagined events about a character that engages in a goal-directed behavior. Narratives are typically temporal events that are sequenced to discuss an event from the past or in the future (Hughes, McGillivray, & Schmidek, 1997). Because narratives integrate phonological, morphological, syntax, semantic, and pragmatic skills; they have the potential for providing information about a child’s academic performance.

Research indicated there is a strong relationship between narrative language ability and school performance for monolingual English speakers (Feagans & Applebaum, 1986; Price, Roberts, & Jackson 2006; Wellman et al., 2011). Furthermore, researchers have documented developmental English narrative growth patterns of monolingual English speakers (Glenn & Stein, 1980; Hedberg & Westby, 1993; Hughes, McGillivray, & Schmidek, 1997; Liles 1987). However, little is known about the English narrative development of ELLs. Although there is a dearth of studies on the English narrative development of ELLs, there were studies on literacy skills. Research indicated that ELLs are falling behind their peers on literacy measures such as vocabulary and reading comprehension (August, Carlo, Dressler, & Snow, 2005; Kindler, 2002).

Because there is a lack of English narrative research for ELLs, educators do not have a clear understanding of how English narratives develop for ELL students. Although annual tests are administered to ELL children, it does not inform the educator on how these children develop
their English narrative skills. Furthermore, it is unclear whether the standards set forth in the CCSS are appropriate for ELL learners even though they are expected to meet these standards.

One way to better understand English narrative development of ELL children is to monitor their English narrative performance. By doing so, educators can ensure that ELL students are developing their English narrative skills appropriately and are able to meet realistic expectations. Researchers have monitored narrative performance of monolingual (Feagans and Applebaum, 1986), bilingual (Fiestas & Peña, 2004), and ELL (August, Carlo, Dressler, & Snow, 2005) children by collecting narrative language samples. Several researchers have elicited narratives through the use of wordless “frog” picture books by Mercer Mayer. These “frog” picture books have been deemed culturally sensitive and are commonly used to assess narrative skills in students who are monolingual and bilingual (Berman & Slobin, 1994; Pearson 2002). Culturally sensitive means that the children would look at the “frog” picture books and would be able to relate to the scenarios presented in the wordless “frog” picture books (Berman & Slobin, 1994). The most common narrative elicitation methods used in research and in progress monitoring are spontaneous narrative tells and narrative retell methods (Fiestas & Peña, 2004). Both elicitation methods have been used in conjunction with the “frog” picture books (e.g., Berman & Slobin, 1994; Rojas & Iglesias, 2013).

This study examined the effects of narrative elicitation methods on English narrative language performance for first grade Spanish-English bilingual (SEB) children. The purpose of the study was to determine which English narrative elicitation method yields the most representative English narrative language performance in SEB children to predict if one elicitation method produces better PSGE Index or EC Index scores. Performance on these
measures would be indicative of English narrative growth, which in turn may be able to predict later academic performance.
CHAPTER II

LITERATURE REVIEW

It is projected that by 2020, school-aged ELL students attending U.S. public schools will increase by 25% (U.S. Census Bureau, 2009a; U.S. Department of Education NCES, 2013a). Educators will encounter more students who are learning English in addition to speaking another language. In America, 69% of ELL students are enrolled in a school where more than half of the student population is ELL (Cosentino de Cohen, 2005). ELL students are expected to meet the same standards as their monolingual English peers. One of the largest populations of ELL children is SEB (US Department of Education NCES, 2013a).

Common Core State Standards

Creation of the CCSS in 2009 was for the purpose of being able to set standards in which students’ academic performance across the nation could be compared among children attending U.S. public schools (NGA Center & CCSSO, 2010). To date, 45 states have adopted the CCSS with the intent to prepare children for post high school skills. The CCSS were designed for all monolingual English children, bilingual children, and children with learning challenges to meet the same standards across states (NGA Center & CCSSO, 2010).

According to the CCSS, there are specific grade level standards in the areas of Mathematics and English Language Arts to prepare students for post high school opportunities in the workplace or for college (NGA Center & CCSSO, 2010). Skills in Mathematics and English Language Arts are addressed as early as first grade. For example, in English Language Arts, a first grader is expected to:

RL1.1 Ask and answer questions about key details in text; RL.1.2 Retell stories, including key details and demonstrate understanding of their central message or lesson; RL1.3
Describe characters, settings, and major events in a story, using key details; RL1.6 Identify who is telling the story at various points in a text; RL1.7 Use illustrations and details in a story to describe its characters, setting, or events; SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media; SL.1.4 Describe people places, things, and events with relevant details, expressing ideas and feelings clearly; SL.1.6 Produce complete sentences when appropriate to the task and situation; and SL.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking (NGA Center & CCSSO, 2010).

**Spanish-English Bilinguals Not Meeting Academic Standards**

Although ELLs are expected to meet the same CCSS as their monolingual English peers, children identified as ELLs have an increased chance in academic underperformance in all subject areas within school including math, science, language arts and reading (Montrul, 2004). The difference in academic performance between monolingual English speakers and ELL has raised national concerns. The U.S. Department of Education IES NCES NAEP, 1992-2013) revealed that general academic performance of Hispanics is considerably lower than those who were non-Hispanic (Aud, Fox, & KewalRamani, 2010; Hemphill, & Vanneman, 2011; US Department of Education IES NCES NAEP, 1992-2013). The U.S. Department of Education conducts an annual report card, which is known as the National Assessment of Educational Progress (NAEP) to determine student academic progress over time (US Department of Education NCES NAEP, 2013b). Findings from the report card indicated that the academic progress of ELL Hispanic students continues to regress in comparison to their White peers in assessment methods such as the SAT and ACT in where high levels of math, science, language arts and reading are required (Aud, Fox, & KewalRamani, 2010).
In addition to the national report card, research suggests that ELL students are not meeting expectations (Aud, Fox, & Kewlam-Ramani, 2010; August, Carlo, Dressler, & Snow, 2005; August & Shanahan, 2006; deJong, 2004; Hemphill & Vanneman, 2011). For example, a review conducted by de Jong (2004) examined the current English academic performance of 4th and 8th grade SEBs who previously received ELL services. During the participant’s earlier years of elementary school, these students were classified as ELL and received ELL services. With time, these students exited out of these services as they were no longer relevant and needed. The results from this study revealed that these ELL students were not meeting math and science standards but met language art standards (de Jong, 2004). Due to the language complexity used in math and science, the researcher found that these children did not yet acquire the necessary higher level academic language skills required for these subject areas (de Jong, 2004). Although these students met Language Art standards, the study showed complex oral language proficiency is crucial for success in areas of math and science in later school years.

Proficiency in oral language skills in the early years may influence academic performance in later years. Identification of ELLs, specifically SEB students, who struggle with oral language skills in the early years may influence language and literacy learning in later years. Therefore, identification of ELL students struggling with oral language should happen in early academic years to ensure appropriate interventions are implemented in a timely manner. The brain has the ability to facilitate language growth during sensitive periods of development. The first three years of life is considered to be the period of maximal brain growth (Bleile, 2014). Children need a foundation of oral language early in life to prepare them for later academic performance. Within the first three years of life, a child has the ability for maximal speech and language development, which is a precursor to later literacy skills (Bleile, 2014). The years from
age 5 to 7 are known as the “window of opportunity”. The “window of opportunity” is when the influence of the environment is particularly facilitative in the acquisition of language and when children gain language with the greatest amount of ease (Pence, & Justice, 2011).

In addition to these time sensitive years, oral language proficiency in a second language may impact a child’s ability to meet academic standards. Children who are learning another language also take 2 to 5 years to meet oral language proficiency at a conversational level called basic interpersonal skills (BICS, Cummins, 1979). Children learning another language require 5 to 7 years to acquire cognitive academic language proficiency (CALP, Cummins, 1979). There is a possibility that oral language proficiency in English (the child’s second language) may also be a reason why ELL students are not meeting academic standards. Hence, it is imperative that educators understand the development of children’s English oral narrative language skills because English is the primary language taught in most schools. Demonstration of difficulty with English oral language may be indicative of later academic learning difficulties.

Other factors may be contributing to low academic performance of ELL children. Exposure to English and linguistic isolation may contribute to ELLs performance in the academic environment in both positive and negative ways. Exposure to English and parental factors may put ELL children at risk for meeting grade level academic expectations. In the year 2000, it was reported, that six out of seven ELL students enrolled in public elementary schools lived in linguistically isolated households where a language other than English was spoken at home (U.S. Census Bureau, 2009a; Rojas & Iglesias, 2012). Linguistically isolated households have the potential to be considered a disadvantage. One reason is that the environment may limit the opportunity for children who speak another language besides English to be exposed to English, the language that is required for their successful performance at school (Rojas &
Iglesias, 2012). Children need to acquire CALP in English to perform well in school where English is the primary school language. However, individuals need to build off of conversational language skills (BICS) to obtain higher academic language skills (CALP). Without excessive exposure to English, this puts ELLs who are linguistically isolated at-risk to have English oral language proficiency skills needed for academic learning.

Although ELLs need to acquire proficiency in their school language, it is also important that they maintain their home language to communicate with family. Rojas & Iglesias (2012) hypothesized that residing in a neighborhood where a language other than English is spoken can be advantageous because it reinforces learning of the child’s native language. For example, many ELL students live in households where a language other than English is spoken as the primary language (Rojas Iglesias &; 2012; U.S. Census Bureau, 2009a) and these students are able to communicate with their families and with peers and adults in their community.

Parental education, language proficiency, and engagement of literacy activities may also influence the acquisition of children’s language skills (Hart & Risley, 1995; Purcell-Gates, 1996; Rescorla & Achenbach, 2002; Strickland & Taylor, 1989). DeBaryshe (1995) found that the more literate the parent, the more concerned the parents were about their child’s language performance and the ability for the child to perform among their peers. For children who received little parental involvement or whose parents did not receive higher education, children were more at-risk for developing language skills that did not meet academic standards.

In summary, research has indicated that ELL students are falling behind their monolingual English peers in academic performance. Proficiency in oral language, learning English as a second language, linguistic isolation, and parental involvement are factors that may impact academic achievement for ELL students and contribute to their underachievement when
compared to monolingual peers (Cosentino de Cohen, 2005). Further research may be needed to tease out which potential reasons may be impacting why ELLs are not meeting expectations the most. One area to further explore is to examine developmental patterns of English narrative development of ELLs.

**Importance of Narratives**

More developed narrative language skills have been linked to stronger complex language skills and higher literacy attainment in later years for monolingual English speaking students (Feagans & Applebaum, 1986; Stein & Glenn, 1979). Whereas, less developed narrative language skill have been linked to academic underperformance. Because of the strong relationship between narrative skills and later academic performance, narratives have been used to identify children who struggle academically (Speece, Roth, Cooper, & De LaPaz, 1999). Performance on narratives may assist in identifying children who are at-risk or who may not be meeting academic standards.

Narratives are considered to be appropriate predictors in academic success and performance due to the complex skill need to create narratives. For example, narratives require the integration of the five areas of language (semantics, phonology, morphology, syntax and pragmatics). In an early study, Feagans and Applebaum (1986) examined the narrative performance of first grade children with deficits in reading comprehension in participants who met federal and state guidelines for a learning disability. The participants acted out a story that was told to them to measure comprehension and paraphrase. The number of trials to accurately act out the story was the comprehension measure. Paraphrase was measured by the accuracy of the participant acting out the story. Academic measures were evaluated using the Wechslser Intelligence Scale for Children-Revised and the Peabody Individualized Achievement Test.
Findings revealed that first grade children with strong narrative skills performed better on reading and math standardized tests compared to those children who demonstrated weaker narrative skills (Feagans & Applebaum, 1986). Hence, narratives played an important role in diagnostic and prediction decisions in academic settings.

Narratives are important because narratives have the potential to help educators recognize the English developmental patterns of SEB children. Utilizing narratives as the method of assessment will allow educators and researchers to further understand the child’s true ability in English narrative language performance. By monitoring the English narrative performance of the SEB child, speech language pathologists, educators, and parents could detect difficulties with producing narratives and determine if additional academic supports are needed to meet academic expectations.

**State of SEB Research**

Studies on monolingual English children have demonstrated a developmental pattern of children’s narratives (Glen & Stein, 1980; Hedberg & Westby, 1983; Hughes, McGillivray, & Schmidek, 1997; Liles 1987). Hughes, McGillivray, and Schmidek (1997) described monolingual English narrative development on a continuum using narrative story structure levels, which begin with a descriptive sequence in preschool to a complete episode around 7 to 8 years old to embedded episodes around 11 years of age. Monolingual English speakers typically develop narrative skills on a continuum with key development in three ages of preschool (6 years), 7 to 8 years, and around 11 years (Hughes, McGillivray, & Schmidek, 1997). A descriptive sequence has no causal relations and describes characters or surroundings (Hughes, McGillivray, & Schmidek, 1997). A complete episode includes the plan of a character and how the character reaches the goal and uses story grammar elements of an initiating event, action, and
consequence (Hughes, McGillivray, & Schmidek, 1997). An embedded embeds a complete episode within another episode (Hughes, McGillivray, & Schmidek, 1997).

Although there is developmental information for monolingual English speakers, little is known about the English narrative skills of SEB children. Much of the narrative research for young SEB children has focused on using narratives to analyze language productivity and complexity (i.e., mean length utterance (MLU), total number of words (TNW), number of different words (NDW)) rather than to examine narrative language performance (i.e., story grammar elements produced, structure of the story grammar elements). A brief review of the current state of SEB narrative research will follow.

Fiestas and Peña (2004) examined language productivity (total number of words, number of C-units, and mean length of C-unit) in spontaneous narrative tells of twelve SEBs between 4 and 6 years of age during two different elicitation tasks (wordless story book and picture). In the storybook task, the examiner showed the wordless picture book *Frog, Where Are You?* (Mayer, 1969) to the child and then asked the child to produce a story. For the picture task, the examiner provided the child a picture of a traditional Mexican American family birthday party and gave the child four prompts to produce a narrative (Fiestas & Peña, 2004).

Findings revealed SEB children told equally complex narratives as measured with mean length utterance in both languages. However, on the wordless storybook task, it was noted that the children had a greater number of initiating events in Spanish than in English and produced more consequences in English. On the picture task, there were no significant differences on language productivity for English and Spanish.
Similarly, Rojas and Iglesias (2013) conducted a three-year, longitudinal study examining language productivity (TNW, NDW) and language complexity (MLU) in Spanish and English narrative retells of 1,723 SEB children from kindergarten through the end of 2nd grade. However, Rojas and Iglesias (2013) used only a narrative retell task to measure language productivity. The participants were asked to retell Frog Stories (Frog, Where Are You? (Mayer, 1969), Frog Goes to Dinner (Mayer, 1974), Frog on His Own (Mayer, 1975), One Frog Too Many (Mayer & Mayer, 1975) in October and May of kindergarten, first, and second grade. The task was completed in Spanish and then in English the following week.

Results stated that children demonstrated different growth patterns on language productivity measures when comparing performance in Spanish and English. For example, growth trajectories for Spanish WPM, NDW, and MLU were described as curvilinear (exponential accelerations or decelerations), nonmonotonic (alternating periods of positive and negative growth). In contrast, the trajectories for English WPM, NDW, and MLU were described as linear (gradual and uniform growth), nonmonotonic, and discontinuous (periods with sudden shifts or inconsistent positive or negative growth) for Spanish and English. The authors highlighted the importance of examining children’s language productivity in both languages due to different developmental patterns in each language. From this study, researchers have identified language productivity growth patterns of SEB children in English and Spanish when retelling stories.

In contrast to the previous studies that examined language productivity, Gutiérrez-Clellen (2002) examined narrative language performance. Specifically, she compared the performance of story grammar elements when narratives were elicited using narrative retells in both English and Spanish for thirty-three normally developing bilingual SEB children. The
narrative retell task was counterbalanced for presentation of the storybook language. The first half of the participants listened to Tiger’s Whisker, which was adapted from the study of Stein and Glenn (1979), in English first. The other half of the participants listened to El Naufragio (Shipwreck) (Verdick, 1973) in Spanish first. The story comprehension task required the children to respond to inferential questions (i.e., “why”, “what if”, “main idea”, “cause effect”) and factual questions (i.e., “who”, “what”, “where”, “when”). Narratives were measured as “recalled”, “related inferences”, or “unrelated inferences”.

Results revealed that participants recalled more statements in English than Spanish with large effects ($d = .73$). Participants also demonstrated better comprehension in English than Spanish with large effects ($d = .72$). This implies that during narrative retell tasks, SEB children may perform better in English than in Spanish.

In addition to Gutiérrez-Clellen (2002), Olszewski (2013) conducted a longitudinal study examining the English narrative development of ELL children. She examined the ability to recall fundamental story grammar elements (i.e., initiating event (IE), action (A), obstacle (O), consequence (C)) and the ability to impose an episodic structure on story grammar elements for 189 SEB students who matriculated from kindergarten through the end of second grade. Narratives were elicited in the fall and spring of kindergarten, first grade, and second grade. Children were asked to view Mercer Mayer wordless picture books called “frog” stories, which were accompanied by a script. One narrative story was presented to the participant at each testing time. There were a total of 4 books used and two were used twice.

Narratives were measured using two research-designed indices called the Proportion of Story Grammar Elements (PSGE) Index and the Episodic Complexity (EC) Index. The PSGE Index measured the total number of initiating events, actions, obstacles, and consequences retold
by the participants. An *initiating event* was something that begins a story. An *action* was something that happens. An *obstacle* was something that gets in the way of someone completing an action. A *consequence* was something that concludes the initiating event. The PSGE Index evaluated the number of story grammar elements a student produced within the narrative. A ratio score of total elements out of potential elements comprised the PSGE Indices. EC Index determined whether the SEB student was able to impose a structure with the use of the story grammar elements. The EC Index measured the ratio of complete (IE, A, C) episodes and complex (IE, A, C + additional A or additional O). The ratio of complete and complex episodes out of potential complete and complex episodes comprised the EC Index.

Results from this study revealed that there were similar trend lines for English PSGE Index and EC Index for ELLs. These trend lines can be described as linear, nonmonotonic (changing directions), and discontinuous (increases and decreases). However, there was a time frame when the trend lines were slightly different between fall of first grade and fall of second grade where the trends were in opposite directions. The PSGE Index was higher than the EC Index at all six time points. Over time, children performed significantly better on both indices from kindergarten through second grade indicating developmental narrative growth. Findings also revealed that males and females did not perform differently on PSGE and EC Indices. Olszewski (2013) also discovered that children who demonstrated higher English oral language proficiency skills consistently outperformed children with average or low English oral language proficiency skills. In summary, narrative performance was measured using story grammar elements and episodic structure. SEB children demonstrated developmental English narrative patterns when producing English narrative retells.
In summary, there are a limited number of studies conducted with SEB children examining narrative language performance. Most studies focused on using narratives to measure language productivity and complexity (i.e., MLU, NTW, NDW) and two studies evaluated narrative performance of ELLs. Because of the dearth of research regarding the assessment of narrative performance, it is difficult to determine which elicitation method, spontaneous narrative tells or narrative retells, elicits the most representative narrative language sample of young SEB children.

Assessing Narratives

The limited research on SEB children does not provide adequate information to guide assessment and instruction of English narratives. The National Literacy Panel on Language Minority Children and Youth raised concerns for Hispanic ELL students due to their low academic performance on state assessments (August & Shanahan, T, 2006). To address the assessment needs of culturally and linguistically diverse (CLD) students attending school in the United States, the World-Class Instructional Design and Assessment (WIDA) Consortium was developed by educators, local and state educational agencies and researchers across the nation (WIDA, 2013). If states chose to participate in the WIDA Consortium, they had access to WIDA assessment that were developed in conjunction with the CCSS and targeted for ELL students (WIDA, 2013). Within the United States, 30 states including the state of Nevada, joined the WIDA and are now consortium members (WIDA, 2013).

The WIDA consortium assesses language and math proficiency skills of ELL students annually by administering the Assessing Comprehension and Communication in English State-to-State for English Language Leaners (ACCESS) (WIDA, 2013). ACCESS is an assessment given to kindergarten-12th graders who have been identified as ELLs. The WIDA ACCESS
assessment is given annually to the states that have adopted the WIDA to monitor the child’s academic growth and progress. The WIDA is categorized into the following levels of performance: Tier A (beginning level), Tier B (intermediate level), and lastly Tier C (advanced level) (WIDA, 2013). The following Tier’s are further broken down into categories to better understand the student’s academic performance. All three levels target an individual student’s range of skills in language. Figure 1 portrays the six levels of performance within the three tiers based on the student’s performance on the WIDA (WIDA, n.d). Figure 1 was used with permission from WIDA.

Figure 1. Six levels of performance within the 3 tiers on the WIDA ACCESS for K-12 Students.

The WIDA assesses academic language on three different levels: discourse, sentence, and word/phrase (WIDA, 2013). Discourse level evaluates linguistic complexity by measuring quantity and variety of oral and written text (WIDA, 2013). The sentence level evaluates
language form and convention through the use of language structures (WIDA, 2013). The word/phrase level evaluates vocabulary usage by measuring use of specific words or phrases. Narratives are considered part of the discourse level (WIDA, 2013). The levels are further broken down into scores with skills: “1-entering”, “2-emerging”, “3-developing”, “4-expanding”, “5-bridging”, “6-reaching”. Figure 2 is provided to illustrate the skills acquired at each level (WIDA, 2011). Figure 2 was used with permission from WIDA. Although narrative skills are being assessed once a year at the Discourse level, it is beneficial to educators to monitor the skills related to narrative production more regularly. Therefore, it is recommended to assess progress using criterion-references assessments rather than norm-referenced tests (Dollaghan, 2007). Performance on narrative measures could be considered a criterion-referenced test.

| 6- Reaching | • Specialized or technical language reflective of the content area at grade level  
• A variety of sentence lengths of varying linguistic complexity in extended oral or written discourse as required by the specified grade level  
• Oral or written communication in English comparable to proficient English peers |
| 5- Bridging | • Specialized or technical language of the content areas  
• A variety of sentence lengths of varying linguistic complexity in extended oral or written discourse, including stories, essays, or reports  
• Oral or written language approaching comparability to that of English-proficient peers when presented with grade-level material |
| 4- Expanding | • Specific and some technical language of the content areas  
• A variety of sentence lengths of varying linguistic complexity in oral discourse or multiple, related sentences or paragraphs  
• Oral or written language with minimal phonological, syntactic, or semantic errors that do not impede the overall meaning of the communication when presented with oral or written connected discourse with sensory, graphic, or interactive support |
Incremental Narrative Assessments

Students are commonly assessed using norm-referenced tests. Norm-referenced tests are based on the collection of data amongst a peer group. Typically, one standard deviation above and below the mean is considered “typical” or normal (Mehrens & Ebel, 1979). Norm-referenced tests have been used to identify students who may qualify for ELL, speech language, reading, or additional learning services (Mehrens & Ebel, 1979). The downside to using norm-referenced assessments is that they are designed to be stable and not measure incremental changes. They are designed to be given at a minimum every six months to one year. With limited test items and contextual opportunities to demonstrate a child’s knowledge, this assessment approach does not necessarily have the capability to inform educators on small
progress being made by the children or provide insight how to adjust instruction throughout the school year.

One way to assess incremental changes in narratives is by collecting narrative language samples. Narrative language samples are sensitive to small changes in narrative growth (Olszewski, 2013). In addition, the examination of narratives allows educators to identify areas of strength and weakness. There are two ways to elicit a narrative: a spontaneous narrative tell and narrative retell (Fiestas & Peña, 2004). To date, it is not known which elicitation method yields a more representative narrative language sample for SEB children.

The purpose of the study was to determine which elicitation method, spontaneous narrative tell or narrative retell elicited the most representative English narrative language performance samples of young 1st grade SEB children. Specifically, the study answered the following questions:

1. Does a spontaneous narrative tell or retell narrative elicitation method yield the most representative narrative performance on the Proportion of Story Grammar Elements (PSGE) Index in young SEB children?

2. Does a spontaneous narrative tell or retell narrative elicitation method yield the most representative narrative performance on the Episodic Complexity (EC) Index in young SEB children?
CHAPTER III

METHODOLOGY

Institutional Review Board (IRB)

This study used human subjects as the participants; therefore, a proposal was submitted to University of Nevada Reno’s (UNR) Institutional Review Board (IRB) to obtain approval for this project. Simultaneously, a research proposal was submitted to the school district where the study would take place. Both proposals included our intended purpose, methodology, potential risks and benefits to the participants, informed consent forms in English and Spanish, and youth assent scripts. See Appendix A, for a sample of the youth assent script. IRB focuses on protecting the participant’s rights and conducting ethical research. We were granted approval from the school district on December 9, 2013 and from UNR IRB on December 16, 2013 to conduct the research.

Participant Recruitment

The primary investigators (PIs), the author of this study and the author’s mentor, worked closely with the local school district’s Director of English Language Learner (ELL) Department to identify schools with high populations of ELL students. The ELL Department is separate from the schools and their main office is offsite from any school. With the help of the ELL Director, principals of schools with a high population of ELL were invited to participate in the study. The project was discussed in detail with the principals outlining the purpose, and procedures by conducting this specific research study. Six principals provided a letter of support to conduct research at their school.

After the ELL Director and PIs received these letters, the ELL Director and her staff identified potential first grade SEB children who met the study’s inclusion criteria. The
inclusion criteria consisted of the following: 1) in 1st grade, 2) had an annual language proficiency WIDA ACCESS score of “1”, "2", "3", "4", or “5” (entering, emerging, developing, expanding, or bridging), 3) spoke Spanish and English, 4) were considered typically developing and were not receiving an Individualized Educational Program (IEP) for language or learning related disabilities, and 5) those whose data could be transcribed and scored by April 11, 2014.

Following IRB protocol, the ELL Director and her staff disseminated a cover letter accompanied with an informed consent form in Spanish and English to potential participants.

After identification of the students, the ELL Director consulted with the principals at each school to send home Spanish and English UNR IRB approved informed consent forms accompanied by a cover letter to potential participants. Clearly stated in the cover letter and parental consent form was that the children would not be penalized in any way if they chose not to participate in the study. Children had an additional opportunity to opt out before providing narrative language samples and during the study. The parents were given ample time to determine if they wanted their child to participate in the study and an opportunity to contact the study PIs with questions. If the parents gave permission to have their child participate in the study, the parent returned the signed consent form to the school’s principal.

After the signed forms were collected at the schools, the school principal sent the signed informed consent forms to the ELL Director who then notified the PI. The PI collected the signed consent forms and created a de-identified master list to which only she had access.

Participants

This study uses a subset of data from a larger project. The parent study had a total of 60 participants. Due to time constraints for transcribing and scoring the English narrative language samples by April 11, 2014, a smaller sample from the parent study was used for this research
study. The purpose of the parent study was the same as the current study. A random selection of participants was generated from the parent study using a web-based random number generator (Urbaniak, & Plous, 2013) for 26 cases. These 26 participants were selected for this study.

Participants for this study met the following inclusion criteria: 1) in 1st grade, 2) had an annual language proficiency WIDA ACCESS score of “1”, "2", "3", "4", or “5” (entering, emerging, developing, expanding, or bridging), 3) spoke Spanish and English, 4) considered typically developing and not receiving an IEP for language or learning related disabilities, and 5) those whose data could be transcribed and scored by April 11, 2014. A total of 26 participants met these criteria.

Materials

Special equipment was used to collect and analyze the data. To collect oral narrative samples from the participants, a laptop, headphones, digital recorder, and scanned picture books were used. Specifically, a personal PC or Apple laptop or iPad was used to view the English Narrative Stories (Frog Goes to Dinner (FGTD; Mayer, 1969) & Frog Where Are You? (FWAY; Mayer, 1974)). Sony headphones were used (and cleaned between participants) to listen to the narrative retell story (FWAY). A Sony IC Recorder model ICD-PX333 was used to record the English spontaneous narrative tell (FGTD) and the English narrative retell (FWAY). Two Mercer Mayer “frog” stories (FGTD (Mayer, 1969), Mercer Mayer’s Frog Where Are You? (Mayer, 1974)) were scanned and saved as PowerPoints maintaining the proper pages according to the book. Stickers were provided for the participants at the end of the data collection session. The software program Systematic Analysis of Language Transcription (SALT) was used to orthographically transcribe the English narrative language samples (Miller & Iglesias, 2010).
Procedures

English narrative samples were obtained from January 13, 2014 through January 27, 2014 over a two-week time period. These two weeks were the first two weeks the children returned to school from winter break. The number of participants assessed per day was dependent upon the number of signed parent consent forms that were received at each school (i.e., ranged from 1-10+ participants per day for each UNR CITI certified research team member).

Specific procedures were followed to obtain English narrative language samples. The PIs of this study will be identified as UNR CITI research team members throughout this section. Research team members, including the PIs, collected samples from one participant at a time. Each participant was quietly escorted from the classroom to a pre-designated area for collection of the English narrative stories. The research team member and the participant sat on chairs with a table in between the two and the research team member read the standard youth assent script to the participant (See Appendix A for youth assent script). In child friendly terms, the script stated that the participant had the option to opt out of the study at any time without being penalized. If the participant chose not to participate, the research team member escorted the participant back to the classroom.

If the participant chose to participate, narrative language samples were obtained. Before collection of the narrative stories (spontaneous narrative tell and narrative retell) each CITI certified UNR research team used a script to record the participant number, date, story, and time on the SONY IC Recorder model ICD-PX33 digital recorder (See Appendix B for the script). This script procedure was repeated for each story to identify the de-identified participant for transcription and scoring purposes. CITI certified UNR research team members used a
Participant Information sheet to collect necessary information from each participant. (See Appendix C).

After the youth assent was read and the participant script was recorded, the participants viewed the wordless “frog” picture story books on either a laptop or iPad Air. The first story elicited was the spontaneous narrative tell using the FGTD book that was scanned on to a PowerPoint. The research team member assisted the participant in viewing all “slides” of the story book. After the participant viewed all “slides”, the research team member returned to the first slide of the story (the cover). The research team member then asked the participant to tell the story while simultaneously viewing the pictures again and digitally recorded the participant’s story. If the participant required assistance to “flip” through the slides, the examiner assisted the participant. The only prompting provided during this was provided by the research team member. Acceptable prompts included: “What happened in this picture?”, “Tell me more”, or “Are you finished?”.

After the spontaneous narrative tell was collected, a second narrative was collected. The second story was an English narrative retell that was collected immediately after the spontaneous narrative tell. The participant was asked to listen to a prerecorded wordless picture book FWAY (Mayer, 1974). The participant viewed the “slides” on the laptop or iPad while simultaneously listening with Sony headphones to a prerecorded story narrated in English that automatically advanced the slides. The recorded slideshow was approximately 4.5 minutes in length. After listening to the story, the research assistant presented the same wordless picture book without audio starting with the cover “slide” for the participant to retell the story. Again, the research team member recorded the participant script before recording the child’s narrative retell (the second narrative collected). The student was asked to look at the wordless picture “slides” while
simultaneously retelling the story. After production of the narrative retell, the participant was given the option to select a prize (sticker) and was escorted back to class.

Both narrative language samples (spontaneous narrative tell and narrative retell) took a total of approximately 15 minutes per participant depending on the skill level of the participant. Participants who were able to tell narratives with ease were faster than participants who had a difficult time telling narratives.

After all the language samples were collected for that day, the research team member brought the digital recorder to the primary investigator’s research lab at the UNR campus to upload the recordings to a password protected folder on Dropbox that only CITI certified personnel have access to. Original digital recordings of the participants were erased immediately from the digital recorder after they were uploaded to Dropbox. The digital recordings were stored in a password protected folder on Dropbox that only CITI certified personnel had access to. The recordings were identified by participant number and the frog story (FGTD or FWAY). In other words, the digital recordings were deidentified and only the frog story was noted on the transcript, not the information regarding if it was a spontaneous narrative or a narrative tell.

CITI certified UNR research team members who collected the narrative language samples also orthographically transcribed narrative samples using a software program called Systematic Analysis of Language Transcription (SALT; Miller & Iglesias, 2010) and Sony headphones. Sony headphones were used to ensure similar transcription of words amongst research team members. After narratives were transcribed, the transcribed narratives, referred to as “transcripts”, were then scored by other research team members who were blinded to the purpose of the study and who did not collect narrative samples nor transcribe. These research team members were divided into two groups. One group scored the FGTD transcripts and the
other group scored the FWAY transcripts. Each research team member in the FGTD and FWAY was paired with another research team member in that group for reliability scoring purposes. Research team members used a scoring rubric to score transcripts. See Appendix D and E for an example of a scoring rubric. Each pair scored transcripts independently and met to determine interrater reliability.

**Dependent Variables**

English spontaneous narratives and English narrative retells were analyzed using two narrative language performance measures: the Proportion of Story Grammar Elements (PSGE) Index and the Episodic Complexity (EC) Index. A sample of the scoring rubrics for PSGE and EC Indices are in Appendix D. One of the PI's of this study used the scoring rubric for PSGE and EC Indices in a longitudinal study examining the English narrative growth of 199 typically developing Spanish English bilingual students from the fall of kindergarten through the spring of 2nd grade (6 time points) to score secondary episodes (Olszewski, 2013). Secondary episodes are considered the “meat” of the story or the “page turners” (Olszewski, 2013). A primary episode would be the general plot of the book (Olszewski, 2013). Reliability reported for scoring the outcome measures was greater than 90% accuracy for the PSGE and EC Indices deeming them a reliable tool to evaluate narrative performance. The PSGE and EC Indices were selected for this study to examine the secondary episodes from the English narrative language productions of the 1st SEB participants.

**Proportion of Story Grammar Elements Index (PSGE Index).** The PSGE Index measures the incremental changes in the ability to provide story grammar elements: initiating event, action, obstacle, and consequence. The PSGE Index scoring procedure was designed to award points when participants recalled story elements that matched those provided in the model
regardless of the sequential order they were provided in (Olszewski, 2013). The total number of story elements recalled was divided by the total possible for that particular “frog” story and then converted into a ratio for a PSGE Index score (Olszewski, 2013).

**Episodic Complexity Index (EC Index).** The EC Index measures the ability to impose a structure on the story grammar elements to make an episode (initiating event, action, consequence). The EC Index was calculated by adding the number of complete episodes and complex episodes. Secondary episodes might be complete, complex, or incomplete. A complete episode included an initiating event, action, and consequence (Olszewski, 2013). A complex episode includes an initiating event, action, and consequence plus an additional action or obstacle. A complex episode was scored as a “3” for having all three components (IE, A, C) or a “0” if it did not have all three components of an episode (IE, A, C). A participant must have a complete episode to be awarded additional points for a complex episode. Each additional component was awarded “1” point for a complex episode. Not all secondary episodes were identified as complex episodes. An incomplete episode was awarded “0” points and was given to those who were unable to remember the essential information needed to form a complete episode. The complete and complex subtotals were added together and then were divided by the potential episodic complexity points possible for that particular “frog” story yielding a ratio score (Olszewski, 2013).

**Data Analysis & Hypothesis**

Data were then analyzed to determine whether data follows assumptions for parametric, (data follows a normal distribution assumptions) or nonparametric (data does not follow a normal distribution assumptions) analysis. If parametric assumptions were met, paired sample t-test were conducted to compare the results between the performance on the spontaneous
narrative tell in comparison to the narrative retell to determine if one elicitation method resulted in better narrative production on the PSGE and EC Indices. Should the parametric assumptions not be met, then comparable nonparametric analyses were employed.

The purpose of this study was to determine which elicitation method, spontaneous narrative tell or narrative retell, elicits the best language and narrative samples of young Spanish English bilingual (SEB) children. It is hypothesized that the spontaneous narrative tell will focus on the participant’s ability to tell a story rather than relying on memory to retell a story, which may be demonstrated more readily by a narrative retell. It is hypothesized that the spontaneous narrative tell would allow for more creativity and would be indicative of a true representation of narrative skills. The prediction is supported by the Gutiérrez-Clellen’s (2002) study where thirty-three SEBs performed better on their spontaneous narrative tells compared to the narrative retells.

**Blinding**

Research assistants who collected narrative samples and orthographically transcribed the narratives were blinded to the purpose of the study. A separate group of research assistants who scored the transcripts for the PSGE and EC Indices were also blinded to the purpose of the study.

**Reliability**

Reliability was calculated for one hundred percent (26 participants) of the participants’ narrative language samples on three tasks: (1) scoring transcripts for story grammar elements, (2) transferring the information from the transcripts to the scoring rubrics, and (3) data entry into the data spreadsheet. Inter-rater reliability was conducted using point-by-point (PBP) procedures. A PBP inter-rater reliability of 90% or above was deemed acceptable and 90% reliability or better was achieved for all three tasks.
Procedural Fidelity

Individual digital recordings were reviewed to determine the order of elicitation method. The procedure was to elicit the spontaneous narrative tell first followed by the narrative retell. Each research assistant who recorded the stories provided a verbal time stamp on the recording. An independent research assistant listened to 100% of the participants’ digital recordings for each story’s time stamp. The order of the stories exhibited a time stamp indicating the elicitation of the spontaneous narrative tell followed by the narrative retell for 26 participants with 100% fidelity.

Tests of Normality

Tests of normality determine whether the data follow a normal distribution, which will be used to determine if parametric or nonparametric statistical analyses were to be employed. Statistical analyses and visual inspection were incorporated to determine whether the outcome variables followed a normal distribution. Statistically, a Shapiro-Wilk analysis revealed that three out of the four outcome measures were normally distributed. Table 1 shows normality results for the PSGE and EC Indices. The EC Index for FGTD was significant indicating it did not follow a normal distribution, thus violating a parametric assumption. Visual inspection of the outcome variables was also conducted to confirm statistical findings. Normal Q-Q plots for PSGE and EC Indices outcome measures for FGTD and FWAY were determined to follow a normal distribution, even the EC Index for FGTD appeared to be close to normal. Normal Q-Q plots for PSGE and EC Indices for both stories are in Appendix F.
Table 1

*Shapiro Wilk Test of Normality*

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Statistic</th>
<th>df</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGTD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSGE Index</td>
<td>.99</td>
<td>26</td>
<td>0.96*</td>
</tr>
<tr>
<td>EC Index</td>
<td>.90</td>
<td>26</td>
<td>0.02</td>
</tr>
<tr>
<td>FWAY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSGE Index</td>
<td>0.95</td>
<td>26</td>
<td>0.27*</td>
</tr>
<tr>
<td>EC Index</td>
<td>.93</td>
<td>26</td>
<td>0.98*</td>
</tr>
</tbody>
</table>

*Note:* FGTD = Frog Goes to Dinner; PSGE = Proportion of Story Grammar Elements; EC = Episodic Complexity Index; FWAY = Frog Where Are You?; * = significance level above .05 equals a normal distribution.
CHAPTER IV

RESULTS

Descriptive Results

Descriptive results for number of participant, age, gender, and WIDA ACCESS scores are in Table 2.

PSGE Index Mean Results

The PSGE Index is the proportion of story grammar elements on a 1.0 scale. To earn points on the scoring rubric, children needed to recall any of the story grammar elements in any order (initiating event, action, obstacle, consequence). In contrast to the hypothesis, the mean PSGE Index scores were higher (M = .61) for the narrative retell FWAY than the spontaneous tell (M = .52). Performance was statistically significant for the PSGE Index. This means that participants told more story grammar elements when producing English narratives elicited with the narrative retell rather than the spontaneous narrative. Results were in contrast to the hypothesis. Results for PSGE Index can be found in Table 3.

Further analysis was conducted to determine if males and females performed different on either elicitation method when producing English narratives. On FGTD spontaneous tell, females (.55) performed slightly better than males (.49). An independent samples t-test was conducted to determine if the performance between males and females was significantly different. Results revealed performance on FGTD was not significantly different for the PSGE Index (t (24) = .67, p = .35). On FWAY narrative retell, females (.62) scored higher again on the PSGE Index than males (.59). An independent samples t-test was conducted to determine if the performance between males and females was significantly different. Results revealed performance on FWAY was not significantly different for the PSGE Index (t (24) = .46, p = .65).
It was concluded that first grade SEB males and females did not perform significantly different than each other on the PSGE Index dependent on the elicitation method used to obtain a narrative language sample when recalling story grammar elements (PSGE Index). PSGE Index results for males and females can be found in Table 3.

**EC Index Mean Results**

As you may recall, the EC Index is the ability to impose an episodic structure on story grammar elements on a 1.0 scale. To earn points on the scoring rubric, children needed to impose a structure (a complete episode or complex episode) on the story grammar elements (initiating event, action, and sequence). In contrast to the hypothesis, the mean EC Index scores were higher (M = .26) for the narrative retell FWAY than the spontaneous tell FGTD (M = .21). Performance was not statistically significant for the EC Index. This means that participants were able to impose an episodic structure on story grammar elements with better performance when producing English narratives elicited with the narrative retell rather than the spontaneous narrative. Results were in contrast to the hypothesis. Results for EC Index can be found in Table 3.

Further analysis was conducted to determine if males and females performed different on the EC Index dependent on the elicitation method implemented when producing English narratives. On FGTD spontaneous narrative tell, females (.23) performed slightly better than males (.18). An independent samples t-test was conducted to determine if the performance between males and females was significantly different. Results revealed performance on FGTD was not significantly different for the EC Index (t (24) = .67, p = .51). On FWAY narrative retell, females (.31) scored higher again on the EC Index than males (.20). An independent samples t-test was conducted to determine if the performance between males and females was
significantly different. Results revealed performance on FWAY was not significantly different for the EC Index \( t(24) = 1.58, p = .13 \). EC Index results for males and females can be found in Table 3.

Table 2

*Descriptive Information for Participants*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Age (SD)</th>
<th>Mean WIDA ACCESS (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>26</td>
<td>6.9 (.24)</td>
<td>2.61 (1.1)</td>
</tr>
<tr>
<td>Males</td>
<td>12</td>
<td>6.8 (.27)</td>
<td>2.54 (.91)</td>
</tr>
<tr>
<td>Females</td>
<td>14</td>
<td>6.9 (.22)</td>
<td>2.67 (1.26)</td>
</tr>
</tbody>
</table>

*Note:* N = number of participants; WIDA ACCESS = World Class Instructional Design and Assessment Assessing Comprehension and Communication in English State-to-State; SD = standard deviation.

Table 3

*Descriptive Results for FGTD and FWAY*

<table>
<thead>
<tr>
<th></th>
<th>FGTD Spontaneous Tell PSGE Index (SD)</th>
<th>FGTD Spontaneous Tell EC Index (SD)</th>
<th>FWAY Narrative Retell PSGE Index (SD)</th>
<th>FWAY Narrative Retell EC Index (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>.52 (.16)</td>
<td>.21 (.18)</td>
<td>.61 (.14)</td>
<td>.26 (.18)</td>
</tr>
<tr>
<td>Males</td>
<td>.49 (.17)</td>
<td>.18 (.16)</td>
<td>.59 (.14)</td>
<td>.20 (.14)</td>
</tr>
<tr>
<td>Females</td>
<td>.55 (.15)</td>
<td>.23 (.20)</td>
<td>.62 (.15)</td>
<td>.31 (.20)</td>
</tr>
</tbody>
</table>

*Note:* FGTD = Frog Goes to Dinner; FWAY = Frog Where Are You?; PSGE Index = Proportion of Story Grammar Elements; EC = Episodic Complexity, SD = Standard Deviation.
Inferential Results

Nonparametric Test

Statistical analysis indicated that one out of the four outcome measures did not have a normal distribution. Therefore, to answer research question one (whether there was a difference on PSGE Index performance between elicitation methods), a nonparametric Wilcoxon test was conducted to evaluate whether the spontaneous tell and narrative retell differed significantly on the PSGE Index. The results indicated there was a significant difference between elicitation methods on the PSGE Index, \( z = -2.42, p = .02 \).

To answer research question two (whether there was a difference on the EC Index performance between elicitation methods), a nonparametric Wilcoxon test was conducted to evaluate whether the spontaneous tell and narrative retell differed significantly on the EC Index. The results indicated there was not a significant difference between elicitation methods on the EC Index, \( z = -1.12, p = .26 \).

Parametric Test

Although statistical analysis indicated one out of the four outcome measures did not have a normal distribution, visual inspection indicated that all four outcome measures may have a normal distribution. Therefore, parametric tests were conducted to determine if parametric results would be similar to nonparametric tests.

Paired Sample t Test

To answer research question one, a paired sample t test was conducted to evaluate which elicitation method (spontaneous tell or narrative retell) yielded higher results on the PSGE Index. The results indicated that the PSGE Index for FWAY (\( M = .61, SD = .14 \)) was significantly greater than FGTD (\( M = 0.52, SD = 0.16 \)) \( t (25) = 2.9, p = 0.01 \). Findings were similar to the nonparametric test.
To answer research question two, a paired sample t test was conducted to evaluate which elicitation method (spontaneous tell or narrative retell) yielded higher results on the EC Index. The results indicated that the EC Index for FGTD (M = .21, SD = .18), was not significantly greater than FWAY (M = 0.26, SD = 0.18) t (25) = 1.3, p = 0.20. Findings were similar to the nonparametric test.

**Repeated Measures ANOVA**

Because independent paired t test results were similar to nonparametric testing, we wanted to determine the clinical significance of the differences between performance on the PSGE Index between FGTD and FWAY. Therefore, a repeated measures ANOVA was conducted to determine an effect size.

A one-way within-subjects ANOVA was conducted with time as the within factor and the dependent variable being the PSGE Index. The results for the ANOVA indicated a significant main effect, Wilk’s Lambda = 0.75, F(1, 25) = 8.6, p = .01, multivariate partial eta squared = .25. Using benchmarks of small (.01), medium (.06), and large (.14), an effect size of .25 is large (Laerd, 2013). A comparison of the statistical significance findings for nonparametric and parametric results can be found in Table 4. Three different statistical analyses were conducted to determine whether each test was considered to be statistically significant. See Table 4 for a comparison of the p value for both PSGE and EC Indices from the nonparametric and parametric statistical analyses.
Table 4

*Statistical Significance for Nonparametric and Parametric Tests*

<table>
<thead>
<tr>
<th>Statistical Analysis</th>
<th>PSGE Index $p$</th>
<th>EC Index $p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilcoxon</td>
<td>.02</td>
<td>.26</td>
</tr>
<tr>
<td>Paired Sample t-test</td>
<td>.01</td>
<td>.20</td>
</tr>
<tr>
<td>Repeated Measures ANOVA</td>
<td>.01</td>
<td>.20</td>
</tr>
</tbody>
</table>

*Note:* PSGE = Proportion of Story Grammar Elements; EC = Episodic Complexity; ANOVA = Analysis of Variance.
CHAPTER V

DISCUSSION

The purpose of the research project was to determine which narrative elicitation method, a spontaneous narrative tell or a narrative retell, produced a representative sample of first grade SEB children’s English oral narrative language skills. The average age of the participants was 6.9 years old. These first grade SEB children earned English language proficiency scores on the WIDA ACCESS ranging from “1” (entering) to “5” (bridging). Figure 2 shows a depiction of the performance levels of the WIDA ACCESS. The average English proficiency level was “emerging” (2.6). Both males and females performed similarly at a mean of the “emerging” level.

Narrative language performance was measured in two ways. The first outcome variable, PSGE Index, measured how many story grammar elements (initiating event, action, consequence) were told by the participant. The second outcome variable, EC Index, measured the child’s ability to impose an episodic structure on story grammar elements produced.

Research Question One

*Does a spontaneous tell or retell narrative elicitation method yield the most representative narrative performance Proportion of Story Grammar Index (PSGE Index) in young SEB children?*

The first research question focused on the performance on the PSGE Index. As mentioned, the PSGE Index was a ratio of the total number of story elements that the children provided while producing their narratives in English. PSGE Index essentially represents the quantity of details, or story grammar elements, within the story that the children used when telling a narrative. These findings revealed that the PSGE Index scores were significantly higher
for the narrative retell FWAY than for the spontaneous tell FGTD. The average PSGE Index for FGTD was .52 and .61 for FWAY. There were no significant differences between males and females on the PSGE Index for either elicitation method.

Similar research results of better performance on narrative retells in English for SEB children were found in a study by Gutiérrez-Clellen (2002) who examined narrative language performance for 33 typically developing SEB children. Gutiérrez-Clellen (2002) examined story grammar elements in both English and Spanish by using a narrative retell. Although Gutiérrez-Clellen (2002) used different narrative measures, she found that children produced more story grammar elements in English as compared to Spanish indicating a large effect size. In addition, there were differences on the narrative performances for both English and Spanish on the narrative retell and spontaneous narrative tell, further indicating the importance of utilizing both the spontaneous narrative tell and narrative retell when assessing English narrative language performance on SEBs.

Although the mean PSGE Index findings are in contrast to the hypothesis that children would perform higher on the PSGE Index when telling a spontaneous narrative tell rather than a narrative retell, there is reason for this observation. The narrative retell yielded quantitatively more story grammar elements. At first glance, it would appear that the narrative retell might be the most representative sample of narrative language performance. However, the researchers of this study would like to pose a different perspective than this assumption. Perhaps, the spontaneous narrative tells represents how many story elements a child can recall. This ability may increase with an assessment approach called “dynamic assessment”. Dynamic assessment is the process of identifying a child’s skills in addition to their learning potential (Peña et al., 2006). It is possible that the minimal structure provided in narrative retells could be framed as
modified dynamic assessment. Therefore, narrative retells may elicit the potential of a child’s ability to recall story grammar elements rather than their true ability.

In support of the idea of dynamic assessment, another study also demonstrated improved narrative retell abilities after receiving dynamic assessment. A study conducted by Schoenbrodt, Kerins and Geselle (2010) examined story grammar elements of 12 SEB participants using a narrative retell. The narrative retell elicitation tasks were conducted in both English and Spanish (Schoenbrodt, Kerins & Geselle, 2010). An intervention program was implemented to examine the effectiveness of providing intervention to the SEB participants (Schoenbrodt, Kerins & Geselle, 2010). The intervention program resembled a dynamic assessment approach. Intervention took place after the pre-test of the SEB participants which took place once a week for a total of 8 weeks (Schoenbrodt, Kerins & Geselle, 2010). The sessions focused on utilizing strategies such as presenting and defining vocabulary, use of visual organizers (word maps to categorize vocabulary) and reinforcing critical thinking by prompting the child (Schoenbrodt, Kerins & Geselle, 2010).

Story grammar elements were measured to determine the effect of dynamic assessment intervention on the production of narrative retells in English and Spanish. Findings indicated that the mean story grammar elements for the narrative retell task increased when comparing the pretest and posttest in both English and Spanish. These findings support the findings from current research study, which validate better performance on the PSGE Index on the narrative retell rather than the spontaneous tell. Schoenbrodt, Kerins and Geselle (2010) found that their participants were capable of producing more story grammar elements after receiving assistance (dynamic assessment) along the way. The results support the findings of this study suggesting
that the SEB participants had a significant increase from pre to post test in the narrative retell in story grammar elements due to receiving support.

Another possible reason to explain the different performance on the PSGE Index on the elicitation tasks is memory. Because performance on both tasks were significantly different, one could argue that the elicitation method of a spontaneous narrative tell is the child’s true ability to recall story grammar elements, and narrative retells might be considered more of a memory task. Therefore, a more representative sample of narrative language would be elicited through spontaneous tells than narrative retells, which are examining narrative memory.

In support of the idea that narrative retells may be more of a memory task and that spontaneous narrative tells may be more of a representation of narrative ability, another study demonstrated similar results. Olszewski (2013) examined the recall of story grammar elements of ELL children and their ability to impose an episodic structure on story grammar elements on a narrative retell tasks from kindergarten through the end of the second grade. Findings from this longitudinal study indicated different trend lines between the PSGE and EC Indices (Olszewski, 2013). She indicated that the PSGE Index might indicate true narrative ability, whereas the task of recalling story grammar elements may be indicative of a memory task (Olszewski, 2013). This is similar to our reasoning that memory skills may play a role in narrative production and that one ought to be cautious when interpreting the findings from recalling story grammar elements.

The idea of a representative English narrative sample needs to be determined by individual educators, clinicians, and researchers. If the individual is looking for the child’s true ability to recall story grammar elements, a spontaneous tell may be most representative.
However, if the individual is looking for a representative narrative language sample of a child’s potential skills, then a narrative retell might be the elicitation method to choose.

**Research Question Two**

*Does a spontaneous tell or retell narrative elicitation method yield the most representative narrative performance on the Episodic Complexity Index (EC Index) in young SEB children?*

The second research question focused on the performance on the EC Index. As mentioned, the EC Index was a ratio of the ability to impose an episodic structure on the story grammar elements. Findings from this study revealed that one elicitation method did not yield significantly different results on the EC Index than the other. The average EC Index for FGTD was .21 and .26 for FWAY. The mean EC Index for both elicitation tasks (spontaneous narrative tell and narrative retell) was not statistically significant between the two elicitation tasks. The EC Index was also lower than the PSGE Index. There were no significant difference between males and females on the EC Index for either elicitation method. These findings are in contrast to the hypothesis that children would be able to impose structure on story grammar elements easier during spontaneous tells versus retells. However, findings revealed that neither elicitation method yielded significantly higher EC Index scores.

Originally, the assumption was that children would be able to impose an episodic structure on story grammar elements easier on a spontaneous narrative tell than on a narrative retell. The prediction was that if a child had the opportunity to create a story, the child would be able to impose episodic structure on story grammar elements with greater ease since the child had not been exposed to the story previously, allowing for more variability. However, the fact that there were no statistically different results noted during January of first grade on the EC Index between elicitation methods is reasonable due to developmental reasons.
The average age for the children in this study was 6.9 years old. Therefore, it is logical that children performed higher on the PSGE Index than on the EC Index for both elicitation methods. Results suggest that the first grade SEB children may not have fully developed the skills needed to impose a structure on story grammar elements. The ability to create episodic structures appear around 7 to 8 years of age for monolingual English children (Hughes, McGillivaray, & Schmidek, 1997). There is a possibility that findings did not demonstrate significant differences between elicitation methods because these skills are still developing for monolingual English speakers and most likely SEB children. This would make sense as we know from research (Cummins, 1979) that it takes two to five years to gain conversational proficiency (BICS) in another language and five to seven years to gain higher academic language skills (CALP).

As a result of findings from this study, there is a strong assumption that the narrative retell may be a suitable elicitation method for assessing narrative memory by measuring the ability to recall specific story grammar elements (PSGE Index). Conversely, the EC Index may be considered more representative of narrative performance, which might be better measured as the ability to impose structure on specific story grammar elements. Performance on the EC Index elicited by either a spontaneous narrative tell or narrative retell may be a true assessment of the child’s true narrative ability. Performance on the PSGE Index yielded significant outcomes for both FGTD and FWAY. However, performance on the EC Index did not yield statistically significant results for FGTD and FWAY. Hence, the results suggested that the spontaneous narrative retell and narrative retell elicitation methods yielded different outcomes allowing for the possibility to test a child’s potential vs. their true narrative ability.
In summary, Hughes, McGillivaray, and Schmidek (1997) reiterate this developmental fact that the skill of developing individual story grammar elements appear before imposing a structure. Imposing episodic story structure on story grammar elements (EC Index) is a linguistically more complex skill. Furthermore, the ability to recall story grammar elements (PSGE Index) may be more representative of memory where the ability to impose structure on story grammar elements (EC Index) may be a true assessment of narrative ability. Imposing an episodic structure when producing a narrative requires the integration of content and organization. To reiterate, narratives are described as monologues that have temporal sequencing and/or causal events, which require the integration of linguistic, cognitive, and pragmatic skills (Labov & Waletzky, 1967; Reilly, Losh, Bellugi & Wulfeck, 2004).

**Limitations**

This research study allowed examination of English narrative language performance of 1st grade SEB children. By analyzing the participant’s English narrative productions, a better understanding of PSGE and EC Index scores was made. The limitations of this study relate to the sample size, lack of norms, English language proficiency, and research design.

Due to time constraints, the sample size was small (n = 26). The relatively small sample size affects the statistical analyses conducted and the potential for the EC Index to be significantly different when comparing elicitation methods. From the small sample size of 26 participants, it was quite evident that the 1st grade SEBs had not fully acquired their ability to impose an episodic structure on story grammar elements (EC Index) and were, therefore, performing significantly better in terms of their PSGE skills. The remaining 34 participants English narrative language productions from the parent study will be orthographically transcribed and scored to compare results from this study and the remaining. Furthermore, future
research with a longitudinal research design will be implemented to further analyze the English narrative language ability in SEB children. A longitudinal study with the same procedure would be implemented to examine English narrative language production of 1st grade, 2nd grade and 3rd grade SEB children to determine when true narrative skills as measured by the EC Index are fully developed by SEB children and to further compare the results with this study.

The PSGE and EC Indices are helpful in describing different ways to evaluate narrative performance. As these are early researcher-designed measures, there is still yet to be learned about the performance on these measures for typically developing children, ELL, and children with specific language impairment. These two indices indicated that children may first develop their ability to recall story grammar elements and then to impose a structure on them. Findings from this study would be strengthened if performance of these children would be able to be compared to a set of norms.

As you may recall, producing narratives is a complex language skill. It should be noted that narrative samples were collected from children with WIDA scores ranging from “1” to “5”. Figure 1 shows a depiction with the levels of performances. About a third of the sample had WIDA scores as “entering”, which means those children’s language skills are characterized by single statements. These children’s results may have impacted narrative performance results yielding lower performance scores on both or one of the indices. Future research will tease out oral language proficiency and its contribution to performance on the PSGE and EC Indices of narrative performance.

Another limitation to this study is that narrative samples were taken at one time point of young SEB children who are continuing to develop their narrative skills. It is unclear whether or not this one time point would be indicative of developmental patterns. This study allowed
educators and researchers to take another look at what they might actually be assessing when looking at narrative development in the middle of first grade. One major finding was that there were differences between the ability to tell story grammar elements and impose a structure on story grammar elements when retelling a narrative. It is yet to be determined if this is a pattern or an artifact of this one time point. Future research needs to be conducted to come to definitive answers regarding which elicitation method is most representative of English narratives of SEB children. This study examined only first graders in the middle of the year. Future research may include longitudinal studies over several grades and looking at narrative performance during multiple points during the school year. Without conducting a longitudinal study, it will be difficult to comment on developmental patterns of English narrative development of ELLs. However, this study has shed some light on this topic.

**Clinical Implications**

Findings from this study have clinical implications for educators, clinicians, and researchers. The idea of eliciting a narrative sample that is representative may take on new meaning based on this study. It is possible that a narrative retell will yield the most number of story grammar elements recalled. However, it may not be a true representation of the child’s independent skills. If representation means a child’s potential, than a narrative retell would yield better performance. It also appears that the ability to impose an episodic structure on story grammar elements is a skill that develops later than the recalling story grammar elements. Therefore, a representative sample of child’s true narrative abilities may be better represented through the EC Index and that memory of story grammar elements may be better represented by a narrative retell.
This current research study provided new information in regards to types of narrative assessments that may be appropriate for eliciting narrative memory and true narrative language ability. When seeking a child’s potential with assistance, a narrative retell would be appropriate and when in quest for a child’s true narrative language ability a spontaneous narrative tell would be more representative.
REFERENCES


Kindler, A. L. (2002). *Survey of the states’ limited English proficient students and available*


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Reilly, J., Losh, M., Bellugi, U., & Wulfeck, B. (2004). “Frog, where are you?” Narratives in


Emerging literacy: young children learn to read and write (Newark, DE, International Reading Association), 147–159.


U.S. Department of Education, Institute of Education Sciences (IES), National Center for Education Statistics (NCES), National Assessment of Educational Progress (NAEP), various years, 1992–2013 Mathematics and Reading Assessments.


Appendix A

Youth Assent Script

Verbal Script Before Telling Stories:

- “Hi, my name is (CITI certified UNR Research team member).
- You are going to be asked to tell two stories.
- I am going to record you saying these two stories so I can remember your story. If you do not want to tell me the stories, you do not have to tell me the stories. I will take you back to class now.
- Would you like to tell me some stories?” (Feel free to show them the prize they will get when they are finished.)
  - If child says, “no”, then take the child back to class.
  - If child answers “yes”, then CITI certified UNR research team member will say,
- This will take about 15 minutes. If you want to stop at any time, just let me know and I will take you back to class.”
Appendix B

Example of UNR CITI research team member script for FGTD

Begin with the FGTD Spontaneous Narrative Tell:

1. **SAY:** “Today you are going to look at some pictures in a wordless picture book. After you look at the pictures you are going to tell me a story. I’m going to record it so I can remember what you say.”

2. Turn on the digital audio recorder. **SAY** the following:
   - “This is UNR Research Team Member.”
   - “I am here with participant ID”.
   - Today’s date is ____”.
   - The time is ____”.
   - This is FGTD tell.”

3. Have participant view each page of FGTD PowerPoint story on the iPad or laptop

4. When finished, **SAY** “now it is your turn to tell me the story. Whenever you are ready, tell me the story”.

5. Continue recording on the digital recorder.

**ALLOWABLE PROMPTS:**

- “Tell me what’s happening in this picture.”
- “Did you want to tell me more?”
- “Are you finished?”

6. When the participant is finished, stop the recording.
Appendix C

Example of Participant Sheet for FGTD & FWAY

AMBER’S PROJECT
Participant Information Sheet

Participant ID:______________ Date:______________
GENDER: F or M Ethnicity:______________
School:______________ Teacher/Rm:______________

D.O.B:______________ CA:______________
WIDA ACCESS Score:______________

Testing Research Assistant: Fidelity Research Assistant:

Date: __________ Date: __________
Testing: Fidelity:

_____ Youth Assent
_____ 1. FGTD tell
_____ 2. FWAY retell

_____ 1. FGTD tell first
_____ 2. FWAY retell second
Appendix D

Example of *Frog Goes to Dinner* Story & Scoring Rubric of PSGE & EC Indices

---

**Example of Frog Story Rubric**

**Frog Goes To Dinner**

<table>
<thead>
<tr>
<th>Episode 1</th>
<th>Episode 2</th>
<th>Episode 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INITIATING EVENT:</strong></td>
<td><strong>INITIATING EVENT:</strong></td>
<td><strong>INITIATING EVENT:</strong></td>
</tr>
<tr>
<td>___The frog jumped into his coat pocket (and the boy didn’t notice).</td>
<td>___The boy and his family sat down or at a table in the restaurant. OR ___Looking at menus. OR ___While they were looking at the menus the frog jumped out of the boy’s pocket towards the band.</td>
<td>___While they were arguing, the frog jumped away to salad. OR ___Landed on a plate of lettuce salad.</td>
</tr>
<tr>
<td><strong>ACTION:</strong></td>
<td><strong>ACTION:</strong></td>
<td><strong>ACTION:</strong></td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td><strong>AND</strong></td>
<td><strong>AND</strong></td>
</tr>
<tr>
<td>___A2: When the boy and his family arrived/went to a fancy restaurant (went to dinner, went to eat).</td>
<td>___A2: The man looked (inside the saxophone) OR ___A2: awful noise or didn’t work.</td>
<td>___A2: The woman screamed or fell.</td>
</tr>
<tr>
<td><strong>CONSEQUENCE:</strong></td>
<td><strong>CONSEQUENCE:</strong></td>
<td><strong>CONSEQUENCE:</strong></td>
</tr>
<tr>
<td>___The frog peaked out of the boy’s pocket but no one noticed him.</td>
<td>___The frog fell out of the horn OR ___A3: Then the frog fell out of the horn</td>
<td>___The frog was frightened and he jumped away. OR ___A2: The woman screamed or fell.</td>
</tr>
<tr>
<td><strong>CONSEQUENCE:</strong></td>
<td></td>
<td><strong>CONSEQUENCE:</strong></td>
</tr>
<tr>
<td></td>
<td>___The saxophone player was so surprised that he fell backwards into the drum, it ripped. OR ___The saxophone/drum player was mad or screaming/yelling.</td>
<td>___The woman complained (or was angry) to the waiter.</td>
</tr>
<tr>
<td><strong>Possible</strong></td>
<td><strong>Earned</strong></td>
<td><strong>Possible</strong></td>
</tr>
<tr>
<td>4 pt</td>
<td></td>
<td>4 pt</td>
</tr>
</tbody>
</table>
### PROPORTION OF STORY GRAMMAR ELEMENTS (PSGE) INDEX

(Quantity of secondary episode elements used)

<table>
<thead>
<tr>
<th>Secondary Episode Elements</th>
<th>Total number of Secondary Episode Elements Possible</th>
<th>Total number of Secondary Episode Elements Earned</th>
<th>ratio of Secondary Episode elements retold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiating Event</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstacle</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Consequence</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### EPISODIC QUALITY (EI) INDEX

(Ratio of complete and complex episodes)

<table>
<thead>
<tr>
<th>EPISODE</th>
<th>Episode Target</th>
<th>Points Earned</th>
<th>Points Possible</th>
<th>Complete Episode 3 points</th>
<th>Complex Episode or 5 points *must have IE, A, C + * + 1 = 4 points * 2 = 5 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>IE, A, A, C</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td>IE, A, A, A, C</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E3</td>
<td>IE, A, A, C</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E4</td>
<td>IE, A, C</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E5</td>
<td>IE, A, A, C</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E6</td>
<td>IE, A, C</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E7</td>
<td>IE, A, C</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal**

**Total** 1 / 26 =

Note: essential elements for a complete episode are in bold as an example of IE, A, and C. (The student can provide any of the actions.)
Appendix E

Example of *Frog Where Are You?* Scoring & Story Rubric

---

**Example of Frog Where Are You? Scoring Rubric**

**Frog Where Are You?**

<table>
<thead>
<tr>
<th>ID#</th>
<th>Date of Exam:</th>
<th>Scorer:</th>
</tr>
</thead>
</table>

---

**Primary Episode**

<table>
<thead>
<tr>
<th>INITIATING EVENT:</th>
<th>ACTION:</th>
<th>CONSEQUENCE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The frog climbed out of the jar.</td>
<td>The boy and the dog <strong>looked</strong> for the frog.</td>
<td>A reference to the boy and frog going home together or the boy getting a frog.</td>
</tr>
<tr>
<td>He jumped out of an open window.</td>
<td>Must imply or include “Where are you, Froggy?”, “look” or “find” the frog, or the frog is “not there”.</td>
<td><strong>OR</strong> A reference the boy and dog were happy to have a new pet.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possible</th>
<th>Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 pt</td>
<td>1 pt</td>
</tr>
</tbody>
</table>

---

**Primary Episode Total**

---

(don’t accepts “good-bye”)
Frog Where Are You?

<table>
<thead>
<tr>
<th>Episode 1</th>
<th>Episode 2 (Dog)</th>
<th>Episode 3 (boy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the house</td>
<td>In the house</td>
<td>Outside - Boy</td>
</tr>
<tr>
<td>INITIATING EVENT:</td>
<td>INITIATING EVENT:</td>
<td>INITIATING EVENT:</td>
</tr>
<tr>
<td>__The frog was in a jar.</td>
<td>X_The boy and/or dog looked (no find) everywhere (shoe, room) for the frog</td>
<td>__The dog leaned (come) out the window with the jar still stuck on his head.</td>
</tr>
<tr>
<td>ACTION:</td>
<td>ACTION:</td>
<td>ACTION:</td>
</tr>
<tr>
<td>A1: The frog climbed out of the jar.</td>
<td>A1: When the dog tried to look in the jar, he got his head stuck</td>
<td>X__A1: The jar was so heavy that the dog fell out of the window headfirst!</td>
</tr>
<tr>
<td>OR</td>
<td>CONSEQUENCE:</td>
<td>CONSEQUENCE:</td>
</tr>
<tr>
<td>A1: He jumped out of an open window.</td>
<td>X_The boy called out the open window, “Frog, where are you?”</td>
<td>The boy called out the open window, “Frog, where are you?”</td>
</tr>
<tr>
<td>CONSEQUENCE:</td>
<td></td>
<td>The boy picked up (get) the dog to make sure he was ok.</td>
</tr>
<tr>
<td>X_They saw that the jar was empty.</td>
<td></td>
<td>OR</td>
</tr>
<tr>
<td>Possible</td>
<td>Earned</td>
<td>Possible</td>
</tr>
<tr>
<td>3 pt</td>
<td>1</td>
<td>3 pt</td>
</tr>
</tbody>
</table>
Appendix F

PSGE and EC Indices *FGTD & FWAY* Graphical Tests for Normality

*PSGE and EC Indices for FGTD Graphical Tests for Normality*

**Figure 1.** Normal Q-Q plot of dependent variable PSGE Index FGTD testing for normality.

**Figure 2.** Normal Q-Q plot of dependent variable EC Index FGTD testing for normality.
**PSGE and EC Indices for FWAY Graphical Tests for Normality**

*Figure 3.* Normal Q-Q plot of dependent variable PSGE Index FWAY testing for normality.

*Figure 4.* Normal Q-Q plot of dependent variable EC Index FWAY testing for normality.