

Running Head: Gender Differences

Gender Differences in the Macrostructural Narrative Language of Second Grade African
American Children

Research Thesis

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By

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Abstract

There is evidence that a racial and ethnic gap in achievement exists in the US. Recently, a gender achievement gap has begun to gain increased attention. The gender gap is more pronounced in African American and Hispanic American populations than in other racial and ethnic groups. Males tend to achieve poorer academic outcomes than females across academic domains. This descriptive study focuses on narrative ability differences between second-grade African American females ($n = 8$) and males ($n = 5$). Students generated a spoken narrative from the wordless picture book, *Frog, Where Are You?* Narrative ability was assessed using the Narrative Scoring Scheme which measures the quality of narrative macrostructure—the hierarchical organization of the narrative. The NSS measures the extent to which each of the following macrostructural components is produced in the narrative: Introduction, Character Development, Mental States, Referencing, Conflict/Resolution, Cohesion, and Conclusion. Results revealed no group differences in macrostructural narrative language ability. These findings indicate that narration may be an area of linguistic strength for African American males.

INTRODUCTION

The significant gap in educational achievement that exists by race and ethnicity in the United States is well-documented and widely referenced (Downey, 2008; Jencks & Phillips, 1998; Kao & Thompson, 2003; Lee, 2002; Weddington, 2010). On average, African American (AA) children attain poorer academic outcomes on all educational levels than their White counterparts. Recently, another achievement gap has begun to gain increased attention. Researchers have found that males tend to achieve poorer academic outcomes than females across academic domains, regardless of race or ethnicity (Coley, 2001; Matthews, Kizzie, Rowley, & Cortina, 2010; Pomerantz, Altermatt, & Saxon, 2002). The risk of neglecting these issues could result in the underdevelopment of these children, so identifying where fallbacks existent is pertinent.

Understanding oral language ability differences among males and females allows for educators and clinicians the opportunity to be proactive and confront the academic achievement gaps that exist among students. Narratives are a great way to assess this skill because they provide insight into the underpinnings of language competence. As early as second grade, children are using metalinguistic skills which can later predict academic achievement in reading and writing abilities. In addition, narratives represent a rich and ecologically valid context within which to examine children's language use. In fact, narration is often included as part of state educational benchmarks, such as the Common Core Standards adopted by 45 of 50 states (National Governors' Association, Center for Best Practices, & Council of Chief State School Officers, 2010). Ohio recently adopted the Common Core State Standards which will officially be introduced in the 2014-2015 school year for grades K-12. Students in second grade will be required to "tell a story or recount an experience with appropriate facts and relevant, descriptive

details, speaking audibly in coherent sentences,” as well as, “create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings” (National Governors' Association et al., 2010). It is important for elementary school students to be proficient in oral narration so that they are articulate, which will enable them to effectively demonstrate their ideas in a clear and concise manner. Likewise, because oral narration is present in conversation, to be proficient in producing a coherent narrative can provide social acceptance as well as the ability to adapt their narratives to formal and informal settings. In the review of the literature that follows, we will discuss the development of narrative macrostructure in several school-age populations, including: typically developing, language-impaired, and AA students. We will then turn to a discussion of gender differences in narrative macrostructure. The literature review will end with a discussion of the current study and research questions.

Typical Development of Narrative Structure during the School-age Years

Narrative structure refers to both macrostructure—the hierarchal organization of the narrative, and microstructure—the syntactic and semantic productivity, complexity, and accuracy of the narrative. Studies of narrative development that can provide a basis for normative comparisons have been conducted almost solely on fictional narratives and have shown that school-age children demonstrate maturation in narrative macrostructure (Heilmann, Miller, Nockerts, & Dunaway, 2010; Muñoz, Gillam, Peña, & Gulley-Faehnle, 2003; Ukrainetz et al., 2005) and microstructure (Greenhalgh & Strong, 2001; Muñoz et al., 2003).

As interest in the development of narrative skills has grown over the past three decades, a variety of macrostructure analyses have been proposed, including story grammar/episodic structure description (Allen, Kertoy, Sherblom, & Pettit, 1994; Fiestas & Peña, 2004; Merritt &

Liles, 1987; Price, Roberts, & Jackson, 2006; Soodla & Kikas, 2010; Stein & Glenn, 1979), cohesive adequacy (Horton-Ikard, 2009), evaluative language analysis (Shiro, 2003), expressive elaboration (Ukrainetz et al., 2005; Ukrainetz & Gillam, 2009), and high-point analysis (Celinska, 2004; McCabe, Bliss, Barra, & Bennett, 2008).

Recently, the Madison Metropolitan School District SALT working group produced the Narrative Scoring Scheme (NSS), which is another measurement of narrative macrostructural abilities. The NSS assesses seven elements that form a coherent narrative: introduction, character development, mental states, referencing, conflict/resolution, cohesion, and conclusion. For an *introduction* to obtain a proficient rating, it must include a description of the setting, as well as descriptions of the main character(s). Next, *character development* is appraised. Throughout the narrative, all characters must be described and distinguishable between main and supporting characters, while also using a fair amount of reported speech. Additionally, the narrative must include *mental states*, which provide insight to characters internal thoughts and feelings (e.g., believe, scared, happy). *Referencing* includes the production of antecedents to pronouns clearly throughout the narrative. The fifth characteristic measured by the NSS is *conflicts and resolutions*, which is the presence or absence of conflicts and resolutions found in the story, as well as how each event is described. *Cohesion* is another element of this measure which describes the logical order of events, smooth transitions, and larger or smaller emphasis of events, depending on the importance of occurrences. Lastly, the *conclusion* is examined to ensure that the narrative clearly comes to an end. Failure to fulfill these criteria would result in a lower score.

Heilmann, Miller, and Nockerts (2010) examined four widely-used narrative measures to determine which was more perceptive of young elementary school students' skills when testing

for knowledge of macrostructure. After examining plot and theme analysis, Applebee measure, Stein measure, and NSS, findings revealed that the NSS had a wider range of scores when compared to other measures. None of the participants scored above 90% for the NSS but 30-35% did for the other three measures of narrative macrostructure. This indicates that these three measures were unable to adequately determine areas of narrative strengths and weaknesses for the tested group. The study confirmed that the NSS was more difficult to master than other measures of narrative macrostructure (Heilmann et al, 2010).

Multiple studies have demonstrated developmental growth in narrative macrostructure (Heilmann et al., 2010; Muñoz et al., 2003; Ukrainetz et al., 2005). Using the wordless picture book *Frog, Where Are You?* (Mayer, 1969), Muñoz and colleagues (2003) elicited fictional narratives from 24 typically-developing low-income Latin American children, ages 4 versus 5 years. Results indicated that older children produced more complete episodes than did younger children. Ukrainetz and colleagues (2005) used short picture sequences and single pictures to elicit fictional narratives from 293 typically-developing American children, ages 5-12 years. This study discovered that each element of expressive elaboration tended to increase with age. More recently, Heilmann and colleagues (2010) elicited fictional narrative retellings of *Frog, Where Are You?* (Mayer, 1969), from 129 typically-developing American children, ages 5-7 years. Findings indicated that narrative macrostructure, as measured by the NSS, was significantly correlated with age as well. Taken together, these studies provide evidence that frequency of narrative macrostructure features increase and well-formedness of narrative macrostructure improves with age.

Macrostructural Narrative Language of School-age Children with Language-Impairment

Macrostructural narrative language has been studied in school-age children with various

disabilities. These studies have focused on children with attention deficit hyperactivity disorder (Luo & Timler, 2008), children who stutter (Bajaj, 2007), and children with expressive language delay (Manhardt & Rescorla, 2002).

Luo and Timler (2008) examined narration in a group of school-age children with ADHD and with ADHD/LI. These researchers analyzed two measures of narrative macrostructure (story grammar, goal-attempt-outcome (GAO)) and determined that narratives with significantly fewer macrostructural elements are often produced by children with ADHD/LI and only LI, while GAO units are common in narratives written by children with typical development and those with only ADHD (Luo & Timler, 2008). These findings indicate that the combination of ADHD and LI can be detrimental to one's macrostructural proficiency.

Narrative macrostructure was also examined by Bajaj (2006) in a study that sought to determine whether narrative performance differs between children with fluent speech and children who stutter. After acquiring 44 language samples from European American males, ages 5;10 to 8;10, it was determined that the mean NSS score for children who stutter was lower than the mean NSS score for children with fluent speech. However, the difference in scores was not large enough to be statistically significant. Thus, narrative organization, as measured by the NSS, does not differ between children with fluent speech and children who stutter.

Narrative macrostructural language has also been studied in children who begin speaking later in life, also known as late talkers (Manhardt & Rescorla, 2002). In a longitudinal study of 54 children, findings revealed that late talkers do in fact obtain lower story grammar structure scores than their typically developing peers.

Narrative Language of African American Children

Despite the lack of published research performed on macrostructural narrative language

of AA children, some interest has been directed toward the general use and development of narrative abilities among this population.

In a study of oral narration in preschoolers (ages 3, 4, and 5 years) identified as AA or European American, Curenton and Justice (2004) examined literate language features (i.e., the ability to expand or explain by using mental state verbs, noun phrases, adverbial phrases, etc.). In their investigation, they found that no ethnic effects were found, however, literate language did improve with age. Additionally, mental and linguistic verbs were documented, which is a feature of macrostructure. This feature was also found to show no variance among the group. As could be anticipated, the greatest difference found was between 3- and 5-year-olds.

Horton-Ikard (2009) examined narrative cohesion among 33 typically-developing AAE speaking children, ages 7, 9, and 11 years. Children retold narratives based on familiar films such as *The Lion King*. Findings from her study indicated that use and adequacy of cohesive devices, such as personal, demonstrative, and conjunctive markers, improved with age.

Hester (2010) investigated the relationship between macrostructural narrative language and reading skills of fourth grade African American children. High-point analysis was used to measure narrative macrostructure, in addition to the Gray Oral Reading Test which was used to measure reading skills. Results indicated that there were no dialect differences; however, reading abilities were found to influence narrative proficiency. Children with typical reading skills were found to apply greater knowledge of evaluation, complicated action, high point, resolution, and coda more often.

Gender-Related Differences in Narrative Language

Gender differences have been examined in narratives of preschool (Price et al., 2006) and school-age (Ely & McCabe, 1993; Ely, Melzi, Hadge, & McCabe, 1998; Mainess, Champion, &

McCabe, 2002) children. (Ely & McCabe, 1993) These studies have explored both the psychosocial and structural characteristics of narratives produced by young children.

In an exploration of children's psychosocial development, Ely, Melzi, and Hadge (1998) examined narratives of 4- to 9 year-old children during a conversation while participating in an art project. Agency (i.e., a sense of mastery, dominance, and independence) and communion (i.e., a sense of integration, connection, and submission) are common among narratives and are believed to provide insight to the person and the self (Ely, et. al. 1998). While females are stereotypically more likely to demonstrate communion, and males, agency, Ely and colleagues (1998) found that males and females equally demonstrated agency more often than communion and child narrators mostly told narratives involving only themselves. However, females were twice as likely to include communion, with more references to family members and personal feelings.

A component of macrostructural narrative language that can be overlooked is reported speech. Reported speech refers to quotations found within a narrative, which aids in the development of characters. In a two-part study conducted by Ely and McCabe (1993), reported speech was most likely to occur in a narration produced by 4- to 8-year-olds. Typically, when reported speech was used, it was to demonstrate what the narrator themselves were saying in their narrative. Age was a major factor with 25% of younger children using reported speech versus 88% of older children. Females were typically more likely to include reported speech in their narratives than were males.

Gender differences in narrative language have also been examined in preschool (Price et al., 2006) and school-age African American children (Mainess et al., 2002). Price and colleagues investigated the impact of five demographic variables: gender, maternal education, stimulation

and responsiveness of the home environment, and socioeconomic status. They specifically looked at the macrostructural quality of the preschool children's narratives. Findings indicated that African American children produced more macrostructural components of narratives at kindergarten than at age 4; however, narratives were not related to any of the five demographic variables.

At the time of this writing, only one study has examined gender differences in narration in school-age African American children and it focused on microstructural narrative language (Mainess et al., 2002). In their study, Mainess and colleagues collected personal narratives from 16 African American children and adolescents, ages 11-15 years. An inductive dependency analysis was carried out to tally occurrences of the following grammatical propositions: fully implicit propositions, internal corrections and false starts (e.g., *He he went home*), the highest level of proposition, and reported speech (e.g., *He said, 'Come over later'*). Results indicated that females produced personal narratives with a higher level of proposition than did males. The authors concluded that females were better able to grammatically elaborate in their discourse than males.

In summary, gender differences in narrative language have been found in African American children in school-age years, but not in preschool years. In terms of narrative macrostructure, girls produce more reported speech in their narratives than boys (Ely & McCabe, 1993). On the microstructural level of narration, girls are producing more syntactic complexity in their narratives than boys (Mainess et al., 2002).

The Current Study

While numerous studies have been conducted involving oral narration, few have inquired about the abilities of AA children (Horton-Ikard, 2009; Curenton & Justice, 2004). Studies

examining macrostructural narrative language are even fewer in number (Price, et. al., 2006; Hester, 2010). Of the studies that focused on macrostructural narrative language, only one examined gender differences (Price et al., 2006) and none have used the Narrative Scoring Scheme, which is more comprehensive than other measures such as high-point analysis and story grammar (Heilman et. al., 2010). Given the achievement gaps that exist, which place males and African American children in general at risk for academic failure, it is critical to examine factors, such as language, that may be related to academic performance. Therefore, the present study poses the following research question: What are the gender related differences in the macrostructural narrative language of African American 2nd graders?

METHODS

Participants

This descriptive study focuses on second-grade African American females ($n = 8$) and males ($n = 5$) between the ages of 7;1 and 8;7. All narrators were in the 2nd grade and attended 4 schools in the central Illinois area. These students were all recipients of the free/reduced lunch program and were therefore classified as having a low socioeconomic status (SES). All students were native monolingual English speakers and typically developing according to parent report. The Behavioral and Social Sciences Institutional Review Board at The Ohio State University approved the present study.

Procedure

Fictional narratives were elicited following the protocol of Berman and Slobin (1994) in which participants silently looked at *Frog, Where are you?* (Mayer, 1969) and then were instructed to go page by page to tell a narrative based on the illustrations. The examiner did not support the participant, but would mutter comments like “mhm” to demonstrate interest, and

would ask if the narrative was finished if the ending was unclear. The narrative samples were audio recorded using Marantz PDP (Itasca, IL) compact disc recorder with an external microphone.

Narrative Analysis

Narrative transcription. Using Systematic Analysis of Language Transcripts (SALT; Miller & Iglesias, 2010), the narratives produced by the 13 participants were orthographically transcribed. Utterances were segmented into communication-units (C-units). C-units consists of one main clause (e.g. *The boy fell*) or a main clause with its subordinate clauses attached to it (e.g., *The boy fell off the deer into the water*) (Loban, 1976). A clause, whether main or subordinate, includes a noun phrase (e.g. *The boy*) and a verb phrase (e.g. *fell off the deer into the water*). C-unit segmentation has been established as an appropriate procedure for examining oral language samples (Loban, 1976) and has been utilized in previous studies on narrative (Hester, 2010) and discourse (Craig, Washington, & Thompson-Porter, 1998; Ivy & Masterson, 2011; Thompson, Craig, & Washington, 2004) abilities of African American children.

Narrative macrostructure. The NSS (Heilmann et al., 2010) measures the extent to which each of the following story grammar components (see Stein and Glenn, 1979) is produced in the narrative: introduction, character development, mental states, referencing, conflict/resolution, cohesion, and conclusion. Appendix A displays definitions of each story grammar component. The NSS requires a score of 0-5 to be determined for each category. Zero is intended for an off-task or incomplete performance. One is designed to be used for an *immature or poor performance*. A score of 2-3 is for *emerging or inconsistent use*, and 4-5 can be applied to an *intermediate* elicitation. For full points, each characteristic had to be *proficient* with a score of 5. A composite NSS score is assigned to each narrative, which is the sum of

scores for each story grammar component. Appendix B displays NSS coded narratives of a second-grade male and female from this study.

Reliability

Transcription. The SALT laboratory conducted blind inter-rater agreement was conducted by a second scorer on 16% ($n = 9$) of randomly selected transcripts. Coding comparisons indicated a 95.66% intercoder reliability for C-unit boundaries (C-unit level errors / total number of C-units), a 96.88% point-by-point intercoder reliability for morphemes (word level errors / total number of words), and 91.22% intercoder reliability for perceptual differences at the word level (perceptual differences + word level errors / total number of words).

NSS. Krippendorff's alpha was utilized to perform interrater agreement. In order to determine what is deemed a reliable result, Krippendorff's alpha maintains standard guidelines. If the comparison is greater than .67, it is an *acceptable* rating. However, reliability ratings are *favorable* if the comparison is greater than .80. Statistical analysis yielded the following alpha values for the NSS measures: introduction $\alpha = .76$, character development $\alpha = .74$, mental states $\alpha = .73$, referencing $\alpha = .20$, conflict/resolution $\alpha = .35$, cohesion $\alpha = .11$, conclusion $\alpha = .13$. Referencing, conflict/resolution, cohesion, and conclusion did not achieve sufficient levels of interrater agreement.

RESULTS

The aim of this study was to examine differences in the macrostructural narrative ability of school-age African American males and females. Results showed no statistically significant gender differences. An independent-samples t -test was conducted to compare NSS scores for males and females. There was no significant difference for males ($M = 5.60$, $SD = 3.05$) and females ($M = 7.63$, $SD = 3.20$) $t(11) = 1.12$, two-tailed. The magnitude of the differences in the

means was moderate ($\eta^2 = .10$). A one-way between-groups analysis of variance (ANOVA) was conducted as a follow-up comparison. Results indicated no gender effect on introductions, $F(1,12) = .13, p = .72, \eta^2 = .01$; character development, $F(1,12) = 1.11, p = .314, \eta^2 = .09$; nor mental states, $F(1,12) = 1.19, p = .23, \eta^2 = .12$. Results are displayed in Table 1 and Figure 1.

DISCUSSION

Summary of Results

The aim of this study was to determine whether gender related differences in the macrostructural narrative language of African American second graders existed. The NSS was used to assess macrostructural narrative language. Results indicated that no gender group differences existed. Overall, this group of second graders fell into the emerging category for macrostructural narrative language ability. This could imply that at the second grade level, macrostructural narrative language is still developing. Past research has established that, with age, narrative ability does progress (Heilmann et. al., 2010; Curenton & Justice, 2004). While they did not always outperform their female counterparts in macrostructural narrative characteristics, raw means score differences in performance appeared to trend toward gender differences (see Figure 1). In fact, while this study showed no statistically significant differences, there was a moderate effect size for character development ($\eta^2 = .09$) and mental states ($\eta^2 = .12$) with a female advantage.

Implications

If indeed macrostructural narrative language ability is limited for AA males, particularly in the area of mental states and character development, these areas may be addressed systematically in the classroom through story-based activities such as shared book reading, sharing time, and story writing. Educators and clinicians should clearly define and provide

examples of each macrostructural element in instruction and intervention to help students apply their knowledge through narrative activities. Educators should make salient the internal states and motivations of characters in the story and highlight how the character develops throughout the story through discussions and story boards. Additionally, storytelling workshops or exercises in school or at home can also give a child the chance to improve his or her macrostructural narrative language skills. Practicing this skill through role playing could also improve confidence and ultimately performance. Lastly, exposure to narrative structure both at school and at home may also be an effective way to close gender gaps in narration.

Limitations

Two primary factors limit the generalizability of our findings. First, the study included a small sample of children. Gender differences may be found with a larger sample of second grade AA males and females. It is possible that with this larger sample size, statistically significant differences between males and females could actually be present.

Second, reliability scores were low for several NSS elements, deeming them uninformative in our analysis. To improve this reliability pitfall, improved understanding of the measurement could result in a more reliable test score. While the NSS itself has been shown to be a valid and reliability measure of macrostructural narrative language (Heilmann et. al., 2010), in a sense it is a judgment-based measure, so proficient understanding of the test before scoring is mandatory. A level of mastery could be established by practice, experience, and confiding in peers or colleagues if questions arise. Another way to improve reliability is to revise the NSS rubric so that each story element is more clearly defined. This could include a more direct explanation of each characteristic, clear distinction between score values, and more in-depth examples.

Future Directions

The next step in this research is to gather data from a larger set of AA males and females to improve our ability to detect gender differences in macrostructural narrative language. In addition, the NSS rubric may need to be modified to improve reliability. It will be critical in future studies to determine if gender differences emerge over time. To that end, longitudinal data should be gathered from AA males and females across the school-age years. Lastly, it is also important to determine whether gender differences would also exist in microstructural narrative language.

Conclusion

This study found no macrostructural narrative ability gap between second grade AA males and females, thus, tentatively concluding that this is not a factor in the educational achievement gap found among AA males and females. It is important to understand where educational misplacement and gaps exist so that these areas of interest may be accordingly addressed and eventually extinguished. This study provided imperative preliminary data to assist in the extermination of this gap. These data are necessary to inform clinical and educational practice so that when educators, families, and clinicians aid in narrative language development, they are assisting in the appropriate areas. It is a victory that an achievement gap appears to be indistinguishable in the area of macrostructural narrative language.

References

- Allen, M. (1994). Children's narrative productions: A comparison of personal event and fictional stories. *Applied Psycholinguistics*, 149-176.
- Bajaj, A. (2007, March). Analysis of oral narratives of children who stutter and their fluent peers: Kindergarten through second grade. *Clinical Linguistics & Phonetics*, 21, 227-245.
- Berman, R., & Slobin, D. (1994). *Relating events in narrative*. Hillsdale, NJ.
- Celinska, D. (n.d.). Personal narratives of students with and without learning disabilities. *Learning Disabilities Research & Practice*, 19, 83-98.
- Coley, R. J. (2001). *Differences in the gender gap: Comparisons across racial/ethnic groups in education and work*. Princeton: Educational Testing Service.
- Craig, H., Washington, J., & Thompson-Porter, C. (1998). Performances of young African American children on two comprehension tasks. *Journal of Speech, Language, and Hearing Research*, 14, 445-457.
- Curenton, S. M., & Justice, L. M. (2004, July). African American and Caucasian preschoolers' use of decontextualized language: Literate language features in oral narratives. *Language, Speech, and Hearing Services in Schools*, 35, 240-253.
- Downey, D. B. (2008). Black/White differences in school performance: The oppositional culture explanation. *Annual Review of Sociology*, 34, 107-26.
- Ely, R., & McCabe, A. (1993). Remembered voices. *Journal of Child Language*, 20, 671-696.
- Ely, R., Melzi, G., & Hodge, L. (1998, April). Bring brave, being nice: Themes of agency and communion in children's narratives. *Journal of Personality*, 66, 257-283.
- Epstein, S.-A., & Phillips, J. (2009). Storytelling skills of children with specific language impairment. *Child Language and Teaching Therapy*, 25, 285-300.
- Fiestas, C., & Pena, E. (2004). Narrative discourse in bilingual children: Language and task effects. *Language, Speech, and Hearing Services in Schools*, 35, 155-168.
- Greenhalgh, K. S., & Strong, C. J. (2001, April). Literate language features in spoken narratives of children with typical language and children with language impairments. *Language, Speech, and Hearing Sciences in Schools*, 32, 114-125.
- Heilmann, J., Miller, J. F., & Nockerts, A. (2010). Sensitivity of narrative organization measures using narrative retells produced by young school-age children. *Language Testing*, 27, 603-626.
- Heilmann, J., Miller, J. M., Nockerts, A., & Dunaway, C. (2010, May). Properties of the narrative scoring scheme using narrative retells in young school-age children. *American Journal of Speech-Language Pathology*, 19, 154-166.
- Hester, E. J. (2010). Narrative correlates of reading comprehension in African American children. *Communication Issues in Communication Science and Disorders*, 37 (Spring 2012), 73-85.
- Horton-Ikard, R. (2009). Cohesive adequacy in the narrative samples of school-age children who use African American English. *Language, Speech, and Hearing Services in Schools*, 40, 393-402.
- Ivy L.J.; Masterson J.J. (2011). A comparison of oral and written English styles in African American students at different stages of writing development. *Language, Speech, and Hearing Services in Schools*, 42, 31-40.
- Jencks, C., & Phillips, J. (1998). The Black-White Test Score Gap: Why It Persists and What Can Be Done. *The Brookings Review*, 16, 24-27.

- Kao, G., & Jennifer, T. (2003). Racial and ethnic stratification in education achievement and attainment. *Annual Review of Sociology, 29*, 417-442.
- Lee, J. (2002). Racial and ethnic achievement gap trends: Reversing the progress toward equity? *Educational Researcher, 31*, 3-12.
- Loban, W. (1976). *Language development : kindergarten through grade twelve*. Urbana.
- Luo, F., & Timler, G. R. (2008, January). Narrative organizational skills in children with attention deficit hyperactivity disorder and language impairment: Application of the casual network model. *Clinical Linguistics & Phonetics, 22*, 25-46.
- Maines, K. J., Champion, T. B., & McCabe, A. (2002). Telling the unknown story complex and explicit narration by African American preadolescents- Preliminary examination of gender and socioeconomic issues. *Linguistics and Education, 13*, 151-173.
- Manhardt, J., & Rescorla, L. (2002). Oral narratives of late talkers at ages 8 and 9. *Applied Psycholinguistics, 24*, 1-21.
- Matthews, J. S., Kizzie, K. T., Rowley, S. J., & Cortina, K. (2010). African American and boys: Understanding the literacy gap, tracing academic trajectories, and evaluating the role of learning-related skills. *Journal of Educational Psychology, 102*, 757-771.
- Mayer, M. (1969). *Frog, Where Are You?* New York: Dial Books for Young Readers. City
- McCabe A., B. G. (2008). Comparison of personal versus fictional narratives of children with language impairment. *American Journal of Speech-Language Pathology, 17*, 194-206.
- Merritt & Liles, (1987). Story Grammar Ability in Children with and without Language Disorder: Story Generation, Story Retelling, and Story Comprehension. *Journal of Speech and Hearing Research, 30*, 539-552
- Muñoz, Maria L. , Gillam, Ronald B., Peña, Elizabeth D. , Gulley-Faehnle, Annette (2003). Measures of Language Development in Fictional Narratives of Latino Children. *Language, Speech & Hearing Services in Schools, 34*, 332-342.
- National Governors Association Center for Best Practices, C. o. (2010). *Common Core State Standards for Speaking and Listening Skills of Second Graders*. Retrieved from Common Core State Standards Initiative: <http://www.corestandards.org/the-standards>
- Pomerantz, E. M., Altermatt, E. R., & Saxon, J. L. (2002). Making the grade but feeling depressed: Gender differences in academic performance and internal distress. *Journal of Educational Psychology, 94*, 396-404.
- Price, J. R., Roberts, J. E., & Jackson, S. C. (2006, July). Structural development of the fictional narratives of African American preschoolers. *Language, Speech, and Hearing Services in Schools, 37*, 178-190.
- Shiro, M. (2003). Genre and evaluation in narrative development. *Journal of Child Language, 30*, 65-195.
- Soodla, P., & Kikas, E. (2010, October). Macrostructure in the narratives of Estonian children with typical development and language impairment. *Journal of Speech, Language and Hearing Research, 53*, 1321-1333.
- Stein N. L., & Glenn, C. G. (1979). An analysis of story comprehension in elementary school children.
- In R. Freedle (Ed.), *Discourse processing: Multidisciplinary perspectives*. Norwood, NJ: Ablex.
- Thompson, C., Craig, H., & Washington, J. (2004). Variable production of African American English across oracy and literacy contexts. *Language, Speech, and Hearing Services in Schools, 35*, 269-282.
- Ukrainetz, T. A., & Gillam, R. B. (2009). The expressive elaboration of imaginative narratives

- by children with specific language impairment. *Journal of Speech, Language, and Hearing Research*, 52, 883-898.
- Ukrainetz, T., Justice, L., Kaderavek, J., Eisenberg, S., & Gillam, R. & Harm, H. (2005). The development of expressive elaboration in fictional narratives. *Journal of Speech, Language, and Hearing Research*, 48, 1363-1377.
- Weddington, G. (2010). It's not the language: Alternative explanations of the education gap for African American children. *Topics in Language Disorders*, 30, 48-56.

Appendix A

NSS Element	Description	Example
Introduction	presence, absence, and qualitative depiction of character and setting components	“The dog looking at the frog. And when they asleep the frog got out the jar.”
Character Development	acknowledgement of characters and their significance throughout the story	“And the dog is just looking like ‘What did I do?’ and licking him.”
Mental States	vocabulary used to convey character emotions and thought processes	“And then he was mad at his dog.”
Referencing	accurate use of antecedents and clarifiers throughout the story. Student’s use of correct pronouns and proper names should be considered in this score	“And when they asleep the frog got out the jar.”
Conflict Resolution	the presence/absence of conflicts and resolutions required to express the story as well as how thoroughly each is described	“And the bee/s chase/ed the dog. And the dog kept runing away from the bees.”
Cohesion	the sequencing of, details given to, and transitions between each event	“Then was like stand/ing on the rock. And he was on top.”
Conclusion	the conclusion of the final event as well as the wrap-up of the entire story	“So they said, "Goodbye" to the baby frog/s and the mother frog.”

Appendix B

Second Grade Female Narrator

C His dog was look/ing (in) in a jar with a frog in it.

C And the boy was too, <> sit/ing down on a stool.

E <Mhm>.

= E laughs

; :02

C The frog jump/ed out of the (um) jar while the dog and the boy sleep/ing on the bed.

; :02

C (When) the boy wake, up and the dog, the frog was gone.

E Hmm.

C He look/ed under a boot.

C The dog was in the jar (his) with his eye/s close/ed.

E Mhm.

C (The dog wa*) the dog fell out the window.

C (Why) and the boy lift up the window.

C And the dog fell outthe window.

C And the boy call/3s for the frog.

E Mhm.

C The dog fell.

C The boy stick/edhis *head out.

C The boy still had his head out the window.

C The boy is mad.

C (The dog) the boy pick/ed up the dog.

C (And the do*) and the boy was mad.

C And the dog lick/ed the boy.

= E laughs.

C The boy had the boot/s on call/ing for the frog.

C And the bee/s came out the beehive.

C The dog was look/ing up.

E Hmm.

: :03

C The boy (call/ed call/ed him in a) call/ed him in a hole.

C The dog jump/ed up to the beehive.

E Mhm.

: :02

C The boy cover/ed his nose.

C A beaver came out the hole.

C The dog was on the tree stand/ing up.

; :04

C The beaver was out the hole.

C The beehive fell.

C (And the) and the bee/s came out the beehive.

C The dog was still (ta*) stand/ing on the tree.

E Mm.

C The boy was up on [up+prep] the tree call/ing the frog in a hole.

C A bat came out.

C And he fell off the tree.

C The bee/s chase/ed the dog.

E Mhm.

: :02

C The boy was on a rock.

C The (the) owl flew away.

; :05

C The owl land/ed in the tree.

C The boy was stand/ing on the rock call/ing for the frog.

E Mhm.

C Suddenly a deer pop/ed up.

C And he was on the deer.

E Mm.

C And the deer was run/ing while the boy was on the deer.

C And the dog was too.

= E laughs.

C The boy and the dog fell into the pond.

C The deer :02 did/n't fall.

; :03

C They land/ed in the water, got all wet.

C And the deer smile/ed and close/ed (the) her eye/s.

E Mhm.

C (The) The dog was on the boy (hat I mean) head.

C And the boy was (um) in the water :02 hear/ing[EW:listening] for stuff.

C And the dog was swim/ing.

C (The boy f* f*) the boy cover his (f*) mouth with his finger :02 and said, "Shh".

C And the dog just was swim/ing.

C And they climb over the branch.

; :03

C They saw two frog/s.

; :02

C And the boy was lay/ing on (the um :03) the :03 branch.

C <And the> dog was too.

E <Mhm>.

C (Mm) They saw little frog/s come/ing out of the grass.

C The boy (got off the) was get/ing ready to get off the (the) branch.

C The dog just stay/ed there.

; :04

C The (the) boy went away with the dog.

C (And the dog) and the boy took one of the frog/s.

: :02

E Mhm.

: :02

- C And wave/ed goodbye.
- + Introduction: 2
- + Character Development: 3
- + Mental States: 2
- + Referencing: 4
- + Conflict/Resolution: 3
- + Cohesion: 3
- + Conclusion: 3

Second Grade Male Narrator

- C Like he/'s look/ing at his froggie.
- C And his dog like/3s the frog also.
- C And :03 it/'s his bedtime.
- E Mhm.
- : :03
- C And before he goes to bed ((I think)) every night, he look/3s at his frog and then goes to bed.
- E Mhm.
- C And right here when he goes to sleep he sneak/3s out and leave/3s.
- C And then when he wake/3s up he does/n't see him anymore.
- ; :02
- C Then (see) he look/3s everywhere, under his clothes, in his boot/s.
- C But he look/ed outside.
- C And he did/n't see him.
- C And then his dog (go* he) got the bucket stuck on his head.
- E {Laughs}.
- : :02
- C And then the dog fell out and broke the glass.
- C And then (the) the boy look/3s mad at the dog.
- C And the dog is just look/ing like, "What did I do" <> and lick/ing him?
- E <{Laughs}>.
- C And then now right there there/'s a bunch of bee/s fly/ing out of the (hi*) beehive.
- C And he/'s call/ing for his frog.
- C And his dog is probably look/ing at the bee/s and sniff/ing to see where the frog went.
- ; :02
- C And right there he (look/s like) look/3s like he disturb/ed the bee/s.
- ; :04
- C (Uh) Right there he/'s look/ing in the tree/s to see if he/'s in there.
- C And then right there he knock/ed it over.
- C And the bee/s are chase/ing him.
- C Then he fell down.
- C And the owl is look/ing out at him.
- C And then he get/3s scare/ed of the owl.
- C (And he s*) and then the owl jump/3s into this big tree.
- C And then the boy start/3s look/ing for his frog again.
- C He look/3s over this big deer.

C And then the deer take/3s him over this cliff.

C And the dog fall/3s off before (the) the (um) boy does.

C And they both fall off.

C Then they fell in this big lake.

; :03

C (He) the dog land/ed on the boy/z stomach.

C And then he got out and told the dog to shush (and) so he can look for his frog.

C And then he went over this big (like) treebranch.

E Mhm.

C And then he find/3s it with this other frog.

C And they had baby/s.

C And then he look/3s happy.

C And then he take/3s his frog back and goes home again.

+ Introduction: 2

+ Character Development: 3

+ Mental States: 2

+ Referencing: 2

+ Conflict/Resolution: 3

+ Cohesion: 2

+ Conclusion: 5

Table 1. Means and standard deviations for Narrative Scoring Scheme components for males and females

		Narrative Macrostructure					
	Introduction	Character Development	Mental States	Referencing	Conflict Resolution	Cohesion	Conclusion
Females	2.61 (1.22)	3.63(1.50)	1.50(1.41)	3.00(1.06)	3.00(1.06)	3.38(.91)	3.88(1.12)
Males	1.68 (.85)	2.80(1.09)	.60(.89)	2.80(.83)	3.00(1.22)	2.40(.54)	4.00(1.0)

Figure 1. Mean Gender-Related Differences on the Narrative Scoring Scheme

