

# Florida State University Libraries

---

2014

The relations of proper character introduction to narrative quality and listening comprehension for young children from high poverty schools

Adrienne E. Barnes, Young-Suk Kim and Beth M. Phillips



The relations of proper character introduction to narrative quality and listening comprehension for young children from high poverty schools

Barnes, A., **Kim, Y.-S.**, & Phillips, B. (2014). The relations of proper character introduction to narrative quality and listening comprehension for young children from high poverty schools. *Reading and Writing: An Interdisciplinary Journal*, 27, 1189-1205.

Correspondence should be addressed to Adrienne E. Barnes, College of Education, Florida State University, 1114 W Call Street, Suite 2204 H, Tallahassee, FL 32306-4301, USA. Email: [abarnes@fcrr.org](mailto:abarnes@fcrr.org).

### Abstract

The present study explored the types and frequency of literate language features in children's narratives, and the relation of literate language and proper character introduction to children's oral language skills in a sample of 184 prekindergarten, kindergarten, and first grade students from high-poverty schools. Using hierarchical regression, the results showed that literate language features were not predictive of listening comprehension or narrative quality outcomes. In contrast, children's skill in properly introducing characters significantly accounted for variance in all outcome measures (narrative comprehension, narrative quality, and listening comprehension) above and beyond the control variables (age, total number of words, and mean length of utterance) and literate language features (adverbs, conjunctions, mental and linguistic verbs, and elaborated noun phrases). These results indicate that the child's retell and language comprehension skills may develop concurrently with proper character introduction.

*Keywords:* Decontextualized discourse, Listening comprehension, Literate language features, Narratives, Oral retell, Character introduction

The Relations of Proper Character Introduction to Narrative Quality and Listening  
Comprehension for Young Children from High Poverty Schools

Narratives are a unique form of discourse, comprised of characteristics that transcend culture to communicate the human experience in a way that fulfills a particular purpose for the speaker (Deese, 1983). High quality, organized narratives incorporate elements of both coherence and cohesion. A coherent and meaningful macrostructure results from clear temporal or causal sequencing (Cain, 2003; Habermas, Ehlet-Lerche, & de Silveira, 2009; Karmiloff-Smith, 1985; Shapiro & Hudson, 1991) and comprehensible cultural knowledge (Shapiro & Hudson, 1991). Early in life, children learn discourse patterns associated with narration through familial and cultural experiences of storytelling (Brockmeier, 2004; Heath, 1982), producing narratives as early as preschool and refining their narrative skills as they progress through the elementary school years (Peterson & McCabe, 1983). As children experience more complex discourse patterns and learn to include various elaborations (see Peterson & McCabe, 1991), they learn to give linguistic shape to the immensely multifaceted encounters experienced in the school setting (Brockmeier, 2004). Thus, children's linguistic ability might be an important contributor to narrative quality. In the present study, we examined how individual differences in literate language use and ability to recognize the listener's needs and properly introduce story characters represented in children's narrative retell and production tasks are related to narrative quality as well as to listening comprehension.

As children develop cognitively and the mean length of narrative utterances increases (Kemper, Rice, & Chen, 1995), children begin to exhibit the sophisticated style

of communication referred to as decontextualized discourse. Decontextualized discourse is comprised of literate language features and abstract styles of talk (Curenton, Craig, & Flanigan, 2008), and is considered a form of oral language more developed and cognitively challenging than contextualized discourse which incorporates environmental information, body language, gestures, and shared cultural knowledge into communication (Curenton et al., 2008; Curenton & Justice, 2004). Literate language features are demarcated by the appearance and appropriate use of adverbs (verb and adjective modifiers; i.e., ‘He quickly walked down the hall,’), conjunctions (links between independent and dependent clauses; i.e., ‘She finished her lunch and went out to play,’), mental and linguistic verbs (verbs referring to mental states or linguistic action; i.e., ‘I think she said she would be home,’), and elaborated noun phrases (nouns with qualifiers or modifiers; i.e., ‘He walked past the old, wooden door,’) (Benson, 2009; Curenton et al., 2008; Curenton & Justice, 2004; Greenlaugh & Strong, 2001; Ukrainetz, Justice, Kaderavek, Eisenberg, Gillam, & Harm, 2005). Adverbs and elaborated noun phrases provide rich descriptions that contribute details to the mental story model that is shaped by the listener. Mental and linguistic verbs not only allow children to extend their utterances by embedding clauses to create more syntactically complex utterances with an increased number of morphemes (e.g., “I think the mom was upset when she lost her purse,”), but they also allow the expansion of character personalities and feelings in spoken narratives. Conjunctions provide organizational structure by connecting related ideas and establishing temporal order (see Curenton & Justice, 2004; Greenlaugh & Strong, 2001 for a detailed explanation of these linguistic devices). Furthermore, it has been suggested that children’s decontextualized language skills are related to skills in

early reading, linguistic quality, and the ability to follow oral directions (Davidson & Snow, 1995). In studies of children aged five to 12 years, literate language use was positively correlated with reading ability (Cain, 2003) and higher quality oral narratives (Ukrainetz et al., 2005).

The linguistic structures of decontextualized discourse, referred to as literate language features, serve to create effective narration without a physical context present for reference (Curenton et al., 2008; Curenton & Justice, 2004). Since contextualization of discourse is actually a continuum (Westby, 1991), children typically use a blend of both contextualized and decontextualized language when communicating with peers and adults (Curenton et al., 2008; Westby, 1991). However, it is the use of decontextualized oral language (the combination of literate language features and abstract styles of discourse) that stimulates the abstract thought processes, imagination, and higher-order thinking skills required for academic success (Greenlaugh & Strong, 2001; Reese, 1995; Snow, 1991). Decontextualized oral language use with children in preschool and kindergarten has been found to predict later reading outcomes such as print knowledge, narrative comprehension, and vocabulary skill as well as narrative quality (Griffin, Hemphill, Camp, & Wolf, 2004; Reese, 1995). Therefore, the abilities that contribute to decontextualized discourse (abstract language styles and literate language feature use) may also facilitate the development of language awareness, allowing students to create elaborate oral narratives, prepare rich written descriptions in stories, and ultimately better understand and interpret written academic texts (Greenlaugh & Strong, 2001; Griffin, Hemphill, Camp, & Wolf, 2004; Reese, 1995; Snow, 1991).

Some ways in which literate language use, expressive language skills, and abstract styles of discourse develop are through shared reading, oral storytelling, and emergent 'reading' experiences where children pretend to read familiar storybooks (Curenton et al., 2008; Deckner, Adamson, & Bakeman, 2006; Karrass & Braungart-Rieker, 2005; Purcell-Gates, 1996). While literate language use emerges in preschool (Curenton & Justice, 2004) and develops over time, it is important to note that literate language features occur less frequently in the narratives of children with language impairments (Curenton & Justice, 2004; Kaderavek & Sulzby, 2000) or in the narratives of children from low socioeconomic environments (Hart & Risley, 1992, 1995). These findings are relevant to the current study because the sample included children from a high poverty locale who may have experienced a reduced exposure to decontextualized oral language throughout the early years of their linguistic and cognitive development.

Several studies on children's narratives have focused on quantifying the linguistic aspects of narratives, specifically the literate language features (Curenton et al., 2008; Curenton & Justice, 2004; Davidson & Snow, 1995; De Temple & Beals, 1991; Greenlaugh & Strong, 2001; Ukrainetz et al., 2005). Although literate language features have been observed in young children, it remains unclear whether literate language features such as adverbs, conjunctions, mental and linguistic verbs, and elaborated noun phrases are predictive of narrative comprehension, narrative quality, or listening comprehension skills for young children from low socio-economic backgrounds. In addition to the use of these literate language features in the context of decontextualized discourse, children's awareness of the knowledge base of the listener might be an important element in producing quality narratives. For a child to produce a high-quality

narrative, the child has to be aware of the listener's needs – whether or not the interlocutor has a shared understanding of the context – to determine the extent to which he/she must lexically and syntactically present information in a story. Thus, not only linguistic competence, but also children's awareness of the listener's needs and consequent use of proper character introduction might be related to children's ability to construct quality narratives. For instance, if the child determines that the listener does not have shared knowledge of a character in a story, then he has to introduce the character using an indefinite article (e.g., There was a boy). If the child introduces a character using a definite article or a pronoun (e.g., The boy loved to play outside or He loved to play outside), then the child is assuming the listener knows who the boy (or he) is.

Previous research has indicated developmental growth in the use of noun phrases (as compared to pronoun use) for character introduction. Only a small amount of growth in this skill was observed in children as they matured from two years to four years of age (Peterson & Dodsworth, 1991). However, cross-sectional observation of children aged four to six years indicated a possible shift away from pronoun use, toward the use of both definite and indefinite noun phrases (Wigglesworth, 1990). By age six or seven, children may be able to successfully monitor the state of the listener and use definite and indefinite noun phrases to introduce characters in a manner that accommodates the listener's level of background knowledge (Villaume, 1988). The ability to monitor the listener's knowledge base and provide appropriate character introductions may be indicative of growth in the awareness of the listener's perspective. In the current study, we include proper character introduction as a proxy for a single aspect of perspective



taking, which is a large and multifaceted construct typically assessed by a battery of measures. It appears that perspective taking skill is demonstrated consistently across various narrative tasks, is developmental in nature (Comay, 2010), and may be predictive of later reading achievement (Griffin, Hemphill, Camp, & Wolf, 2004). This research indicates that early propensity for awareness of the listener's needs may lead to enhanced future reading achievement. To our knowledge, no studies have examined the relation of children's proper character introduction specifically to narrative quality (operationalized as the extent to which specific story elements are included, widely known as story grammars [Pressley, Johnson, Symons, McGoldrick, & Kurita, 1989]) and language comprehension skills for children in prekindergarten, kindergarten, and first grade.

#### Present Study

We examined the extent to which literate language features and proper character introduction were present in four, five, and six year old children's narrative retell and production, and how these features related to narrative comprehension, narrative quality, and listening comprehension. The primary research questions were as follows:

1. What specific literate language features (adverbs, conjunctions, mental and linguistic verbs, and elaborated noun phrases) are used in narrative retell and production tasks by prekindergarten, kindergarten and first grade students from high poverty schools?
2. How do children's skills with literate language features relate to their narrative comprehension, narrative quality, and listening comprehension after accounting for age, overall retell length (i.e., total number of words) and linguistic complexity (i.e., mean length of utterance)?

3. Is children's use of proper character introduction uniquely related to narrative comprehension, narrative quality, and listening comprehension after controlling for the use of literate language features as well as age, total number of words and mean length of utterance?

We hypothesized that there would be grade/age-related differences such that prekindergarten children would exhibit fewer literate language features than kindergarteners, who, in turn, would exhibit fewer literate language features than first graders. Previous research has indicated that developmental differences across three, four, and five-year-olds (Curenton & Justice, 2004). Additionally, literate language features appear to be related to language and cognitive abilities (Justice et al., 2006), which, then, are related to overall narrative quality (Curenton, 2011). Ukrainetz et al. (2005) included adverbs, adjectives and mental verbs in a larger matrix of characteristics used to judge narrative quality for children aged five- to 12-years-old. We hypothesized that children's use of proper character introduction (see below) would contribute to narrative comprehension, narrative quality, and listening comprehension independent of control variables (age, total number of words, and mean length of utterance [MLU]) and the use of literate language features.

## Method

### Participants

The sample included 58 prekindergarteners (58.6% male), 63 kindergarteners (46% male), and 63 first graders (46% male: total N = 184) in high poverty schools in a north Florida school district. Serving as a proxy for socioeconomic status, the free and reduced lunch proportions at the school level ranged from 67 to 85 percent. Sixty-seven

percent of these children were African American, 25% Caucasian, 3% Hispanic, and 5% were classified as multiracial or other. These children were participants in a feasibility study, and all children received the intervention (i.e., no control group) whose goal was to improve narrative retell and narrative comprehension through retell. All children experienced an equally powerful and similar version of the 4-week intervention. The data in the present study were from 4 groups of children who participated in this study throughout the academic year. The range of ages at pretest was 47 to 89 months ( $M = 70.1$ ,  $SD = 11.5$ ). Prekindergarten children ranged in age from 47 to 64<sup>1</sup> months ( $M = 56.4$ ,  $SD = 5.11$ ); kindergarten children ranged in age from 61 to 79 months ( $M = 70.3$ ,  $SD = 4.01$ ); and first grade children ranged in age from 74 to 89 months ( $M = 82.6$ ,  $SD = 4.01$ ).

## Measures

### Outcome Measures

**Narrative comprehension.** Children's narrative comprehension was assessed by their responses to the comprehension questions in narrative retell tasks. In the narrative comprehension task, the examiner read a story aloud, and the child was asked to retell the story he or she just heard. Then the child was asked comprehension questions about the story. These questions were related to the narrative key elements (i.e., Who were the main characters? Where did this story take place? What was the problem in this story?) and other details in the story. While many questions were scored dichotomously (1 or 0), several questions had a total score of 2 or 3 if the response required providing multiple pieces of information (e.g., main character names). All scoring for this construct was

---

<sup>1</sup>One child in prekindergarten was 70 months old.

based on a researcher-created rubric. Inter-rater agreement (exact agreement) was 100 percent.

Narrative quality. Children's narrative quality was measured by the extent to which the child included key narrative elements and was assessed in both narrative retell and narrative production tasks. For each of the three grade levels, there were three narrative stories for the retell tasks and one narrative production task. Identical passages were used for kindergartners and first graders, and shorter stories were used for prekindergarteners. The stories for prekindergarten children were 147 words long on average (138, 151, and 152 words), and the stories for kindergarten and first grade children averaged 211 words long (123, 208, and 303 words). In the narrative production task, which was adapted from the Test of Narrative Language (Gillam & Pearson, 2004), the child was shown a series of four illustrations and asked to think of a story based on the illustrations and tell the best story he or she could think of. In their development of the Test of Narrative Language, Gillam and Pearson (2004) analyzed the factor structure of retell and production tasks and found these two types of tasks to be measuring the same latent construct. We utilize their justification of a single construct to combine the retell and production tasks for the current study. Children's story retell and production were transcribed verbatim following Systematic Analysis of Language Transcription (SALT; Miller & Iglesias, 2006) guidelines, and coded for inclusion of story structure elements (e.g., main characters, setting, events, problem, and resolution). Children's performance on each element was rated on a scale of 0-2. A child received a 0 for an incorrect answer or no inclusion of the story elements; 1 for a correct but imprecise answer; 2 for a correct

and precise answer. Inter-rater agreement was greater than .90 in all the story structure elements for retell and production tasks.

Listening comprehension. The Listening Comprehension subtest of the Oral and Written Language Scales (OWLS; Carrow-Woolfolk, 1995) is a norm-referenced test of oral language comprehension and was administered to all children except the first group of children who participated in the study in the fall, resulting in missing scores for 16 prekindergarten students, 16 kindergarten students, and 15 first grade students. In the OWLS task, the child heard stimulus sentences (i.e., ‘Show me The boy has eaten the banana,’). Then, the child was shown four stimulus pictures and was asked to choose the picture best described by the auditory stimulus. Internal consistency reliabilities range from .78 to .89 for ages four to six years, test-retest reliability is .74 for ages four to six years, and inter-rater reliabilities are .99 for ages three to five years and .96 for ages six to eight years.

#### Predictor Measures

Literate language features. Children’s transcribed story retells and productions were coded for the following literate language features informed by previous studies (Curenton et al., 2008; Curenton & Justice, 2004; Greenlaugh & Strong, 2001): adverbs (i.e., ‘He quickly walked down the hall,’), conjunctions (i.e., ‘She finished her lunch and went out to play,’), mental and linguistic verbs (i.e., ‘I think she said she would be home,’), and elaborated noun phrases (i.e., ‘He walked past the old, wooden door,’).

Proper character introduction. Introduction of characters was considered proper when characters were introduced using an indefinite article (‘a boy’), a proper name (‘John’), or via a reference to a previously introduced character (‘a boy and his mother’).

Introductions with definite articles or pronouns (i.e. ‘the boy’ or ‘he’) were not considered proper. One point was awarded for each properly introduced character.

Characters introduced with definite articles or with pronouns received a score of zero. A score was assigned only the first time the character appeared in the narrative and subsequent references to the same character were not scored.

#### Control variable

Mean length of utterance (MLU) and total number of words. These measures were obtained from the SALT (Miller & Iglesias, 2006) language analysis software. Mean length of utterance is a measure of the mean number of morphemes produced per utterance, averaged across all tasks. MLU was measured in morphemes rather than in words because morphemic analysis is a more precise measure of language complexity. Morphemes are the smallest unit of meaning in a word, such as a prefix, suffix or root word (Carlisle, 2003). Where the word elephant is comprised of a single morpheme, the word played has two morphemes (play/ed) that reflect the use of a root word and an inflectional suffix changing the tense. Total number of words is the sum of all words in each relevant utterance, averaged across all tasks. Irrelevant utterances to the retell tasks (i.e., requests to get a drink or use the restroom) were omitted from the analysis set of utterances.

#### Procedures

Data collection. Children’s narrative retell and production tasks were administered pre and post intervention. In the present study, in order to acquire a larger corpus of language samples for each child, we used the children’s performances from both pre-and post-tests, collected approximately 5 weeks apart. The assessment battery was individually

administered to students at their school by trained assessors. The narratives were audio-recorded using an Olympus VN-8100PC digital voice recorder with a connected microphone that was attached to the child's lapel.

Transcription and coding. The narratives were transcribed by trained graduate students using Systematic Analysis of Language Transcripts software (SALT; Miller & Iglesias, 2006). Transcriptions were segmented into T-units for analysis (a T-unit consists of a single independent clause and all dependent clauses). Utterances containing multiple independent clauses linked by coordinating conjunctions were segmented into individual T-units. Transcriptions were then coded for morphological structure, literate language features (adverbs, conjunctions, mental and linguistic verbs, and elaborated noun phrases) and proper or improper initial character introduction. These transcripts were checked for errors and analyzed for coding, mean length of utterance in morphemes, and total number of words with the 2012 researcher version SALT software (Miller & Iglesias, 2006).

Inter-rater reliability. After training, inter-rater agreement between the two coders was established at .90. All disagreements were discussed to agreement and agreed-upon changes were made to the coded transcriptions. A subsequent random check of ten percent of the entire sample of 1345 transcripts found 98 percent agreement between the two coders. Disagreements were discussed to resolution and corrections were made.

### Results

Table 1 shows means and standard deviations in the outcome and predictor variables by grade level and Bonferroni adjusted p-values ( $p < .005$ ) for each comparison. On average, prekindergarten children produced 39 words, kindergarteners 55 words, and first graders 74 words across narrative retell and production tasks.

Prekindergarten children produced 3.6 adverbs, 7.6 conjunctions, 0.6 mental and linguistic verbs, and 0.7 elaborated noun phrases. Kindergartners were found to produce, on average, 4.7 adverbs, 11.5 conjunctions, 1.7 mental and linguistic verbs, and 1.3 elaborated noun phrases. First graders in this sample were found to produce, on average, 6.4 adverbs, 13.7 conjunctions, 2.4 mental and linguistic verbs, and 1.9 elaborated noun phrases.

In order to examine differences in performance among prekindergarten, kindergarten, and first grade children in literate language features in their narratives, Multivariate Analysis of Variance (MANOVA) was conducted. All the assumptions were met in our visual inspection of data. Bonferroni corrected alpha levels ( $p = .005$ ) were utilized to control for Type I error. Results revealed significant differences between grade levels,  $F(9, 172) = 524.47, p < .001$ . This result is consistent with age related differences found by Curenton and Justice (2004). Additionally, as hypothesized, post-hoc tests of the MANOVA results revealed significant grade-related differences between prekindergarten and kindergarten (total number of words, MLU, conjunctions, mental and linguistic verbs, elaborated noun phrases, narrative comprehension, and OWLS raw score), between kindergarten and first grade (total number of words, MLU, adverbs, mental and linguistic verbs, elaborated noun phrases, proper character introduction, narrative comprehension, narrative quality, and OWLS raw score), or between prekindergarten and first grade (all variables listed above were significantly different at  $p < .001$ ). Table 1 includes the p-values for the comparisons for each variable across grade levels.



These data represent a snapshot of the kind of narratives produced by children across the ages of 4, 5, and 6. While we cannot extrapolate longitudinal development and change across age from a cross-sectional data sample, it is worth examining the variation within each age group and the differences present across grade levels. Appendix A shows stories produced at each grade level that represent a range of performances. The use of both proper and improper character introduction appeared in all ranges of performance, and across all three grade levels. The length and sophistication of the stories did tend to increase for the older children. However, minimal, one-line responses were present in all three grade levels as well, and these were not included in the appended samples. Many children were able to discuss several important story elements and children at all three grade levels used the three types of character introductions coded in the current study. Overall, we see an increase in story length and decontextualized linguistic devices in conjunction with increases in age.

With regard to Research Question 2, bivariate correlations (Table 2) showed that total number of words and MLU correlated positively and strongly with literate language features of number of adverbs, number of conjunctions, number of mental and linguistic verbs, and number of elaborated noun phrases, after controlling for age ( $.56 \leq r_s \leq .83$ ,  $p_s < .001$ ). Controlling for age, we found weak and positive correlations between the number of conjunctions used and narrative quality ( $r = .21$ ;  $p = .016$ ), between number of mental and linguistic verbs and narrative comprehension ( $r = .18$ ;  $p = .037$ ) and between number of mental and linguistic verbs and narrative quality ( $r = .23$ ;  $p = .009$ ). However, no other correlations between literate language features and comprehension outcomes were statistically significant (see Table 2).

In order to examine the unique relations of literate language features to each outcome variable (narrative comprehension, narrative quality, and listening comprehension), we conducted hierarchical regressions. Raw scores were used for the OWLS listening comprehension. In the first step, control variables such as age, total number of words, and MLU were included. In step two, we added the literate language features variables — mean number of: adverbs, conjunctions, mental and linguistic verbs, and elaborated noun phrases. When each of these literate language features was entered to the model individually, elaborated noun phrases was a significant, but negative predictor for narrative quality ( $\Delta R^2 = .02$ ;  $p = .01$ ), suggesting a suppression effect. When all the literate language feature variables were entered to the model simultaneously, none of the literate language features accounted for unique variance in any of the three comprehension outcomes: narrative comprehension ( $\Delta R^2 = .01$ ;  $p = .45$ ), narrative quality ( $\Delta R^2 = .03$ ;  $p = .07$ ), or OWLS listening comprehension ( $\Delta R^2 = .004$ ;  $p = .91$ ) after accounting for age, total number of words, and MLU.

Bivariate correlations in Table 2 showed that proper character introduction was moderately and positively related to all four literate language features ( $.36 \leq r_s \leq .51$ ;  $p_s < .001$ ), as well as narrative comprehension ( $r = .30$ ;  $p = .001$ ) and narrative quality ( $r = .31$ ;  $p < .001$ ). It was weakly and positively related to listening comprehension ( $r = .19$ ;  $p = .025$ ).

To address the third research question, we included the mean number of proper initial character introductions in the third step of hierarchical regressions (see Table 3). Proper initial character introduction significantly accounted for small but statistically significant amount of variance: narrative comprehension ( $\Delta R^2 = .02$ ;  $p = .007$ ), narrative

quality ( $\Delta R^2 = .02$ ;  $p = .029$ ), and listening comprehension ( $\Delta R^2 = .02$ ;  $p = .028$ ) after accounting for both control variables and literate language features<sup>2</sup>.

### Discussion

The first aim of this study was to investigate the extent to which literate language features appeared in narrative retell and production for children aged four to six years old. Next, we examined whether children's skills with literate language features (adverbs, conjunctions, mental and linguistic verbs, and elaborated noun phrases) related to narrative quality, narrative comprehension, and listening comprehension. Finally, we explored whether children's skill in properly introducing story characters is uniquely related to narrative comprehension, narrative quality, and listening comprehension after accounting for age, total number of words, MLU, and use of literate language features.

Developmental indicators of the literate language features associated with decontextualized discourse need to be established for young children (Curenton & Justice, 2004). In the current study, older children (six year olds) used literate language features more frequently than younger children (four and five year olds). Analysis of the data by grade level revealed significant grade effects for all four literate language features and all comprehension outcomes. This finding is convergent with a previous study, which showed age effects for conjunctions and mental and linguistic verbs in the narratives of three-, four-, and five-year-old children (Curenton & Justice, 2004). The present study further found grade effects in adverb use between kindergarten and first grade, conjunction use between prekindergarten and kindergarten, mental and linguistic

---

<sup>2</sup> We ran separate models using either pronoun errors, total grammar errors, or use of definite pronouns to predict the outcome variables, and none of these linguistic variables were significantly related to the comprehension outcomes. Additionally, proper character introduction still accounted for variance above and beyond these variables (one percent for narrative quality and two percent for narrative comprehension and listening comprehension).

verb use between all three grades, and elaborated noun phrase use between all three grades. Although these findings are from a cross-sectional rather than a longitudinal sample, they might suggest a developmental trend for the use of literate language features, even for young children from high poverty environments, which could possibly suppress the development of sophisticated language skills (Fish & Pinkerman, 2003; Hart & Risley, 1992, 1995).

Previous research has suggested that the use of literate language features may be predictive of a child's ability to produce high quality oral narratives (Ukrainetz et al., 2005). One goal of this study was to examine the predictive nature of literate language features to narrative comprehension, narrative quality, and listening comprehension. We anticipated that literate language features would be predictive of these outcomes. However, for the sample in the present study, literate language features were not uniquely predictive of narrative comprehension, narrative quality, and listening comprehension outcomes after controlling for age, total number of words, and MLU. Note that these results might be partially due to some floor effects observed in the number of mental and linguistic verbs and number of elaborated noun phrases. Future replication is needed.

Another finding of the present study was that children's proper initial character introduction was uniquely related to all outcome measures after accounting for age, total number of words, MLU, and literate language features. These results suggest that children who are aware of the audience's needs as indicated by the use of proper character introduction produce retell higher quality narratives and demonstrate higher levels of listening comprehension, even after accounting for age and overall linguistic sophistication (i.e., MLU, narrative length, and literate language features). The ability to

use proper character introduction does not appear to be simply a function of the child's linguistic ability such as using proper definite or indefinite articles. This was evidenced by the fact that proper character introduction remained uniquely related to our outcomes after both MLU which is generally considered as a syntactic development marker, and grammatical errors were taken into consideration. Unlike the Schneider and Hayward (2010) study, we did not find a difference between prekindergarten and kindergartner's ability to use proper character introductions. However, we did find an increase of this skill between kindergarten and first grade for the children in our sample ( $p < .001$ ), indicating that this may be a developmental change in cognition wherein children begin to realize the knowledge base of their audience, beginning to understand the gap in shared knowledge between the story teller and the listener.

In the current study, the skill of proper character introduction was moderately and positively correlated with literate language feature use, narrative comprehension, narrative quality, and oral language comprehension. These findings indicate that these expressive and comprehension language skills may develop concurrently with proper character introduction. It should be noted that given the correlational nature of the present study, the direction of these relations cannot be determined. For instance, it is plausible that these cognitive and language skills influence one another bidirectionally (e.g., Guajardo & Watson, 2002; Slade & Ruffman, 2005).

#### Limitations and Future Directions

We found limited use of some literate language features such as mental and linguistic verbs and elaborated noun phrases. Although grade effects existed between prekindergarten, kindergarten, and first grade for these two variables, the limited

variation might have played a role in the regression results. In addition, the cross-sectional nature of this sample limits the generalizability of the developmental aspect of these findings. Future research should include a larger sample (preferably longitudinal) with a greater range of ages to ascertain whether the grade effects found in this study will be applicable over time and with a larger population, and if literate language features do predict narrative quality and comprehension outcomes across other samples and age levels. Finally, OWLS listening comprehension was not administered for 47 children in the present study as this test was not part of the assessment battery for the first wave of children.

To conclude, we found significant effects of the ability to provide proper character introductions on children's narrative and listening comprehension skills, as well as overall narrative quality. Future research should explore the relation between proper character introduction and other skills such as perspective taking and theory of mind, and how these constructs are related to listening and reading comprehension outcomes and oral and written narrative quality.

## References

- Benson, S. E. (2009). Understanding literate language: Developmental and clinical issues. *Contemporary Issues in Communication Sciences and Disorders*, 36, 174-178.
- Brockmeier, J. (2004). What makes a story coherent? In A. U. Branco & J. Valsiner (Eds.). *Communication and Metacommunication in Human Development* (pp. 285-306). Greenwich, CT: Information Age Publishing.
- Cain, K. (2003). Text comprehension and its relation to coherence and cohesion in children's fictional narratives. *British Journal of Developmental Psychology*, 21, 335-351.
- Carlisle, J. F. (2003). Morphology matters in learning to read: A commentary. *Reading Psychology*, 24(3-4), 291-322.
- Carrow-Woolfolk, E. (1995). *Oral and Written Language Scales*. Bloomington, MN: Pearson Assessment.
- Comay, J. (2010). Individual differences in narrative perspective-taking and theory of mind. Unpublished doctoral dissertation: McGill University.
- Curenton, S. M. (2011). Understanding the landscapes of stories: the association between preschoolers' narrative comprehension and production skills and cognitive abilities. *Early Child Development and Care*, 18, 791-808.
- Curenton, S. M., Craig, M. J., & Flanigan, N. (2008). Use of decontextualized talk across story contexts: How oral storytelling and emergent reading can scaffold children's development. *Early Education and Development*, 19, 161-187.

- Curenton, S. M., & Justice, L. M. (2004). 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.
- Davidson, R. G., & Snow, C. E. (1995). The linguistic environment of early readers. *Journal of Research in Childhood Education, 10*, 5-21.
- De Temple, J. M., & Beals, D. E. (1991). Family talk: Sources of support for the development of decontextualized language skills. *Journal of Research in Childhood Education, 6*, 11-19.
- Deckner, D. F., Adamson, L. B., & Bakeman, R. (2006). Child and maternal contributions to shared reading: Effects on language and literacy development. *Journal of Applied Developmental Psychology, 27*, 31-41.
- Deese, J. (1983). Forward. In C. Peterson & A. McCabe (Eds.). *Developmental Psycholinguistics: Three Ways of Looking at a Child's Narrative*. (pp. xiii-xxxi). Plenum Press: New York, NY.
- Fish, M., & Pinkerman, B. (2003). Language skills in low-SES rural Appalachian children: normative development and individual differences, infancy to preschool. *Journal of Applied Developmental Psychology, 23*(5), 539-565.
- Gillam, R. B., & Pearson, N. (2004). *Test of Narrative Language*. Austin, TX: Pro-Ed.
- Greenlaugh, K. S., & Strong, C. J. (2001). Literate language features in spoken narratives of children with typical language and children with language impairments. *Language, Speech, and Hearing Services in Schools, 32*, 114-125.
- Griffin, T. M., Hemphill, L., Camp, L., & Wolf, D. P. (2004). Oral discourse in the preschool years and later literacy skills. *First Language, 24*, 123-147.



- Guajardo, N. R., & Watson, A. C. (2002). Narrative discourse and theory of mind development. *The Journal of Genetic Psychology*, 163, 305-325.
- Habermas, T., Ehlet-Lerche, S., & de Silveira, C. (2009). The development of temporal macrostructure of life narratives across adolescence: Beginnings, linear narrative form, and endings. *Journal of Personality*, 77, 527-560.
- Hart, B., & Risley, T. (1992). American parenting of language-learning children: Persisting differences in family-child interactions observed in natural home environments. *Developmental Psychology*, 28, 1096-1105.
- Hart, B., & Risley, T. (1995). *Meaningful Differences in the Everyday Experience of Young American Children*. Baltimore, MD: Paul H. Brookes.
- Heath, S. B. (1982). What no bedtime story means: Narrative skills at home and school. *Language in Society*, 11, 49-76.
- Justice, L. M., Bowles, R. P., Kaderavek, J. N., Ukrainetz, T. A., Eisenberg, S. L., & Gillam, R. B. (2006). The index of narrative microstructure: A clinical tool for analyzing school-aged children's narrative performances. *American Journal of Speech-Language Pathology*, 15, 177-191.
- Kaderavek, J. N., & Sulzby, E. (2000). Narrative production by children with and without specific language impairment: Oral narratives and emergent readings. *Journal of Speech, Language & Hearing Research* 43, 34-49.
- Karmiloff-Smith, A. (1985). Language and cognitive processes from a developmental perspective. *Language and Cognitive Processes*, 1, 61-85.

- Karrass, J., & Braungart-Rieker, J. M. (2005). Effects of shared parent–infant book reading on early language acquisition. *Journal of Applied Developmental Psychology*, 26(2), 133-148.
- Kemper, S., Rice, K., & Chen, Y-J. (1995). Complexity metrics and growth curves for measuring grammatical development from five to ten. *First Language*, 15, 151-166.
- Miller, J. F., & Iglesias, A. (2006). *Systematic Analysis of Language Transcripts (SALT)*. Madison, WI: University of Wisconsin.
- Peterson, C., & Dodsworth, P. (1991). A longitudinal analysis of young children's cohesion and noun specification in narratives. *Journal of Child Language*, 18, 397-415.
- Peterson, C., & McCabe, A. (1983). *Developmental Psycholinguistics: Three Ways of Looking at a Child's Narrative*. Plenum Press: New York, NY.
- Peterson, C., & McCabe, A. (1991). Linking children's connective use and narrative macrostructure. In A. McCabe & C. Peterson (Eds.). *Developing Narrative Structure*. (pp. 29-54) Hillsdale, NJ: Earlbaum.
- Pressley, M., Johnson, C. J., Symons, S., McGoldrick, J. A., & Kurita, J. A. (1989). Strategies that improve children's memory and comprehension of text. *The Elementary School Journal*, 90, 3-32.
- Purcell-Gates, V. (1996). Stories, coupons, and the TV Guide: Relationships between home literacy experiences and emergent literacy knowledge. *Reading Research Quarterly*, 31(4), 406-428.

- Reese, E. (1995). Predicting children's literacy from mother-child conversations. *Cognitive Development*, 10, 381-405.
- Schneider, P., & Hayward, D. (2010). Who does what to whom: Introduction of referents in children's storytelling from pictures. *Language, Speech, and Hearing Services in Schools*, 41, 459-473.
- Shapiro, L. R., & Hudson, J. A. (1991). Tell me a make-believe story: Coherence and cohesion in young children's picture-elicited narratives. *Developmental Psychology*, 27, 960-974.
- Slade, L., & Ruffman, T. (2005). How language does (and does not) relate to theory of mind: A longitudinal study of syntax, semantics, working memory and false belief. *British Journal of Developmental Psychology*, 23, 117-141.
- Snow, C. E. (1991). Theoretical basis for relationships between language and literacy development. *Journal of Research in Education*, 6, 5-10.
- Ukrainetz, T. A., Justice, L. M., Kaderavek, J. N., Eisenberg, S. L., Gillam, R. B., & Harm, H. M. (2005). The development of expressive elaboration in fictional narratives. *Journal of Speech, Language, and Hearing Research*, 48, 1363-1377.
- Villaume, S. K. (1988). Creating context within text: An investigation of primary-grade children's character introduction in original stories. *Research in the Teaching of English*, 22, 161-182.
- Westby, C. E. (1991). Learning to talk, talking to learn: Oral-literate language differences. In C. S. Simon (Ed.). *Communication Skills and Classroom Success: Assessment and Therapy Methodologies for Language and Learning Disabled Students* (pp. 334-357). Eau Claire, WI: Thinking Publication.

## Appendix A

### Prekindergarten oral retell samples

1. The mom lost her wallet. The little kids ordered a Happy Meal and uh cheeseburger! They came they umm. The mom said, "We're going to go out to eats tonight."
2. There was a, there was a little boy and a little girl, and they went to McDon. They, they maybe shouted out, "McDonald's." And then, their mother ordered a s-s-s-s-salad. And then, she got she tried to get her wallet. But it was at, it was, they was. Got back in her car to go home to get it. And then they had a great meal at McDonald's.

### Kindergarten oral retell samples

1. They was driving the um to a restaurant and the um, her mommy, forgot her wallet. And um, and she, the ch-children said they'll wait for her. And she to wait and come back.
2. Lisa, Lisa, and, Lisa and, I forgot his name, but they, in um her, his, her brother, they, her mom say, "What do y'all want to eat tonight?" Both of 'em shouted, "McDonald's, McDonald's!" They, they had hopped in the car and then they ran. Then, they was at the store, McDonald's. And then, uh, Lisa, her brother, they, one of them wanted a Happy Meal and the other one Happy Meal. And then, it will be, um, I forgot how much. And then, she said, "I left my wallet. It must be on the counter in the, in, at our house". They say, "We will stay here and wait". And then, she, they had, they had a good night at the thing, at McDonald's. That's all I know.

### First grade oral retell samples

1. Um, um, the two boys and two, one is a girl, and one's a boy. And they went to McDonald's. And, the girl wanted um, um a cheeseburger meal, a Happy Meal, and a big ice cream cone. The, the boy wanted a Big Mac and um a big, um milkshake. And, the mom wanted a salad. And um, the mom forgot her wallet. So, she went back home and got it. And then they had a great happy meal together. They jumped into the car.
2. Well, Lisa and Raymond, they, they. "What do you want to eat?" And then, they said, they both shouted, "McDonalds, McDonalds!" And then Mom, and then, they went to McDonalds. And then they had a happy meal. But, Lisa didn't know what she want. She either want a Big Mac or Chicken Nuggets. She didn't know what to pick. But then, then when Mother and Raymond saw what they wanted, they already had their meal. But they said. And then they had, then they had went. And that then they had, then he said, "That was fifty I mean twelve dollars." And then Mom looked in her purse and there was no no, her wallet wasn't there. And then, they went back to the house. And got her wallet. And then they had a great meal.

Table 1  
 Descriptive statistics and Tests of Mean Differences (N = 184)

Variable	PreK	Kindergarten	First Grade	Prek and Kindergarten	Kindergarten and first grade	PreK and first grade
	M (SD)	M (SD)	M (SD)	p-value	p-value	p-value
Total number of words	38.7 (19.89)	55.3 (30.85)	74.2 (33.52)	0.009	0.001	<.001
Mean length of utterance	4.3 (1.07)	5.6 (1.32)	6.3 (1.12)	<.001	0.005	<.001
Number of adverbs	3.6 (3.16)	4.7 (3.18)	6.4 (3.54)	0.251	0.009	<.001
Number of conjunctions	7.6 (3.92)	11.5 (6.65)	13.7 (6.67)	0.001	0.136	<.001
Number of mental and linguistic verbs	0.6 (.71)	1.7 (1.44)	2.4 (1.52)	<.001	0.003	<.001
Number of elaborated noun phrases	0.7 (.67)	1.3 (1.06)	1.9 (1.29)	0.009	0.004	<.001
Proper initial character introductions	0.7 (.70)	0.8 (.53)	1.4 (.56)	0.143	<.001	<.001
Narrative comprehension	10.9 (7.10)	16.84 (7.00)	22.1 (5.73)	<.001	<.001	<.001
Narrative quality	16.4 (9.12)	20.3 (7.72)	25.7 (8.58)	0.03	0.003	<.001
OWLS raw score	24.5 (10.6)	35.5 (12.5)	44.6 (11.99)	<.001	<.001	<.001
OWLS standard score	80.9 (17.83)	82.4 (24.62)	85.5 (20.86)	1	1	0.941

Note. OWLS = Listening Comprehension Scale of the Oral and Written Language Scales, Listening Comprehension (N=137)

Table 2  
Correlations among variables controlling for age

	1	2	3	4	5	6	7	8	9
1. Total number of words	--								
2. Mean length of utterance	.64***	--							
3. Number of adverbs	.69***	.44***	--						
4. Number of conjunctions	.83***	.65***	.74***	--					
5. Number of mental and linguistic verbs	.83***	.56***	.67***	.73***	--				
6. Number of elaborated noun phrases	.75***	.57***	.72***	.73***	.71***	--			
7. Proper initial character introductions	.54***	.47***	.36***	.40***	.51***	.48***	--		
8. Narrative comprehension	.20*	.24**	.05	.12	.18*	.06	.30**	--	
9. Narrative quality	.32***	.30***	.05	.21*	.23*	.11	.31***	.52***	--
10. OWLS	.01	.24**	.03	.10	.03	.03	.19*	.23**	.35***

Note. OWLS = raw score on the Oral and Written Language Scales, Listening Comprehension.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 3  
Hierarchical Multiple Regression Analyses Predicting Comprehension Outcome Measures

Predictor	Narrative Comprehension		Narrative Quality		OWLS	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	.44***		.35***		.44***	
Age in months		.37***		.23***		.63***
Total number of words		-.01		.05*		-.09*
Mean length of utterance		1.13*		1.35*		3.60**
Step 2	.01		.03		.04	
Number of adverbs		-.06		-.35		.01
Number of conjunctions		.05		.07		.28
Number of mental and linguistic verbs		.37		-.33		.90
Number of elaborated noun phrases		-1.21		-1.60		-.74
Step 3	.02**		.02*		.02*	
Proper initial character introductions		2.80**		2.77*		4.60*
Total R2	.48**		.40***		.46***	
n	184		184		137	

Note. OWLS = raw score on the Oral and Written Language Scales, Listening Comprehension. All  $\beta$ s are unstandardized coefficients

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .