

NARRATIVE VOICES OF EARLY ADOLESCENTS: INFLUENCES OF LEARNING DISABILITY AND CULTURAL BACKGROUND

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This study analyzed personal and fictional narratives of culturally/ethnically diverse students with and without learning disabilities. The participants were 82 fourth to seventh graders from urban and suburban schools located in a Midwest metropolitan area. Narratives were elicited in the context of naturalistic conversation and analyzed using High Point Analysis and Episodic Analysis. The significant effects of student ethnic/cultural background, learning disability and the interaction of the two factors were found on several narrative facets in both personal and fictional genres. The findings are interpreted beyond the traditional deficit-based approach, pointing out to possible influences of student ethnic/cultural background. Educational implications for assessment and narrative-based instruction for diverse narrators are discussed.

For nearly four decades, ethnically and linguistically diverse students have been disproportionately represented in special education high incidence categories, with substantial proportions of them classified as having a learning disability (LD) and placed in programs for language-based reading difficulties (Artiles, 2002; Hosp & Reschly, 2004). National data across all high incidence disability categories shows disproportionate representation as particularly evident among African Americans (Donovan & Cross, 2002; Klingner et al., 2005) and related it to the child's characteristics such as socioeconomic status, race, and academic achievement (Hosp & Reschly, 2004; Oswald et al., 1999). In contrast, research indicated that this process is also impacted by sociocultural and contextual factors, including special education referral and placement decision-making (Kea & Utley, 1998; Klingner, et al., 2005).

However, research in special education has either not attended to these factors in the process of identifying and servicing students with disabilities or viewed cultural differences from a deficit perspective as a barrier to school success (Artiles, 2002; Gutierrez & Rogoff, 2003). In classrooms, predominantly mainstream educators typically evaluate performance of culturally diverse students against White middle-class standards and interpret performance as deficient whenever it does not align with such standards (Gay, 2000; Heath, 1982, 1983; Klingner et al., 2005). This interpretation is often accompanied by teacher perceptions of these students as less capable of learning and, consequently, lowered teacher expectations for achievement (Garcia & Ortiz, 1988; Kea & Utley, 1998; Labov, 1982). In this study, interpretation of performance of ethnically/culturally diverse students with and without LD is expanded beyond the deficit perspective by utilizing sociocultural views that consider variations in performance as expressions of culture-based style differences (Gutierrez & Rogoff, 2003).

Among various socio-cultural correlates of school success, research has supported the importance of classroom discourse participation for school task engagement, literacy development, and socio-emotional development (Cazden, 1988, 1999; Heath, 1983). Cazden (1999) argued that *classroom discourse has become more than the group context for individual student learning; it has become an essential and dynamic social process for accomplishing complex conceptual and communication goals* (p. 31). Because *culture provides the tools to pursue the search for meaning and to convey our understanding to others*, student participation in discursive learning is significantly impacted by his/her cultural and language background (Gay, 2000, p. 77). Thus, culturally and linguistically diverse students who use discursive styles incongruent with school and mainstream cultural norms may encounter more obstacles to school achievement than peers who use styles that approximate such norms (Gay, 2000; Nieto, 1999). *The absence of shared communicative frames of reference (...) and*

discourse systems make it difficult for culturally diverse students and teachers to genuinely understand each other and for students to fully convey their intellectual abilities (Gay, 2000, p. 81). Culturally-based language differences in African American students have been shown to impact their participation in classroom discursive learning activities (Lue, et. al, 2002). For example, *participatory-interactive* discursive style preferred by some African-American students may be perceived by teachers as not conducive to intellectual learning and lead to misdiagnosing academic performance and potential of these students as deficient (Gay, 2000; Labov, 1972; Wiley, 2005). In the special education referral and placement decision making, educators' failure to distinguish between child intrinsic deficits and characteristics related to cultural/linguistic background have contributed to the disproportionate representation of culturally diverse students within the category of LD and in remedial reading programs (Garcia & Ortiz, 1988; Massey, 1996).

This study focuses on one prominent type of classroom discourse, namely narrating about personal and fictional content. A common mode of classroom learning, narrative activities are used in various instructional activities, core readings, and standardized reading tests (Flood, et al., 1991; Gay, 2000; Hicks, 1993). In all these learning contexts, narrative provides *the symbolic means through which children give shape to their experience and conversely through which teachers and texts shape children's experiencing of events and characters* (Hicks, 1993, p. 137). Classroom use of narratives effectively mediates and expands children's conceptual understandings by providing contextualized application of abstract concepts that would otherwise be cognitively inaccessible to them (Bruner, 1990; Hicks, 1993). By participating in narrative discourse, students also engage in specific identities, attitudes, and social interactions (Gee, 1991; Miller & Legge, 1999). Further, narrative discourse activities significantly contribute to various aspects of literacy development (Roth et al., 1996; Zigo, 1998). Children's facility with specific oral narrative forms has been linked to their reading achievement and other school outcomes (Roth et al., 1996; Zevenberger, 1997). In particular, struggling readers with LD demonstrated significant improvements in conceptual reasoning (Dolyniuk, 1999), reading comprehension, and written expression (Williams, 2000) in response to direct instruction in narrative organization and/or narrative-based literacy instruction. Urban minority, low income students exposed to narrative-based literacy instruction that incorporated their preferred narrative styles showed significant improvements in academic performance and task engagement across a wide range of grades and curricula (Gay, 2000; Miller & Legge, 1999; Zigo, 2001).

In urban public schools, narrative discourse is expected to adhere to the narrowly-defined concept of narrative, referred to as *essayist* or *topic-centered*, in which discrete parts are related to a cumulative element with a distinctive closure (thus, resembling an expository, descriptive writing style) (Gay, 2000; Gee, 1991; Heath, 1983; Hicks, 1993; Michaels, 1991). Because the purpose of narrative this style is to convey information (i.e., report a chronology of events), teachers discourage personal or cultural interpretation of the events while they value clarity of descriptive detail, clear focus on the essential features, and concise organization (Gee, 1991; Heath, 1983; Hicks, 1991; Michaels 1991). The school-based narrative performance expectations are consistent with narrative forms practiced in White middle-class families and communities Gee, 1991; (Heath, 1983; Hicks, 1983). In contrast, low-income African American children, among a variety of narrative styles in their repertoire, may prefer to use *episodic* or *topic-associating* narrative forms (Champion, 2003; Gee, 1991; Heath, 1983; Hicks, 1991, 1993; Michaels, 1991). A distinguished feature of this narrative style – frequent shifts in time, place, and characters marked through lexical and intonation patterns result in implicit relationships among narrative components to be inferred by the listener (Bidell, et. al., 1997; Gay, 2000). In a sharp contrast to a *clear problem-solving sequences involving goals, obstacles, attempts to overcome objects, or resolutions, typical of Western story schemata* (Bidell, et. al., 1997, p. 4), this narrative structure *introduces a theme with a strong emotional content (...), expands on this same theme, then closes with a final repetition of the theme* (Bidell, et. al., 1997; p. 5). Topic-associating narratives may be perceived by teachers unfamiliar with them as disorganized and pointless despite the narrator's use of sophisticated syntactic, semantic, and prosodic devices to achieve narrative overall coherence (Michaels, 1991). As result, teachers may not engage in a dialog to elaborate on these narratives and appreciate the child's narrative expressions. The mismatch between the child's narrative style and teacher expectations may also lead to a misevaluation of the child's competencies, lowering achievement expectations, changing attitudes toward the child as a learner, and/or to an increased chance of being classified as having a learning disability (Gay, 2000; Michaels, 1991; Roth, 1986).

Thus, the congruence between a child's culturally-based narrative style and school's narrative expectations may impact the likelihood of his/her academic success and social engagement. Students

with LD may also have limited access to the intellectual and social benefits of classroom narrative discourse since they often demonstrate specific difficulties in comprehending, recalling, and producing narratives even when their socio-cultural background supports their fulfillment of school-based narrative expectations. Generally, these students demonstrate difficulty with formulating more complex narrative structures and connecting multiple components into a coherent unit. Across narrative tasks, they tend to produce less developmentally advanced narrative patterns, compared to same-age, typically achieving peers.

When asked to answer narrative comprehension questions, children with LD often have difficulty drawing inferences about the relationships among various narrative components and tend to rely on idiosyncratic responses rather than narrative-based information (Crais & Chapman, 1987; Williams, 1993). Although children with LD are typically able to accurately recall the temporal sequence of events and include all story grammar categories (Copmann & Griffith, 1994; Williams, 1993), they recall less narrative information, especially about characters' internal responses and goal-directed behavior (regardless of age, the listener's status, and type of narrative measure). Self-generated narratives of children with LD tend to be shorter than those of same-age, typically achieving peers since they contain less information about the context of the narrative events and the characters' thoughts and feelings (Klecan-Aker, 1985; Roth & Spekman, 1986). For example, make-believe stories generated by 8 to 13-year-old students with LD, compared to stories of peers matched on age, vocabulary level, and socioeconomic status, were overall shorter, contained fewer complete episodes, fewer statements describing story characters/objects and the characters' thoughts, emotions, and goals, and fewer inter-episodic connections (Roth & Spekman, 1986). In a study comparing stories told about a picture by 8 to 15-year-old students with LD, typically achieving, and low achieving peers matched on grade and socio-economic status (Newcomer et al., 1988). Children with LD produced fewer stories that included both a setting and a conflict-resolution pair and fewer action sequences that recounted temporally linked non-goal-directed events. A comparison of personal narratives generated by students with and without LD matched on gender and grade (Celinska, 2004) indicated that girls with LD produced fewer narratives with a central crisis, resulting in difficulty with communicating to the audience their own perspective on the recounted events.

In conclusion, both students from diverse ethnic/cultural backgrounds and students with LD may have specific difficulties with fulfilling school narrative discourse expectations. Although the impact of ethnic/cultural background and learning disabilities on narrative performance has been well documented in literature, research on the possible interactive effects of the two factors is nonexistent. This study addresses this important gap in research in an attempt to provide additional insights into the unique educational needs of diverse students with LD that may guide culturally-responsive, narrative-based interventions. In particular, this study analyzes the length, structural organization and coherence of personal and fictional narratives produced by Caucasian and African American early adolescents with and without LD.

The Study Narrative Analysis Framework

This study used two distinct and complimentary narrative approaches. These included *High Point Analysis* (HPA) and *Episodic Analysis* (EA), to compare the length, and structural organization, as well as overall coherence of the participants' personal and fictional narratives. Both HPA and EA are among the most commonly used frameworks for analyzing children's narratives, and have proved useful in examining narratives of Caucasian and African American children (Champion, 2003; Labov, 1972; Peterson & McCabe, 1983). Although the two approaches investigate narrative structure and coherence, each illuminates a distinct aspect of children's narrative organization and recognizes a specific narrative form (genre) as prototypic narrative structure.

From the sociolinguistic perspective of HPA, narrative is a linguistic tool of sense-making and self-representation defined as *one method of recapitulating past experience by matching a verbal sequence of clauses to the sequence of events that actually occurred* (Labov & Waletzky, 1967, p. 20). The basic underlying assertion of HPA distinguishes the two interwoven functions of narratives: referential and evaluative (Labov, 1972; Labov & Waletzky, 1967). The referential aspect of a narrative orients the listener to the temporal and spatial circumstances of reported events, introduces characters, and presents the temporal sequence of events. The evaluative aspect of a narrative expresses the narrator's attitude toward reported events, reveals the meaning of events to the narrator, and describes the narrator him or herself. Although the evaluative function may permeate the entire narrative, it is likely to be particularly concentrated at a *high point*, a climactic moment of the account that assumes the role of the

central organizing element. By analyzing both the narrative events and their personal significance, HPA is uniquely suited to reveal personal meaning that narrators impose on the recounted events and capture the overall narrative coherence emerging from organizing narrative events around a single event of particular significance to the narrator.

HPA postulates that a prototypical narrative, called *classic narrative*, is composed of seven discrete structural elements (Labov & Waletzky, 1967; Labov, 1972). *Abstracts* and *Introducers* that occur at the beginning mark the onset of the narrative, summarize it, or/and summon the listener's attention. *Orientations* provide background information about the people and objects involved, and orient the listener to temporal and spatial context of events. *Complicating actions* recount actions leading up to and including a high point. The high point is marked by *Evaluations* that convey the importance and meaning of the recounted events through explicit statements and/or implicit linguistic devices (e.g., repetition of words). The high point is followed by a *Resolution* that resolves any complication included in the narrative. A *Coda* can be added at the end to close the narrative and to relate it to the present communicative context.

Developmental studies (e.g., Peterson and McCabe, 1983) revealed five patterns of narrative coherence in addition to classical narrative pattern. The least developed narrative structures, *Leap-frog narratives*, are composed of events that are incomplete and unsystematically organized, resulting in difficulties in reconstructing the original events. *Impoverished narratives* include insufficient number of events or statements to form a recognizable pattern, and usually are restricted to orientation, evaluation, and repetition of narrative components. *Disoriented narratives* are usually contradictory, and seem to reflect the child's confusion about the narrated events or the child's difficulty with language. *Chronological narratives* consist of a temporally organized sequence of discrete, independent events that occur within a specific time period, or a list of events without recognizing any particular one as a high point. *Ending-at-the-High-Point narratives* provide successive complicating actions until the high point is reached without resolving the central conflict of a narrative. HPA has been widely applied to explore various aspects of narratives produced by children across a wide age range in different communicative contexts (Celinska, 2004; Champion, 2003). Some examples of the use of HPA in school-age children include conversational personal experience narratives (Peterson & McCabe, 1983), personal narratives of students with LD (Celinska, 2004), and communicative functions of narrative performance in both African-American and Caucasian children (Champion, 2003; Labov, 1972).

Episodic Analysis (EA) is one of the story grammar frameworks that seek to identify the basic underlying *story schemas* or *story grammars* (Stein & Albro, 1997). Asserting that narratives reveal underlying cognitive representations of human intentional behavior, EA explores children's mastery of the basic unit of narrative organization, called *episode*. An episode describes a sequence of goal-directed actions in which the character's thoughts and feelings are causally related to his/her problem-solving behavior. By focusing on episodically organized goal-directed actions, EA is particularly appropriate to evaluate the child's knowledge of human intentionality and causally organized problem-solving behavior (Stein & Albro, 1997).

EA purports that stories are composed of two discrete types of structural categories: setting and a system of one or more episodes. *Setting* statements introduce the characters and describe the spatial and temporal context of a story. *Episode*, a primary unit of story internal organization, is composed of the following discrete categories: (1) *Initiating Event* that presents a change in the environment, motivating the response of the protagonist, (2) *Internal Responses* that are goals, thoughts, and feelings of the protagonist, (3) *Attempts* that indicate the protagonist's goal-oriented actions, (4) *Direct Consequences* that refer to the attainment of goal(s) and the changes that resulted from the attempt, and (5) *Reactions* that include the protagonist's thoughts and feelings related to the outcomes of his/her actions.

EA applied to the analysis of children's stories has revealed seven developmental patterns of the story episodic organization that reflects the growing complexity of goal-directed action sequences (Stein, 1988; Stein & Albro, 1997). A *Descriptive Sequence*, consists of descriptions of characters, actions, and settings that are temporally or causally unrelated. When children begin to connect story events, two possible story structures appear: an *Action Sequence* in which actions are temporally related, or a *Reactive Sequence* containing a chain of changes that are linked both temporally and causally, but are not goal-directed behaviors. In contrast, an *Abbreviated Episode* includes events that are causally

structured into episodes and a goal of the protagonist can be inferred, whenever not stated explicitly. Although this level of stories contains an intact episode with a goal, attempt, and outcome, two components of the complete episode are missing: an obstacle to goal attainment and an ending. When an entire goal-oriented sequence is present, story structure is called a *Complete Episode*. Using various story grammar frameworks, developmental researchers have generated extensive data on Caucasian children's comprehension, memory, and production of fictional narratives (Stein & Albro, 1997). EA has also been successfully applied to analyzing narratives produced by low-income African American students (Champion, 2003) and to examine a variety of narrative skills in children with language/learning disabilities across a wide range of ages.

Research questions

This study was design to answer the following research questions: (1) Do personal and fictional narratives produced by Caucasian and African American participants differ in terms of length, structural organization, and global coherence (Ethnicity factor); (2) Do personal and fictional narratives produced by typically achieving participants and participants with learning disabilities differ in terms of length, structural organization, and global coherence (Learning Disability factor); and (3) Are there any interactive effects of the participants' ethnicity (Caucasian vs. African American) and learning disability status (learning disability vs. typical achievement) in terms of length, structural organization, and global coherence?

Method

Participants

The participants were 48 Caucasian (C group) and 34 African- American (AA group) students who attended four urban (N=28) and 11 suburban (N=54) schools within a large Midwest metropolitan area. All Caucasian participants attended suburban schools, whereas 28 African-American participants attended urban schools and six African-American students attended suburban schools. The participants included 41 boys and 41 girls enrolled in grades four (N=17), five (N= 46), six (N=17), and seven (N=2), with the equal number of boys and girls at each grade level. Twenty-six African-American students from urban schools and three Caucasian students from suburban schools were eligible for free or reduced lunch (35% of the sample). All participants were native English language speakers. Forty-one participants had an identified learning disability (LD group, N=41) and were matched individually with the typically achieving peers (NA group, N= 41) for chronological age (within six months), grade, and gender.

The mean chronological age of the participants was 136.0 months (SD = 11.20), and ranged from 115 to 159 months. An Ethnicity by Disability ANOVA on chronological age revealed a significant main effect for ethnicity [$F(1,74)= 44.56, p=.000$], with Caucasian participants being younger (M=130.50, SD=8.82) than African-American peers (M=143.91, SD= 9.42). The main effect for disability [$F(1,74)= 1.11, p=.295$] and the interaction between group and gender [$F(1,74)= .016, p=.899$] were nonsignificant.

The participants with LD (24 Caucasian and 17 African-American) were selected from students identified as having LD by their schools (based on the IDEA'97 criteria) who also met the research selection criterion of an absence of a diagnosis of an emotional disturbance as a primary or secondary disability on the participant's most recent case study evaluation or IEP. Academic achievement and cognitive abilities of all participants with LD were evaluated based on a review conducted by the author of the student's most recent case study evaluation and/or IEP. Achievement data indicated that 36 students (83% of Caucasian and 94% of African-American) exhibited learning difficulties with reading, 38 in writing (88% of Caucasian and 100% of African-American), and 28 in mathematics (54% of Caucasian and 88% of African-American). Data on cognitive skills were available for 40 participants and revealed that 37 of them (61% of Caucasian and 76% of African-American) demonstrated weaknesses in auditory processing; 36 in visual processing (91% of Caucasian and 76% of African-American); 15 in concept formation, abstract thinking, and/or reasoning (35% of Caucasian and 41% of African-American); 9 in planning and organization of independent work (35% of Caucasian and 33% of African-American); and 20 in attention, monitoring, and/or following directions (30% of Caucasian and 76% of African-American). Data on educational placement indicated that 32 students (24 Caucasian and 8 African-American) received more than 50% of instruction in general education settings, whereas 9 (all African-American) received less than 50% of instruction in this setting.

The typically achieving participants (NA group) were selected from students who never received or were referred to remedial services of any kind. Student achievement was based on the scores on a state standardized achievement test. All 24 Caucasian NA students were given the *Illinois Standards Achievement Test* and data was available for 22 of them. Twenty students met or exceeded standards in reading, writing, and mathematics. Data on group standardized achievement test scores were available for 15 out of 17 NA African-American participants. Two of them were given the ISAT and met standards in reading and writing (but not in mathematics). Out of 13 African American students who were given the *Iowa Test of Basic Skills*, nine showed at least moderate achievements in reading and mathematics (no scores in writing were available).

The participants' oral language skills were assessed to control for a possible impact of these skills on their narrative performance (Copmann & Griffith, 1994; Crais & Chapman, 1987). Select subtests of the *Clinical Evaluation of Language Fundamentals-Third Revision* (CELF-3) (Semel, Wiig & Secord, 1995) were used: the *Listening to Paragraphs* subtest to evaluate listening comprehension skills, whereas the *Formulated Sentences* subtest and the *Sentence Assembly* subtest to assess expressive syntactic abilities. An Ethnicity by Disability MANOVA revealed significant main effects for ethnicity [$F(3,76)= 14.04, p=.000$] and disability [$F(3,76)= 10.88, p=.000$] on the composite of the three oral language scores. The interaction between ethnicity and disability was nonsignificant [$F(3,76)= 1.92, p=.134$]. Follow-up Ethnicity by Disability univariate ANOVAs revealed a significant main effect for ethnicity and for disability (see Table 1). African-American participants displayed less advanced listening comprehension and expressive syntactic skills than did their Caucasian counterparts. Participants with LD demonstrated weaker expressive syntactic abilities than their NA peers.

Table 1.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the standardized structural language test scores.

	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Listening to Paragraphs</i>								
African American	6.8	2.8	8.8	3.2	7.8	3.1		
Caucasian	10.3	2.7	9.8	1.9	10.1	2.3		
Total	8.8	3.2	9.4	2.5				
							1.72 (A)	.000*
							15.28 (B)	.000*
							4.37 (AxB)	.040
<i>Sentence Assembly</i>								
African American	6.8	3.3	9.4	2.1	8.1	3.0		
Caucasian	8.4	2.8	11.2	2.7	9.8	3.1		
Total	7.7	3.1	10.4	2.6				
							19.02 (A)	.000*
							8.08 (B)	.006*
							.03 (AxB)	.869
<i>Formulated Sentences</i>								
African American	5.7	2.0	8.5	2.1	7.1	2.5		
Caucasian	9.1	2.3	10.8	2.0	10.0	2.3		
Total	7.7	2.8	9.9	2.4				
							22.97 (A)	.000*
							36.44 (B)	.000*
							1.50 (AxB)	.224

* Significant differences. The level of significance adjusted to .0166.

Procedure

The procedure for collecting narratives was an adaptation of the *conversational map*, a protocol for naturalistic elicitation of personal narratives in the context of conversation (McCabe & Rollins, 1994; Peterson & McCabe, 1983). The interviewer was a Caucasian female graduate student in special education. In a separate room in the school the interviewer initiated a casual conversation and later encouraged narrating on self-selected topics with an open-ended question about the child's recent experiences. Following the initial elicitation prompt, the interviewer assumed the role of a narrator, providing short narratives about common experiences of potential interest to children (e.g., pet adventures) and immediately prompted the child to narrate about similar events. Throughout the 20- to

30- minute interview, the interviewer encouraged (without leading) the children to narrate personal experiences meaningful to them while demonstrating an interest in the child's narration regardless of its thematic and structural features. Narrating personal experiences was followed by the interviewer's explicit prompt that asked the child to tell a fictional (make-believe) story of his/her choice. Following an interview, the child was administered the standardized oral language tests. All conversations between the interviewer and participants were audiotape and later transcribed verbatim.

Data Coding and Reliability

Transcripts were masked so that raters were not aware of the participants' ethnicity, gender, age, grade, school attended, and LD status. First, transcripts were analyzed to identify personal narratives, using Labov's definition of a minimal narrative as *a sequence of two clauses which are temporally ordered; that is, a change in their order will result in a change in the temporal sequence of the original semantic interpretation* (Labov, 1972, p. 360). Because the length of personal narrative was found to be a good predictor of its complexity (McCabe & Rollins, 1994), the three longest of each child's personal narratives (in clauses) were selected for all subsequent analysis (with the exception of six African-American participants who produced only two narratives). The total of 240 personal narratives was analyzed: 144 from Caucasian and 96 from African-American participants. Fictional narratives were those produced in response to a specific prompt to tell a fictional (make-believe) story (see *Procedure* section). The total of 82 fictional narratives was analyzed, with each participant producing one narrative.

Coding Using High Point Analysis

First, audiotapes were coded in terms of the inclusion of the following types of HPA Evaluation structural components: Onomatopoeia (an imitation of an environmental sound or an animated object), Stress (a marked emphasis in voice), Elongating (marked drawing out of some words/sounds), Exclamation (an increase in voice loudness), and Imitation of human voice (a change in the narrator's speech characteristics to imitate the narrative characters' speech qualities) (Peterson & McCabe, 1983). Inter-rater agreement about these codes was established for 20% of randomly selected transcripts, resulting in a 91% agreement for number of components, and a 98% agreement for type of component.

Then, the child's three longest personal narratives and the fictional narrative were broken into syntactic clauses, that are *logical sequences of words containing a subject and a verb* (Friend, 1976, p. 31). Clauses were further classified into two types: independent clauses (i.e., clauses that express a complete thought) and dependent clauses (i.e., clauses that have incomplete meaning) (Friend, 1976). The inter-rater agreement was established for 18% of randomly selected transcripts, and resulted in a 95% agreement for number of clauses and a 97% agreement for type of clause. Independent clauses, called *narrative clauses*, were coded as one of the five components: *Orientation, Evaluation, Complicating action, Resolution, and Appendage* (this category includes *Abstracts, Introducers, and Codas*). Narrative clauses coded as either Orientation, Complicating action, Resolution, or Appendages could also be classified as Evaluations to capture the evaluative narrative function that may permeate the entire narrative. Dependent clauses were coded as either Orientation or Evaluation category, and might be subordinate to any of the five types of independent clauses. The inter-rater agreement was established for 18% of randomly selected transcripts and resulted in an 87% agreement for the type of structural component. Further, each personal and fictional narrative was categorized into one of the six patterns of narrative coherence: *Leap-frogging, Impoverished, Disoriented, Chronological, Ending-at-the-high-point, and Classic*. The inter-rater agreement was established for 18% of randomly selected transcripts, and resulted in an 86% agreement for the type of pattern.

Coding Using Episodic Analysis

All personal and fictional narratives were divided into propositions that consist of a predicator or relational word (usually the verb) and one or more arguments which stand in some specific relation to the predicator (Fillmore, 1968). The inter-rater agreement was established for 15% of randomly selected transcripts, and resulted in a 96% agreement for number of propositions. Each proposition was then classified into one of the EA structural components: *Setting, Initiating Event, Internal Response, Attempt, Direct Consequence, and Reaction*. The inter-rater agreement was established for 15% of randomly selected transcripts and resulted in an 85% agreement for the type of component. Next, all personal and fictional narratives were classified into one of the coherence patterns: *Descriptive, Action Sequence, Reactive Sequence, Abbreviated Episode, and Complete Episode*. The inter-rater agreement was established for 15% of randomly selected transcripts and resulted in an 88% agreement for type of pattern.

Design

The following dependent measures were used to compare narratives across Caucasian (C group) and African-American (AA group) participants (Ethnicity factor), and across students with LD (LD group) and typically achieving participants (NA group) (Disability factor):

1. Length, as measured by the mean number of: (a) clauses per narrative, (b) propositions per narrative, (c) propositions per episode, and (d) episodes per narrative.
2. Structural organization, as measured by the mean proportion of: (a) clauses per narrative classified into each of the HPA five structural components and (b) propositions per narrative classified into each of the EA six structural components.
3. Global coherence, as measured by the mean proportion of narratives classified into: (a) one of the HPA five patterns of narrative global coherence and (b) one of the EA five patterns of narrative global coherence.

Results

A series of Ethnicity by Disability MANOVAs and/or ANOVAs were conducted to analyze group differences on the dependent measures. To control for Type I error, the level of significance for all analysis was adjusted by dividing .05 by the number of *F* tests, if appropriate (see the results tables for the specific levels of significance used for each series of *F* tests).

*Length of Narratives**Personal and fictional narratives*

Ethnicity by Disability ANOVAs revealed significant main effects for disability on the mean number of propositions per narrative, indicating that students with LD produced significantly longer personal narratives than their NA peers (see Table 2). Main effects for ethnicity indicated that African-American students' personal narratives were shorter than the personal narratives produced by their Caucasian peers in terms of the number of propositions per narrative and the number of propositions per episode, while containing more episodes per narrative (see Table 2).

Table 2.

Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of length of personal narratives (High Point Analysis and Episodic Analysis).

Ethnicity (B)	Disability (A)				Total		<i>F</i> (1, 78)	<i>p</i>
	LD M	SD	NA M	SD	M	SD		
<i>Clauses per narrative</i>								
African American	16.8	13.2	12.1	6.5	14.5	10.5		
Caucasian	16.7	13.2	14.5	6.3	15.6	10.3		
Total	16.8	13.1	13.5	6.4				
							2.31 (A)	.133
							.20 (B)	.657
							.46 (AxB)	.501
<i>Propositions per narrative</i>								
African American	17.9	14.3	12.4	6.6	15.1	11.3		
Caucasian	17.3	14.5	15.2	7.1	16.3	11.4		
Total	17.6	14.2	14.0	7.0				
							19.02 (A)	.000*
							8.08 (B)	.006*
							.03 (AxB)	.869
<i>Propositions per episode</i>								
African American	9.0	2.8	8.1	2.6	8.6	2.7		
Caucasian	12.0	6.6	10.2	3.1	11.1	5.2		
Total	10.8	5.5	10.0	4.5				
							1.98 (A)	.163
							6.99 (B)	.010*
							.21 (AxB)	.650
<i>Episodes per narrative</i>								
African American	2.5	3.2	1.7	1.4	2.1	2.5		
Caucasian	1.4	.5	2.3	1.7	1.9	1.3		
Total	1.9	2.1	2.1	1.6				
							.46 (A)	.498
							36.44 (B)	.000*
							4.42 (AxB)	.039

* Significant differences. The level of significance adjusted to .0126.

Ethnicity by Disability ANOVAs revealed a significant main effect for ethnicity on the mean number of episodes per narrative, indicating that African-American students produced more episodes per narrative than their Caucasian counterparts (see Table 3).

Table 3.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of length of fictional narratives (High Point Analysis and Episodic Analysis).

Ethnicity (B)	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Clauses per narrative</i>								
African American	38.2	38.4	24.4	17.1	37.6	35.5		
Caucasian	27.0	22.6	36.9	33.5	25.7	19.9		
Total	31.6	30.3	29.6	25.6				
							.10 (A)	.753
							3.65 (B)	.060
							.01 (AxB)	.922
<i>Propositions per narrative</i>								
African American	39.8	39.2	39.4	36.5	39.7	37.3		
Caucasian	27.2	24.7	24.2	18.2	25.7	21.5		
Total	32.4	31.7	30.5	28.0				
							.06 (A)	.806
							4.48 (B)	.037
							.05 (AxB)	.833
<i>Propositions per episode</i>								
African American	10.5	4.7	12.9	7.8	7.09	2.49		
Caucasian	15.1	7.5	10.0	5.8	9.98	2.34		
Total	13.2	6.8	11.2	6.8				
							.84 (A)	.364
							.28 (B)	.600
							6.42 (AxB)	.013
<i>Episodes per narrative</i>								
African American	4.1	3.4	2.9	1.8	3.5	2.7		
Caucasian	1.9	1.2	2.7	1.9	2.3	1.6		
Total	2.8	2.6	2.8	1.8				
							.13 (A)	.717
							6.87 (B)	.011*
							4.53 (AxB)	.037

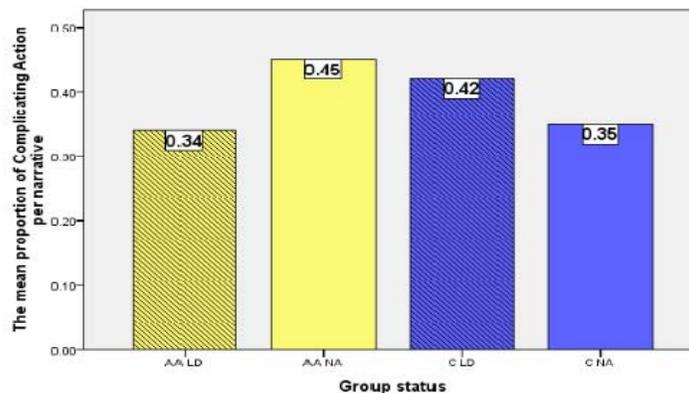
* Significant differences. The level of significance adjusted to .0126.

Structural Organization

Personal narratives

An Ethnicity by Disability MANOVA on the mean proportion of clauses per narrative classified into

Graph 1. Simple effects for disability (LD-NA) and ethnicity (AA-C) on Complicating Action in personal narratives



each of the five structural components of HPA indicated no significant main effect for ethnicity ($F(5,74)=1.02, p=.415$) and disability ($F(5,74)=2.27, p=.056$) but a significant ethnicity by disability interaction ($F(5,74)=4.43, p=.001$). Follow-up Ethnicity by Disability univariate ANOVAs revealed

significant ethnicity by disability interaction effects the Complicating Action and Orientation categories (see Table 4).

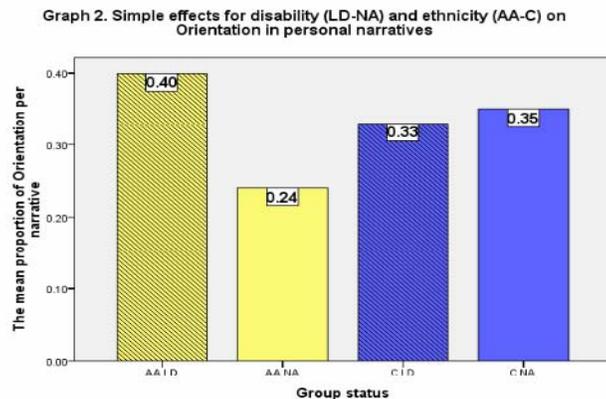
Table 4.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of structural organization of personal narratives (High Point Analysis).

Ethnicity (B)	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Complicating Action</i>								
African American	.34	.11	.45	.14	.40	.14		
Caucasian	.42	.11	.35	.11	.38	.11		
Total	.39	.11	.39	.13				
							.61 (A)	.438
							.23 (B)	.634
							12.07 (AxB)	.001*
<i>Resolution</i>								
African American	.03	.04	.04	.04	.03	.04		
Caucasian	.06	.10	.03	.02	.04	.07		
Total	.05	.08	.03	.03				
							1.02 (A)	.316
							.66 (B)	.420
							1.97 (AxB)	.165
<i>Appendages</i>								
African American	.02	.03	.06	.07	.05	.06		
Caucasian	.04	.03	.05	.04	.04	.04		
Total	.03	.03	.05	.05				
							6.59 (A)	.012
							.18 (B)	.673
							2.34 (AxB)	.130
<i>Orientation</i>								
African American	.40	.10	.24	.10	.32	.12		
Caucasian	.33	.12	.35	.15	.34	.13		
Total	.36	.12	.30	.14				
							6.33 (A)	.014
							.53 (B)	.469
							11.22 (AxB)	.001*
<i>Evaluation</i>								
African American	.34	.12	.34	.16	.34	.14		
Caucasian	.38	.12	.42	.18	.40	.15		
Total	.37	.12	.38	.18				
							.38 (A)	.540
							3.29 (B)	.074
							.26 (AxB)	.611

* Significant differences. The level of significance adjusted to .010.

Simple effects analysis for disability on the proportion of Complicating Action revealed that the African-American students with LD produced this category significantly less frequently ($M=.34$, $SD=.11$) than African-American NA students ($M=.45$, $SD=.14$) ($F(1,78)=7.72$, $p=.007$), whereas the difference between Caucasian students with LD ($M=.42$, $SD=.11$) and Caucasian NA students ($M=.35$, $SD=.11$) was nonsignificant ($F(1,78)=4.38$, $p=.040$). (see Graph 1 above) Simple effects analysis for ethnicity on the proportion of Complicating Action revealed that African-American NA students produced Complicating action category significantly more frequently ($M=.45$, $SD=.14$) than Caucasian NA students ($M=.35$, $SD=.11$) ($F(1,78)=7.40$, $p=.008$), whereas the difference between African-American students with LD ($M=.34$, $SD=.11$) and Caucasian students with LD ($M=.42$, $SD=.11$) was nonsignificant ($F(1,78)=4.16$, $p=.045$).

Simple effects analysis for disability on the proportion of Orientation revealed that the African-American students with LD produced this category significantly more frequently ($M=.40$, $SD=.10$) than African-American NA students ($M=.24$, $SD=.10$) ($F(1,78)=7.72$, $p=.007$), whereas the difference between Caucasian NA students ($M=.35$, $SD=.15$) and Caucasian students with LD ($M=.33$, $SD=.12$) was nonsignificant ($F(1,78)=4.38$, $p=.040$). (see Graph 2 below) Simple effects analysis for ethnicity



on the proportion of Orientation revealed that African-American NA students produced Orientation category significantly less frequently ($M=.24$, $SD=.10$) than Caucasian NA students ($M=.35$, $SD=.15$) ($F(1,78)=7.40$, $p=.008$), whereas the difference between African-American students with LD ($M=.40$, $SD=.10$) and Caucasian students with LD ($M=.33$, $SD=.12$) was nonsignificant ($F(1,78)=4.16$, $p=.045$). An Ethnicity by Disability MANOVA on the mean proportion of propositions per narrative classified into each of the six structural components of EA indicated nonsignificant main effect for disability ($F(7,72)=1.79$, $p=.102$) and significant main effects for ethnicity ($F(7,72)=2.46$, $p=.025$) and for ethnicity by disability interaction ($F(7,72)=2.69$, $p=.016$). Follow-up Ethnicity by Disability univariate ANOVAs revealed a significant main effect for ethnicity on Internal Response category, indicating that African-American participants included a higher proportion of this category than their Caucasian peers (see Table 5 Next page). In addition, a significant ethnicity by disability interaction was revealed on Direct Consequence category.

Simple effects analyses for disability on Direct Consequence revealed that the African-American students with LD produced this category significantly less frequently ($M=.17$, $SD=.09$) than African-American NA students ($M=.28$, $SD=.11$) ($F(1,78)=9.95$, $p=.002$), whereas the difference between Caucasian students with LD ($M=.25$, $SD=.10$) and Caucasian NA students ($M=.24$, $SD=.09$) was nonsignificant ($F(1,78)=.36$, $p=.548$). Simple effects analysis for ethnicity on the proportion of Direct Consequences revealed no significant differences between African-American NA students ($M=.28$, $SD=.11$) than Caucasian NA students ($M=.24$, $SD=.09$) ($F(1,78)=1.18$, $p=.280$), and between African-American students with LD ($M=.17$, $SD=.09$) and Caucasian students with LD ($M=.25$, $SD=.10$) ($F(1,78)=5.82$, $p=.018$).

Graph 3. Simple effects for disability (LD-NA) and ethnicity (AA-C) on Direct Consequence in personal narratives

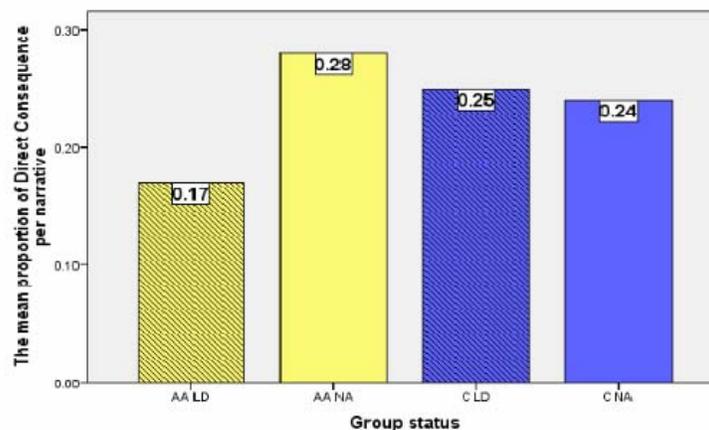


Table 5.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of structural organization of personal narratives (Episodic Analysis).

Ethnicity (B)	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Setting</i>								
African America	.34	.16	.24	.09	.29	.13		
Caucasian	.34	.10	.34	.11	.34	.10		
Total	.34	.13	.30	.11				
							3.82 (A)	.054
							4.40 (B)	.039
							3.77 (AxB)	.056
<i>Initiating Event</i>								
African American	.23	.10	.22	.10	.22	.10		
Caucasian	.19	.08	.20	.08	.19	.08		
Total	.21	.09	.21	.09				
							.00 (A)	.948
							1.95 (B)	.166
							.28 (AxB)	.598
<i>Internal Response</i>								
African American	.10	.05	.10	.12	.10	.09		
Caucasian	.05	.07	.05	.04	.05	.06		
Total	.07	.07	.07	.08				
							.01 (A)	.933
							8.40 (B)	.005*
							.00 (AxB)	.953
<i>Attempt</i>								
African American	.10	.11	.11	.10	.10	.10		
Caucasian	.07	.06	.09	.09	.08	.08		
Total	.08	.08	.10	.09				
							.31 (A)	.578
							1.37 (B)	.245
							.04 (AxB)	.841
<i>Direct Consequence</i>								
African American	.17	.09	.28	.11	.23	.11		
Caucasian	.25	.10	.24	.09	.25	.09		
Total	.22	.10	.25	.10				
							4.10 (A)	.046
							.87 (B)	.355
							7.85 (AxB)	.006*
<i>Reaction</i>								
African American	.05	.05	.04	.09	.04	.07		
Caucasian	.08	.06	.06	.07	.07	.07		
Total	.06	.06	.06	.08				
							.19 (A)	.661
							2.67 (B)	.106
							.06 (AxB)	.802

* Significant differences. The level of significance adjusted to .008.

Fictional narratives

An Ethnicity by Disability MANOVA on the mean proportion of clauses per narrative classified into each of the components of HPA indicated no significant main effects for ethnicity ($F(5,74) = .92, p = .471$), disability ($F(5,74) = 1.63, p = .162$), or ethnicity by disability interaction ($F(5,74) = 1.55, p = .186$). Follow-up Ethnicity by Disability univariate ANOVAs revealed no significant main effects (see Table 6 next page).

An Ethnicity by Disability MANOVA on the mean proportion of propositions per narrative classified into each of the six structural components of EA indicated nonsignificant main effect for ethnicity ($F(7,72) = 2.28, p = .038$) and disability ($F(7,72) = .46, p = .860$) and a significant main effect for ethnicity by disability interaction ($F(7,72) = 4.62, p = .000$). Follow-up Ethnicity by Disability univariate ANOVAs revealed a significant main effect for ethnicity by disability interaction on the Reaction category (see Table 7).

Table 6.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of structural organization of fictional narratives (High Point Analysis).

Ethnicity (B)	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Complicating Action</i>								
African American	.41	.17	.42	.17	.41	.16		
Caucasian	.44	.15	.34	.15	.39	.17		
Total	.42	.16	.37	.16				
							1.49 (A)	.226
							.57 (B)	.451
							2.58 (AxB)	.112
<i>Resolution</i>								
African American	.02	.03	.03	.03	.03	.04		
Caucasian	.03	.04	.03	.04	.04	.07		
Total	.03	.04	.03	.04				
							.10 (A)	.755
							1.43 (B)	.236
							.17 (AxB)	.678
<i>Appendages</i>								
African American	.02	.03	.02	.03	.02	.03		
Caucasian	.01	.02	.02	.04	.01	.03		
Total	.01	.02	.02	.03				
							.55 (A)	.460
							.64 (B)	.425
							.09 (AxB)	.760
<i>Orientation</i>								
African American	.37	.20	.32	.16	.34	.18		
Caucasian	.33	.10	.44	.17	.39	.15		
Total	.35	.15	.39	.18				
							.77 (A)	.383
							1.47 (B)	.230
							5.21 (AxB)	.025
<i>Evaluation</i>								
African American	.23	.13	.36	.24	.30	.20		
Caucasian	.30	.18	.34	.16	.32	.17		
Total	.27	.16	.35	.20				
							4.55 (A)	.036
							.21 (B)	.651
							1.26 (AxB)	.265

* Significant difference. The level of significance adjusted to .010.

Simple effects analysis for disability on the proportion of Reactions revealed that the African-American students with LD produced this category less frequently than African-American NA students, whereas Caucasian students with LD produced it more frequently than Caucasian NA students (see Graph 4). Simple effects analysis for ethnicity on the proportion of Reactions revealed that African-American NA students produced this category more frequently than Caucasian NA students, while African-American students with LD produced Reactions less frequently than Caucasian students with LD (see Graph 4).

Graph 4. Simple effects for disability (LD-NA) and ethnicity (AA-C) on Reaction in fictional narratives

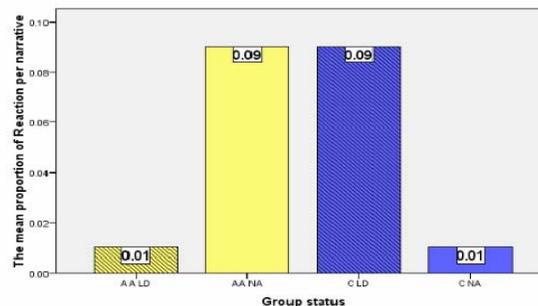


Table 7.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures structural organization of fictional narratives (Episodic Analysis).
 Disability (A)

Ethnicity (B)	LD		NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Setting</i>								
African American	.35	.12	.30	.15	.33	.14		
Caucasian	.30	.14	.30	.16	.30	.15		
Total	.32	.14	.30	.16				
							.53 (A)	.468
							.72 (B)	.398
							.71 (AxB)	.401
<i>Initiating Event</i>								
African American	.15	.07	.14	.09	.15	.08		
Caucasian	.19	.11	.23	.20	.21	.16		
Total	.17	.10	.19	.17				
							.37 (A)	.544
							4.19 (B)	.044
							.81(AxB)	.371
<i>Internal Response</i>								
African American	.10	.09	.06	.07	.08	.08		
Caucasian	.10	.10	.09	.12	.09	.11		
Total	.10	.10	.07	.10				
							1.76 (A)	.189
							.70 (B)	.404
							.24 (AxB)	.627
<i>Attempt</i>								
African American	.14	.14	.14	.17	.14	.14		
Caucasian	.15	.14	.13	.15	.14	.15		
Total	.15	.14	.14	.16				
							.12 (A)	.727
							.01 (B)	.935
							.07 (AxB)	.793
<i>Direct Consequence</i>								
African American	.22	.15	.28	.12	.25	.13		
Caucasian	.17	.12	.20	.13	.18	.12		
Total	.19	.13	.23	.13				
							2.46 (A)	.121
							4.82 (B)	.031
							.44 (AxB)	.510
<i>Reaction</i>								
African American	.01	.03	.09	.09	.05	.07		
Caucasian	.09	.08	.01	.03	.05	.07		
Total	.06	.07	.04	.07				
							.02 (A)	.904
							.04 (B)	.836
							29.23 (AxB)	.000*

• Significant differences. The level of significance adjusted to .008.

Global Coherence

Personal narratives

A series of Ethnicity by Disability ANOVAs (see Table 8) was conducted to analyze group differences on the mean proportion of narratives classified into one of the five distinct patterns of narrative global coherence of High Point Analysis. These analyses revealed no significant main effects for ethnicity, disability, or ethnicity by disability interaction on any of the coherence patterns.

Ethnicity by Disability ANOVAs on the mean proportion of narratives classified into one of the five EA narrative coherence patterns revealed no significant main effects for ethnicity and significant main effects for disability and ethnicity by disability interaction (see Table 9). Significant main effects for disability indicated that participants with LD produced a higher proportion of Action Sequences and lower proportion of Abbreviated Episodes than did their NA peers. A significant main effect for ethnicity by disability interaction was revealed on the Descriptive Sequence pattern.

Table 8.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of global coherence of personal narratives (High Point Analysis).

Ethnicity (B)	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Classic</i>								
African American	.37	.37	.34	.28	.36	.32		
Caucasian	.29	.26	.39	.36	.34	.32		
Total	.32	.31	.37	.33				
							.22 (A)	.644
							.06 (B)	.805
							.78 (AxB)	.382
<i>Ending-at-the-high-point</i>								
African American	.06	.13	.17	.22	.11	.19		
Caucasian	.12	.16	.19	.26	.16	.22		
Total	.10	.15	.18	.24				
							3.80 (A)	.055
							1.06 (B)	.306
							.18 (AxB)	.676
<i>Chronological</i>								
African American	.39	.32	.31	.32	.35	.32		
Caucasian	.32	.27	.22	.33	.27	.30		
Total	.35	.29	.26	.33				
							1.57 (A)	.214
							1.38 (B)	.244
							.02 (AxB)	.896
<i>Leap-frogging</i>								
African American	.04	.11	.06	.17	.05	.14		
Caucasian	.06	.16	.01	.07	.03	.12		
Total	.05	.14	.03	.12				
							.14 (A)	.714
							.23 (B)	.634
							1.05 (AxB)	.309
<i>Impoverished</i>								
African American	.14	.24	.12	.28	.13	.26		
Caucasian	.14	.24	.17	.28	.15	.25		
Total	.14	.23	.15	.28				
							.01 (A)	.936
							.18 (B)	.673
							.16 (AxB)	.693

- Significant differences. The level of significance adjusted to .010.

Table 9.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of global coherence of personal narratives (Episodic Analysis).

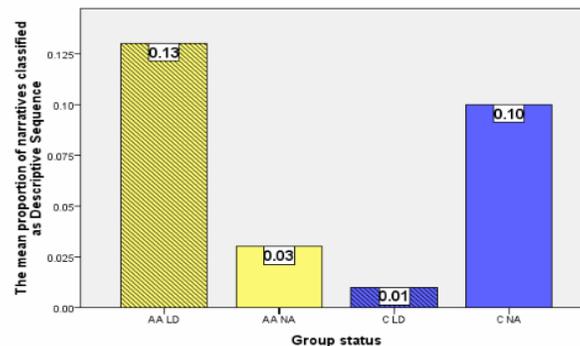
Ethnicity (B)	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Descriptive Sequence</i>								
African American	.13	.13	.03	.10	.08	.12		
Caucasian	.01	.05	.10	.15	.06	.12		
Total	.06	.11	.07	.14				
							.00 (A)	.983
							.79 (B)	.377
							12.51 (AxB)	.001*
<i>Action Sequence</i>								
African American	.16	.18	.15	.25	.12	.23		
Caucasian	.25	.28	.00	.00	.16	.22		
Total	.21	.24	.06	.17				
							8.05 (A)	.006*
							.54 (B)	.466
							6.34 (AxB)	.014

<i>Reactive Sequence</i>								
African American	.63	.23	.68	.25	.65	.24		
Caucasian	.60	.32	.75	.28	.68	.28		
Total	.61	.28	.72	.24			2.78 (A)	.099
							.17 (B)	.679
							.66 (AxB)	.419
<i>Abbreviated Episode</i>								
African American	.03	.09	.09	.16	.06	.13		
Caucasian	.01	.07	.11	.15	.06	.13		
Total	.02	.08	.10	.16			7.03 (A)	.010*
							.01 (B)	.946
							.68 (AxB)	.412
<i>Complete Episode</i>								
African American	.04	.10	.05	.12	.05	.11		
Caucasian	.12	.24	.03	.08	.08	.19		
Total	.09	.20	.04	.10			1.36 (A)	.246
							.81 (B)	.372
							1.97 (AxB)	.165

* Significant differences. The level of significance adjusted to .010.

Simple effects analyses were conducted to account for the significant interaction effect on the Descriptive Sequence pattern. Simple effects analysis for disability revealed that Caucasian students with LD ($M=.01$, $SD=.05$) produced this pattern less frequently than Caucasian NA students ($M=.10$, $SD=.15$) ($F(1,78)=7.45$, $p=.008$), whereas the difference between African-American students with LD ($M=.13$, $SD=.13$) and African-American NA students ($M=.03$, $SD=.10$) was nonsignificant ($F(1,78)=5.41$, $p=.023$). Simple effects analysis for ethnicity on the proportion of Descriptive Sequence revealed that African-American students with LD produced this pattern significantly more frequently ($M=.13$, $SD=.13$) than did Caucasian students with LD ($M=.01$, $SD=.05$) ($F(1,78)=9.93$, $p=.002$), whereas African-American NA students ($M=.03$, $SD=.10$) and Caucasian NA students ($M=.10$, $SD=.15$) did not differ significantly on this measure ($F(1,78)=3.55$, $p=.063$).

Graph 5. Simple effects for disability (LD-NA) and ethnicity (AA-C) on Descriptive Sequence in personal narratives



Fictional narratives

A series of Ethnicity by Disability ANOVAs (see Table 10 next page) were conducted to analyze group differences on the mean proportion of narratives classified into one of the five distinct patterns of narrative global coherence of High Point Analysis. These analyses revealed no significant main effects for ethnicity, disability, or ethnicity by disability interaction on any of the coherence patterns.

Ethnicity by Disability ANOVAs on the mean proportion of narratives classified into one of the five EA narrative coherence patterns revealed a significant main effect for ethnicity on the Complete Episode pattern, pointing that Caucasian participants produced this pattern more frequently than did their African-American peers. A significant main effect for disability was found on the Complete Episode pattern, indicating that participants with LD produced this pattern more frequently than their typically achieving counterparts (see Table 11 next page).

Table 10.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of global coherence of fictional narratives (High Point Analysis).

Ethnicity (B)	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Classic</i>								
African American	.35	.49	.59	.51	.47	.51		
Caucasian	.58	.50	.54	.51	.56	.50		
Total	.49	.51	.56	.50				
							.73 (A)	.394
							.66 (B)	.418
							1.50 (AxB)	.224
<i>Ending-at-the-high-point</i>								
African American	.00	.00	.00	.00	.00	.00		
Caucasian	.08	.28	.00	.00	.04	.20		
Total	.05	.22	.00	.00				
							1.47 (A)	.229
							1.47 (B)	.229
							1.47 (AxB)	.229
<i>Chronological</i>								
African American	.47	.51	.24	.44	.35	.49		
Caucasian	.29	.46	.25	.44	.27	.44		
Total	.37	.49	.24	.44				
							1.77 (A)	.186
							.63 (B)	.432
							.87 (AxB)	.354
<i>Leap-frogging</i>								
African American	.06	.24	.18	.39	.12	.33		
Caucasian	.00	.00	.04	.20	.02	.14		
Total	.02	.16	.10	.30				
							2.25 (A)	.137
							3.33 (B)	.072
							.51 (AxB)	.476
<i>Impoverished</i>								
African American	.06	.25	.00	.00	.03	.17		
Caucasian	.04	.20	.13	.34	.08	.28		
Total	.05	.22	.07	.26				
							.05 (A)	.821
							.99 (B)	.321
							1.73 (AxB)	.192

* Significant differences. The level of significance adjusted to .010.

Table 11.
Comparison of LD and NA Groups (Disability - Factor A) and AA and C Groups (Ethnicity - Factor B) on the dependent measures of global coherence of fictional narratives (Episodic Analysis).

Ethnicity (B)	LD		Disability (A) NA		Total		<i>F</i> (1, 78)	<i>p</i>
	M	SD	M	SD	M	SD		
<i>Descriptive Sequence</i>								
African American	.02	.08	.04	.10	.03	.09		
Caucasian	.00	.00	.14	.26	.07	.19		
Total	.01	.05	.10	.21				
							5.52 (A)	.021
							1.12 (B)	.294
							3.14 (AxB)	.080
<i>Action Sequence</i>								
African American	.23	.28	.14	.21	.18	.25		
Caucasian	.04	.14	.09	.24	.07	.20		
Total	.12	.23	.11	.23				
							.10 (A)	.751
							5.52 (B)	.021
							1.89 (AxB)	.173

<i>Reactive Sequence</i>								
African American	.41	.34	.56	.38	.49	.36		
Caucasian	.47	.48	.48	.32	.48	.40		
Total	.45	.42	.51	.34				
							.76 (A)	.386
							.01 (B)	.910
							.61 (AxB)	.437
<i>Abbreviated Episode</i>								
African American	.21	.34	.18	.30	.19	.31		
Caucasian	.01	.07	.16	.27	.09	.21		
Total	.09	.24	.17	.28				
							.99 (A)	.324
							3.40 (B)	.069
							2.50 (AxB)	.118
<i>Complete Episode</i>								
African American	.12	.28	.08	.18	.10	.23		
Caucasian	.47	.44	.13	.30	.30	.42		
Total	.32	.42	.11	.26				
							7.02 (A)	.010*
							7.26 (B)	.009*
							4.24 (AxB)	.043

* Significant differences. The level of significance adjusted to .010.

Discussion

Generally, African-American and Caucasian participants with and without learning disabilities produced personal and fictional narratives that were comparable on most measures of narrative length, structural organization, and coherence. First, the participants produced fictional narratives that were of similar overall length and composed of comparable length episodes. Second, they used the majority of structural organization components with a similar relative frequency to represent narrative events, convey the personal meaning and significance of the recounted events, and summon the listener's attention to introduce and later close their narratives within the communicative context of conversation. Third, the participants were equally competent in their use of a variety of coherence patterns to produce personal and fictional narratives in the form of either a chronological recount or a hierarchical structure with a high point as a central organizing element (i.e., a central crisis or a cumulative event of a particular personal significance).

In the context of multifaceted similarities across the groups in producing personal and fictional narratives, the study revealed several specific features of narrative performance associated with participants' learning disabilities and/or ethnic background. Despite less developed expressive syntactic and listening comprehension skills, students with LD regardless of ethnicity produced fictional and personal narratives generally equivalent to narratives of their typically achieving peers. However, the two groups differed with respect to their use of goal-directed episodic structures. Specifically, students with LD tended to recount events from personal experience in the form of action sequences rather than goal-directed episodic structures. In contrast, in their fictional narratives, these students produced more goal-directed episodes than their typically achieving peers. Perhaps, participants with LD had difficulty with applying their knowledge of narrative goal-directed structures to recounts of personal experience. The pattern of narrating about personal and fictional content demonstrated by ethnically/culturally diverse students with LD in this study is inconsistent with developmental trends documented in typically achieving Caucasian children and previous research on fictional narrative skills of Caucasian students with LD. For example, in a developmental study of narrative episodic structures, Peterson and McCabe (1983) documented that personal narratives of children across different age groups included more goal-directed episodic structures than their fictional stories. Previous research has shown that students with LD have difficulty with generating goal-directed narrative structures in fictional narratives (Copmann & Griffith, 1994; Roth & Spekman, 1986). In the context of school-based expectations to produce goal-directed, problem-solving narratives, diverse students with LD who focus on a chronology of personal events without linking them to their goals, thoughts, and feelings may be perceived as less competent narrators and, consequently, have less access to classroom narrative activities.

Generally, African-American and Caucasian students, regardless of their learning disability status, produced comparable personal and fictional narratives despite the fact that African-American participants demonstrated less developed expressive syntactic and listening comprehension skills than their Caucasian peers (as measured by standardized language tests). Personal narratives of African-

American students were shorter in total length and composed of shorter episodes. These students also included more episodes per narrative in both fictional and personal narratives. Their tendency to narrate about fictional and personal content using multiple episodes resembles topic-associating style that has been well documented in some African-American communities. Characterized by frequent shifts in time, place, and characters, this style allows narrators to simultaneously accomplish the purposes of informing and persuading their audience, along with expressing personal and social identity (Bidell, et al., 1997; Champion, 2003; Hicks, 1993; Michaels, 1991). Further, while recounting personal experiences, African-American students elaborated on their internal responses to the initiating narrative event to a greater degree than did their Caucasian peers. As a result, they emphasized goals, thoughts, and feelings as motivating factors in their actions, assuring the audience's understanding of the intentional nature of their behavior. Such emphasis may be indicative of their preference to engage in narrating as an interactional social event (i.e., produce performative narratives), a narrative style common in African-American children who may view narrative tasks as means of self-expressing and establishing social relationships with the audience (Bidell, et al., 1997; Cazden, 1999; Champion, 2003; Gee, 1991). Additional differences between the ethnicity groups pertained to the use of complete episodes in fictional narratives. Caucasian participants produced more complete episodes that included an obstacle and an ending in addition to the components of an abbreviated episode: a goal, attempt, and outcome. This pattern of differences may be accounted for by well documented cultural experiences related to children's exposure to fictional narrative genre (make-believe stories) (Bidell et al., 1997; Gee, 1991; Heath, 1983). Typically, middle-class Caucasian children are extensively exposed to literate-like, topic-centered make-believe stories that explicitly relate goals, obstacles, attempts, and outcomes (Hicks, 1991). In contrast, African-American children are often socialized into narrative styles that de-emphasize linear problem-solving sequencing in favor of thematic organization (Bidell et al., 1997; Hicks, 1991).

Besides culturally-based narrative preferences and experiences, the differences between the ethnicity groups may be accounted for by other factors that were not controlled in this study and may have impacted the patterns and/or magnitude of these group differences. First, the group differences may be related to the fact that African-American participants in this study were older than their Caucasian peers by approximately 13 months. Previous developmental research on narrative organization indicated an increased inclusion of the characters' internal responses and use of goal-directed episodic structures in children's narratives with age (e.g., Stein, 1988; Stein & Albro, 1997). Second, ethnicity groups differed with respect to their socio-economic status as indicated by the fact that 93% of African-American participants and 6% of Caucasian participants were eligible for free/reduced lunch. Previous research has established a link between family socio-economic background and children's narrative experiences, preferences, and competencies (Champion, 2003; Heath, 1983; Labov, 1982). Third, the ethnicity group differences may be related to the specific features of the narrative elicitation procedure used in this study, including the ethnicity of the interviewer (Caucasian female) and the structure of narrative prompts used during the interview (short, topic-centered personal narratives). Labov (1972) has documented variability in the linguistic competence of African-American youth in response to the race of the examiner and the type of social relations established during narrative elicitation process. Similarly, Hicks' (1991) analysis of narratives produced by low-income African-American and mainstream White children in response to changing narrative task demands evidenced ethnicity-based differences in children's interpretation of narrative tasks and preferences for specific narrative genres.

In addition to specific features of narrative performance related to the participants' learning disabilities or ethnicity, the interactive effects of the two factors were evident with respect to several aspects of narrative structural organization and coherence of personal narratives. Specifically, African-American students with LD, compared to their typically achieving African-American peers, provided less information about events and their outcomes and more information about the context of these events. Caucasian students with and without LD did not differ in this respect, while African-American typically achieving students outperformed their Caucasian counterparts on these measures. Similarly, African-American students with LD, in comparison to Caucasian students with LD, more frequently built coherence in personal narratives using descriptive sequence pattern in which characters, actions, and settings are described but not linked explicitly through temporal and/or causal relationships. Importantly, typically achieving Caucasian and African-American participants did not differ in their use of this coherence pattern, whereas Caucasian students with LD produced fewer descriptive sequences than did their Caucasian typically achieving counterparts. Developmental research on children's narrative skills indicated that descriptive sequences are more frequently used by preschool narrators than school-age narrators who increasingly depend on chronological event sequencing and

goal-directed episodic structures to generate narratives (Stein, 1988; Stein & Albro, 1997). However, an emphasis on providing elaborate contextual information at the expense of a detailed chronology of events and outcomes in personal narratives seems consistent with the topic-associating narrative style documented in some African-American children. The narrator's elaboration of contextual information provides the means of implicitly communicating the meaning of personal and/or socio-cultural narrative experiences that support social networking function of narrating (Gee, 1991; Heath, 1983; Hicks, 1991; Michaels, 1991).

Taken together, African-American students with LD in this study displayed features of narrative performance consistent with topic-associating narrative style more frequently than both their typically achieving African-American peers and Caucasian students with LD. Consequently, they may be perceived by teachers who value episodically organized narratives as less skillful narrators who struggle with sharing personal experiences in a logical manner. In a milieu of incongruent teacher narrative expectations and student narrative performance, these students may experience more obstacles to demonstrating their language and intellectual competencies (Gay, 2000; Nieto, 1999) and/or may be misidentified as having language/learning intrinsic deficits (Garcia & Ortiz, 1988; Massey, 1996). However, the differences between this study's African-American and Caucasian participants with LD in their use of coherence patterns in personal narratives may be accounted for by several differences between the two groups that have been related to narrative performance in previous research. First, the specificity of narrative performance in African-American participants with LD may be related to the fact that they more frequently demonstrated academic underachievement and were placed in more restrictive learning environments than their Caucasian peers with LD. Previous research has documented the relationship between the level of narrative abilities and academic achievement among students with LD (Celinska, 2004; Feagans & Applebaum, 1986; Hicks, 1991; Roth et al, 1996). Second, compared to Caucasian peers with LD, African-American participants with LD were more likely to have identified weaknesses that have been previously linked to narrative skills: concept formation/reasoning (Wright & Newhoff, 2001) and attention and self-monitoring (Snow, 1983). Previous research has shown that students with LD who demonstrate such weaknesses experience difficulty with generating coherent, hierarchically organized narratives (Celinska, 2004; Klecan-Aker, 1985; Newcomer et al., 1988). Third, the two groups differed in respect to the type of school attended, with all Caucasian students enrolled in suburban schools and 82% of African-American students in urban schools. MacMillan and Siperstein (2002) have documented significant differences in how urban and suburban schools identify students with LD, pointing that more than half of these students in urban settings showed cognitive functioning typically associated with poverty rather than intrinsic deficits.

Implications For Practice And Research

Current results suggest that in order to capture the variability and complexity of narratives in diverse students, educators should apply multiple approaches to narrative analysis. For example, Episodic Analysis may be used to evaluate the narrator's ability to episodically organize goal-directed actions to reveal his/her knowledge of human intentionality and problem-solving behavior. High Point Analysis may be utilized to examine narrative structural organization and coherence as it emerges from interweaving the recount of events and the narrator's personal meaning of these events. As educators embrace a broader view of narrative, they gain better tools to illuminate diverse learners' expressions of personal and cultural meanings and more fully engage them in narrative-based classroom learning. Current findings further imply that a comprehensive assessment of narrative skills in students from diverse backgrounds and with varying abilities should include narrating both personal and fictional content. This study revealed that narrative abilities may not be generalized across narrative genres and student narrative performance may vary depending on the content (personal versus fictional) and/or specific demands of narrative genres. When planning instructional interventions to enhance narrative discourse skills, specific narrative structures demonstrated in one genre may constitute an excellent basis for interventions aimed at generalizing them across different contents/genres.

The results of this study pointed out those specific features of narratives produced by early adolescents may be associated with their ethnic/cultural background and/or learning disability, evidencing the importance of considering these factors when assessing and planning narrative-based interventions for diverse learners. Students with LD tended to recount events from their personal experience in the form of non-goal-directed action sequences. Because of the central role of goals in building narrative coherence, listeners may perceive these personal recounts as disorganized and, consequently, feel burdened to infer the underlying causality of behavior to fully understand the narrator's actions. Thus,

some narrators with LD may need assistance with generating episodically organized personal narratives, perhaps by applying their knowledge of goal-directed behavior of fictional characters to their own experiences. By making the links between their actions, thoughts, and feelings explicit, these students may communicate the intentions and causality underlying their behavior more effectively, leading to more accurate self-representation and expanded social networks.

African-American students tended to use narrative features that differentiated them from Caucasian peers and were consistent with topic-associating narrative style. Specifically, their personal narratives were composed of multiple short episodes and included elaborate information on the narrator's goals, thoughts, and feelings, suggesting a preference to engage in narrative activity to express personal and social meanings. In fictional narratives, they tended to use episodes that did not include obstacles and outcomes related to the attainment of the characters' goals, although they effectively used them in personal narratives. Because some African-American children are socialized into narrative styles that de-emphasize linear problem-solving in favor of thematic organization, they may benefit from supports with generalizing their ability to produce complete episodes in personal narratives to fictional content. At the same time, their preference to use features of topic-associating style when recounting personal experiences should be recognized as an equally valuable expression of personal and cultural identities.

When narrating about personal experiences, African-American students with LD tended to emphasize narrative contextual information at the expense of a detailed chronology of events and outcomes and to provide detailed descriptions of setting, actions, and characters without linking them temporally or causally. Thus, they may be perceived as less able to fulfill teacher narrative expectations to produce coherent recounts of personal experience, resulting in more barriers to their participation in narrative-based learning activities and social communication exchanges. These students may benefit from assistance in expressing temporal and/or causal relationships among events, outcomes, and their own thoughts and feelings when narrating about personal experiences. Their fictional narratives that include these organizational components may be used as a basis for generalizing more advanced coherence patterns from fictional content to recounting personal events.

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