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# Using Narrative Intervention to Accelerate Canonical Story Grammar and Complex Language Growth in Culturally Diverse Preschoolers

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Oral narratives are a commonly used, meaningful means of communication that reflects academic language. New state curriculum standards include narrative-related language expectations for young school-age children, including story grammar and complex language. This article provides a review of preschool narrative-based language intervention studies, with special attention to how the intervention accelerated young children's story grammar and complex language beyond developmental expectations, meeting or even exceeding recently adopted state language standards. In addition, we provide an overview of a narrative-based language intervention used with culturally and linguistically diverse preschoolers to prepare them for meeting the language standards in elementary school. Evidence supports a conclusion that personal-themed stories that are developmentally and socially appropriate for preschoolers can strengthen children's use of mainstream story grammar and complex language, which will be an asset to them in elementary school. **Key words:** *Common Core State Standards*, *complex language*, *developmental expectations*, *language intervention*, *narrative*, *preschool*, *story grammar*, *storytelling*

THE most recent National Assessment of Educational Progress (NAEP; National Center for Education Statistics, 2015) showed that more than 50% of fourth- and eighth-grade students in the United States have difficulty understanding the complex language that they are expected to read. Additionally, the vast majority of culturally and linguistically diverse students cannot read at grade level. In fact, reading scores on the NAEP have essentially remained unchanged over the past 20 years (National Center for Education Statistics, 2011). Furthermore, results from the 2011 NAEP assessment indicated that more than 75% of 8th- and 12th-grade students could not write at grade level.

In response to such findings, new state standards for education are being adopted across the country. These new standards place a greater emphasis on independent, higher level comprehension and production of complex oral and written language. Language has long been underemphasized in education, even though the connection between strong language skills and academic success is clear (Ehren, 1989; Horn & Packard, 1985; Scott & Windsor, 2000; Wallach & Butler, 1994). These elevated, language-related standards are designed to prepare students for higher education, as well as for employment in an economy that emphasizes literacy more than

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ever before (Darling-Hammond & McCloskey, 2008).

Raising language standards alone, however, is not enough to improve student academic performance (Baker, 2004). An infusion of language instruction throughout the curriculum is needed (Ukrainetz, 2006), with further distillation of higher language standards and interventions to preschool-age children who are in a particularly active state of language learning (e.g., Bever, 1981; Birdsong & Molis, 2001; Long, 1990). The purpose of this article is to provide an overview of narrative-based language interventions used with diverse preschoolers and to report on the extent to which evidence shows that these interventions can accelerate young children's story grammar and language complexity, meeting or even exceeding recently adopted school-age language standards.

## NEW NARRATIVE LANGUAGE STATE STANDARDS FOR YOUNG STUDENTS

Oral narratives are a commonly used, meaningful means of communication that reflect academic language. The literate language features used in narration (e.g., adverbs, adjectives, conjunctions, causal and temporal markers, and subordinate and relative clauses) are consistent with the written language children are exposed to in school (Greenhalgh & Strong, 2001; Nelson, 1985; Nippold, 1998; Pelligrini, 1985; Wallach & Miller, 1988; Westby, 1991, 2005). Because narrative language is closely related to written language, narrative proficiency is highly predictive of reading comprehension (Catts, Fey, Tomblin, & Zhang, 2002; Dickinson & McCabe, 2001; Griffin, Hemphill, Camp, & Wolf, 2004). It stands to reason that young children with good narrative skills experience fewer academic problems (Bishop & Edmundson, 1987; Feagans & Appelbaum, 1986), and research has indicated that storytelling abilities of 5-year-olds is one of the best predictors of academic remediation in second grade (Fazio, Naremore, & Connell, 1996). It is prudent then that new state curriculum standards include narrative-related language expectations for young school-age children, including story grammar and complex language associated with narration.

### Story grammar

Newer standards such as the Common Core State Standards (CCSS; National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010), Virginia's Standards of Learning (Virginia Department of Education, 2014), or the Texas Essential Knowledge and Skills (Texas Education Agency, 2014) establish an expectation for kindergarten students to generate personal stories and retell familiar stories with key details including characters, settings, and key events with and without prompting and support. Implied are the retelling and generation of coherent stories, which entail the inclusion of, at minimum, the elements necessary to make up a complete episode (Stein & Glenn, 1979). Such standards are not written to be reflective of current student performance; instead, these standards imply that when given evidence-based instruction, children will meet these elevated standards and be on trajectory to meet higher standards the following year. Thus, although developmental research has indicated that 5-year-old kindergarten students rarely produce personal stories with minimally complete episodes with a setting and internal responses of the characters (Applebee, 1978; Hedberg & Stoel-Gammon, 1986; Hudson & Shapiro, 1991; Kaderavek & Sulzby, 2000; McCabe & Peterson, 1984, 1991; McGregor, 2000; Peterson & McCabe, 1983; Stein & Glenn, 1979; Westby, 1984), this is in the absence of explicit narrative language instruction. Research has indicated that young school-age children with and without language impairment can improve their ability to understand and produce story grammar in specific contexts beyond traditional developmental expectations through explicit narrative language intervention (e.g., Gillam, Gillam, & Reece, 2012; Petersen, 2011). Furthermore, although many school-age children who are culturally and linguistically diverse

may not produce story grammar reflective of canonical narrative structures expected in school (Tappe & Hara, 2013), the majority of these children do not have language impairment and their response to explicit narrative language instruction that reflects mainstream cultural expectations has yielded rapid gains (Petersen, Thompsen, Guiberson, & Spencer, 2015). Helping diverse preschool children with and without language impairment improve their narrative language could have an even greater impact on their ability to navigate an ethnocentric, mainstream school curriculum. Such interventions should not be considered a replacement for each child's micro- or macrocultural approach to narration, which can be considerably different from what is reinforced in U.S. schools (Champion, 1998; Currenton & Justice, 2004; Gillam, Fargo, Petersen, & Clark, 2012; Gorman, Fiestas, Peña, & Clark, 2011; Heath, 1983; Mills, Watkins, & Washington, 2013; Westby, 1994). Instead, narrative language intervention should be considered a way to expose children to the mainstream narrative language dialect expected of them in the school culture, allowing them to be multidialectal and multicultural.

## Language complexity

In addition to story structure, the understanding and use of complex oral and written language have been touted as the hallmark of the CCSS (Calkins, Ehrenworth, & Lehman, 2012). Yet, there is an underemphasis on complex language for young children in the CCSS, which does not have clearly stated expectations for complex language until third grade. At best, the new standards suggest that kindergarten students should be able to describe causal and temporal relationships between events in a story. A synthesis of the literature for language complexity in young children by Arndt and Schuele (2013), and recent research with language intervention with young children, suggests that the new education standards underrepresent developmental norms and underestimate what children can accomplish with explicit narrative intervention (e.g., Spencer, Kajian, Petersen, & Bilyk, 2014).

Complex language (defined as sentences that include one or more subordinate clauses) emerges in the oral language of typical children between 2 and 3 years of age (Bloom, Tackeff, & Lahey, 1984; Limber, 1973). By the time children enter kindergarten, they are usually adept at using and understanding a variety of complex syntactic forms (Bloom et al., 1984; Paul, 1981; Tyack & Gottsleben, 1986). While complex syntax is developing in young children, more basic language structures are developing simultaneously. This concurrent development of basic and complex language structures implies that the relationship between the two is not exclusively dependent. Diessel (2004), in his research on adverbial clauses, found that young children used the subordinating causal conjunction "because" fairly often, with approximately 19% of conjoined clauses having that conjunction (almost always right branching), and they also used the subordinating temporal conjunction "when," but less frequently.

Studies that have examined child utterances in narration have noted the greatest use of complex utterances (Kamhi, 2014; Masterson & Kamhi, 1991; Stalnaker & Creaghead, 1982). Klein, Moses, and Jean-Baptiste (2010) found that, in older preschool children, a narrative context elicited the most complex utterances. They also found that causal and temporal subordination was more likely to be included in older preschool children's language than in the language of younger cohorts.

Arndt and Schuele (2013) suggested that the focus on complex syntax for many children with language impairment should begin during the preschool years. Otherwise, children may be unable to meet the language production and comprehension demands of newly considered core curriculum standards.

## Preschool narrative-based language intervention studies

Building upon promising early efficacy studies of narrative-based language intervention

with preschool children (Hayward & Schneider, 2000; Peterson, Jesso, & McCabe, 1999), recent research has examined the extent to which diverse preschool children with and without language impairment can achieve higher language-related standards.

McCabe, Boccia, Bennett, Lyman, and Hagen (2009) reported the results of two closely related pretest–posttest, quasi-experimental, narrative-based language intervention studies conducted over 2 years with 48 diverse preschool-age participants each year. The purpose of the studies was to examine the effect of narrative-based language intervention on receptive vocabulary, oral personal narratives, and teacher ratings of emergent reading, emergent writing, and oral language. In the first year, 20 children from one school served as a comparison group, whereas 28 children from a neighboring school participated in the intervention. Children in the treatment group participated in intervention for an average of 26 individualized, one-on-one sessions. During the intervention sessions, interventionists elicited a personal narrative from the children and transcribed their stories. Interventionists expanded the children's stories by asking questions and introducing related vocabulary. Interventionists drew attention to letter knowledge and writing, while reading the transcribed narrative back to the children. In the second year, 29 children were in the treatment group and 19 children were in the comparison group. Pictography (Ukrainetz, 1998) was introduced into the intervention procedures for the second year, which required the interventionist to draw three pictures to represent the beginning, middle, and end of each story. Results indicated that the preschool children who participated in the intervention consistently had greater gains in receptive vocabulary and oral narrative quality than the children in the comparison group.

Khan, Nelson, and Whyte (2014) examined the extent to which narrative-based language intervention impacted preschool children's ability to produce and understand story grammar in narrative retells and generations. Twenty-six preschool-age children were matched on age, gender, expressive vocabulary, and syntax. The children were then assigned to two narrative-based language intervention conditions, which differed only in the extent to which children were allowed to choose the character, problem, and solution to the story. Fourteen children were assigned to the choice condition, and 12 children were assigned to the no-choice condition. Intervention sessions were 10–15 minutes over 4 weeks. Both groups were presented with 16 stories across eight sessions. Children in the choice condition helped construct the stories by selecting pictures that depicted different versions of each story grammar element, whereas the children in the no-choice condition played a more passive role, unable to direct the construction of the story. Results indicated that the children in the choice condition included a greater number of story grammar elements than the children in the no-choice condition across all outcome measures.

In a multiple baseline across-participants experimental study, Brown, Garzarek, and Donegan (2014) implemented narrative-based language intervention with three preschool children at risk for language disorders. Intervention took place two to three times per week. During intervention, the interventionists focused on five major story grammar elements (character, initiating event, internal response, attempt, and consequence) across 16 fictional stories. Icons from the instructional program, SKILL: Supporting Knowledge in Language and Literacy (Gillam, Gillam, & Laing, 2012), were used for visual scaffolding. Pictures from published books also were used to highlight story grammar elements for each story. Children practiced retelling narratives, recorded their narratives, and played them back for self-monitoring. Scores from story retelling from *The Test of Narrative Retell (TNR) School-Age: Kindergarten Stories* (Petersen & Spencer, 2012) were used as the outcome measure. Visual inspection of the data indicated that all three children demonstrated clear gains in their ability to retell narratives, with a causal relationship between the intervention and outcomes apparent. Results

also indicated that the children were able to maintain narrative retell gains 2 weeks following intervention.

Recently, Spencer, Petersen, and colleagues have conducted a series of studies with culturally diverse preschool children that have systematically examined the effects of narrative-based language intervention on the comprehension and use of story grammar and complex language features. Participants in the research have been both typically developing preschool children and preschool children with language impairment across a range of ethnicities and English language proficiencies. The central focus of the intervention has been on the macrostructure of personally relevant fictional and personal narratives, and temporal and causal subordinated clauses, which play a large role in the composition of complex narrative language. Their narrative-based language intervention approach, called *Story Champs* (Spencer & Petersen, 2012a), is designed to be used as a multitiered narrative intervention curriculum, with the aim to teach children narrative story grammar and complex language to serve as a foundation for reading comprehension and writing. Several preschool narrative intervention studies have examined the *Story Champs* intervention as the independent variable, with the same dependent measures used for all of them; therefore, we provide a thorough overview of the program, followed by a review of the evidence from these studies and findings relevant to recent curriculum standards.

### *Story Champs*: A multitiered narrative intervention curriculum

*Story Champs* includes 12 repeatable stories that form the basis of the narrative intervention. They were systematically created around childhood themes such as getting hurt, misplacing something, or quarrelling with a sibling. Stories have a consistent length (i.e., 68–70 words), story grammar structure that aligns with the Stein and Glenn (1979) schemata (i.e., setting, initiating event, internal response, attempt, consequence, resolution), and literate-like linguistic structure. Each of the *Story Champs* stories has five pictures depicting major story grammar elements, labeled in simple terms for children, including the following: character (part of the setting); problem (initiating event); feeling (internal response); action (attempt); and ending (consequence and resolution). Colorful icons, games, and gestures are used to represent each story grammar element and foster interaction. *Story Champs* is a semimanualized program in that there are not only specific steps that interventionists follow but there is also flexibility with how interventionists differentiate the intervention for each of the students based on their individualized language and learning needs. During each intervention session, visual scaffolds are introduced and then systematically removed so that children can learn to produce coherent story grammar and increased language complexity independently.

A six-step procedural sequence is typically followed in each small group session. In the first step, the interventionist models a story for the children (Step 1) and then the children reconstruct the story as a group using icons and pictures for support (Step 2). Children then take turns retelling the story with decreasing visual support (Steps 3–4) and finally children generate their own personal stories (Steps 5–6). These steps are outlined in the Supplement Digital Content Appendix available at http://links.lww.com/TLD/A47 and described in detail in the *Story Champs* manual (Spencer & Petersen, 2012b) and in the Spencer and Slocum (2010) study.

Using data derived from the preschool *Narrative Language Measures* (NLM), previously referred to as the *Test of Narrative Retell* (Petersen & Spencer, 2012, 2014a; Spencer & Petersen, 2012b), instructors can provide differentiated intervention by emphasizing specific language complexity targets or story grammar elements depending on each child's abilities and regularly monitoring children's language growth (or limited growth) over time. Extensions to *Story Champs* include take-home activities, writing extensions,

classroom activities, and *Story Champs Blitz* (Petersen & Spencer, 2014b). They provide curricular extensions and additional stories with different levels of complexity and different intervention targets, allowing the interventionist to focus specifically on individual student needs, including inferential word learning, multiple-episodic stories, and writing. Importantly, the intervention can be delivered in large group, small group, and individual formats and is intended for use by collaborative teams made of teachers, paraprofessionals, and speech–language pathologists. Videos demonstrating small group instruction (https://www.youtube.com/watch?v=oeQhZbL9vHY) and large group instruction (https://www.youtube.com/watch?v=0M-IKtJVg7s) are available online.

One of the most important and intentional aspects of *Story Champs* stories is that they are personally relevant to young children. Although they are fictional, they represent the same-language complexity features children will encounter in school. In addition, *Story Champs* stories reflect everyday events that young children are likely to experience (e.g., misplacing shoes, scraping a knee), regardless of differences related to language, culture, or ability.

There are a number of reasons that personal-themed stories are useful for teaching narratives. First, because the content is familiar, it reduces the need to use background knowledge to understand the story. Personal-themed stories can reduce problems with the lack of familiarity that may be experienced by culturally diverse children and level the playing field for language development. The second reason for choosing personal themes for intervention narratives is to provide a comfortable and relevant context to learn something new and difficult (e.g., complex language features and new vocabulary words). When children can attach meaning to new material, they are more likely to understand it, use it, and retain it (Coyne, Simmons, & Kame'enui, 2004; Stahl, 1986; Stahl & Fairbanks, 1986). Third, to maximize the opportunity for children to practice newly acquired skills, the language they learn should be immediately useful. *Story Champs* stories contain the language of everyday life. For example, one story includes the content, "Hannah was mad because her sister was playing with her doll. She asked her sister, 'Can I play with it too?'" Such a scenario is relevant to children's current lives in many cultures. As children have similar experiences, the vocabulary and structures learned through *Story Champs* lessons become useful. Importantly, the majority of stories told by young children are about children's personal experiences (Preece, 1987). This means young children tell stories about real events that happened to them. Early protonarratives often are focused on problems associated with scary or negative events, such as getting hurt (Miller & Sperry, 1988). Furthermore, Nelson (2014) has found that asking children to write narratives about a problem they have encountered increases the likelihood of eliciting more elements of a complete episode. Even when young children tell fictional stories, the central topic is usually related to social conflict, emotionally charged events, or injury (Ames, 1966; Pitcher & Prelinger, 1963). For that reason, the structures taught in *Story Champs* stories feature a problem as the initiating event. Finally, the transfer from retelling *Story Champs* personal-themed stories to generating personal experience stories has significance for children's social development.

Proficient storytellers attract more peer attention and have more opportunities to practice language in social contexts (Hart, Fujiki, Brinton, & Hart, 2004; McCabe & Marshall, 2006) and receive approval from adults (Bliss & McCabe, 2012). When the natural social environment rewards children for telling stories, they are more likely to keep telling stories, which facilitates language development without the need for explicit instruction.

## *Story Champs* preschool narrative intervention studies

The authors and colleagues have completed several studies that have examined the extent to which children transferred newly acquired language skills from retelling to personal stories through the use of *Story Champs* as an

intervention. For example, Spencer, Petersen, Slocum, and Allen (2014) conducted a quasi-experimental control group study with four Head Start classrooms of 4-year-old children who were culturally and linguistically diverse (58% were language minority students). Approximately 10% of the children had identified disabilities, although separate analyses were not conducted with this subgroup. An educator delivered daily 15- to 20-min sessions for 3 weeks to whole classes of about 20 children. In this whole-class context, lessons focused primarily on retelling stories with complex language. Each participant's narrative language was assessed preintervention, postintervention, and at follow-up using the retell, personal generation, and story comprehension sections of the NLM (Spencer & Petersen, 2012b). Results indicated that the group of participants who received *Story Champs* retold fictional, personal-themed stories and answered questions about those stories with significantly more complex story grammar than the control group at postintervention and follow-up, but the intervention had a minimal impact on children's personal narrative generation skills. The authors concluded that because the lessons focused only on retelling and the large group format was such a low dose of language instruction, the language growth was observed only in story retells and answering questions. To have an impact on children's personal stories, this study suggested that a more intensive instructional arrangement might be needed and that explicit practice telling personal stories was warranted (Spencer et al., 2014).

To examine whether children who are younger than 5 years can produce stories with basic, complete episodes, the means from these groups were examined. On the retell section of the NLM, a score of 8 approximates a complete episode with clear and complete inclusions of an initiating event (2 points), attempt to address the problem (2 points), and a consequence (2 points). Most often children who produce 2-point episodic elements also include character and setting information, providing an additional 2 points. Personal stories are scored in the same way so that a score of 8 reflects the inclusion of the basic episodic components. At follow-up, the group of participants who received intervention had a mean retell score of 11.51 and the control group had a mean retell score of 8.62. These scores indicate that 4-year-old children were able to produce a minimally complete episode, but with story grammar instruction they produced more complex stories ($M = 11.51$, $p < .05$). With respect to personal stories, the treatment group participants had mean scores approximating 8 points at posttest, whereas at pretest, their mean score was 5.56 (Spencer et al., 2014), indicating that their personal story generations after intervention also comprised, on average, basic complete episodes.

In another investigation of the impact of *Story Champs* on personal stories, Spencer and Slocum (2010) delivered intervention to small groups of four children attending Head Start. The five children in their study were also 4 years old. They were selected to participate because they demonstrated poor language skills and were at risk for qualifying for special education. Two of these children were Caucasian, two were Latino, and one was American Indian. During intervention sessions, children practiced retelling modeled stories but then had an opportunity to tell a personal story while the interventionist provided supportive prompting and feedback. A multiple baseline design across children was used to monitor day-to-day influence of the intervention. Children received four 10- to 15-min sessions a week, and story retells and personal stories were assessed every day before intervention sessions using the NLM. One purpose of this study was to examine how quickly narrative retells and personal stories could be positively impacted. In other words, one goal of the investigation was to determine how large of a dose was necessary to show improvements in storytelling. This set of children showed rapid growth on story grammar in their narrative retells. All children retold stories above their baseline performance within five sessions and eventually produced retells with scores ranging from 8

to 13 points. Children also were given opportunities to tell personal stories, but if they did not have a story to tell, it was not forced. The results indicated that as the children's retell story grammar performance improved, they began producing more personal stories. Their inclusion of episodic story grammar elements improved as well. Four of the participants produced personal stories, earning scores of 8 or higher.

This same effect on personal stories was documented in a replication study of small group *Story Champs* with an emphasis on differentiated complex language targets (Weddle, Spencer, Kajian, & Petersen, 2015). Participants were seven 3- and 4-year-old Spanish-speaking English learners attending Head Start preschool whose teachers were considering referring them for special education evaluations due to limited language skills. Children received *Story Champs* differentiated intervention in groups of four, and each child's complex language targets were addressed in the same 15-min session led by a single interventionist. Following multiple baseline conventions, all seven participants produced retells and personal stories that lacked complete episodes in baseline. With differentiated intervention, children's retelling skills improved and their personal stories increased in frequency and substantially improved in quality. The participants' NLM narrative retell scores increased from baseline to intervention by 7–19 points. Furthermore, their high scores on generated personal stories reflected story grammar and language complexity expected of 5- and 6-year-olds.

In a fourth investigation, children with language impairment were selected as participants and received *Story Champs* in an individual arrangement (Spencer et al., 2014). Of the five participants, four were Spanish-speaking English learners and one was American Indian. All were 4 years old. During the 10- to 15-min intervention sessions, children received repeated retell practice, followed by supported practice telling personal stories. Children received intervention sessions twice a week for 6 weeks. A multiple baseline design across children was used to investigate the effect of intervention on narrative retells and answering questions about stories. Personal stories were collected only at pretest, posttest, and follow-up time points. For this group of children, their highest retell scores ranged from 7 to 23, suggesting that some children were able to produce comprehensive retells with multiple story grammar elements whereas others were just approaching minimally complete episodic retells. Of particular significance, three of the participants produced personal stories with scores much higher than typically expected of preschool children (e.g., scores of 17, 19, and 25). The other two children produced personal stories with scores of 8, which reflects a minimally complete basic episode. These children were culturally and linguistically diverse and had language impairments, yet a fairly brief intervention resulted in the production and comprehension of narratives with story grammar complexity above what developmental norms outline (Hudson & Shapiro, 1991; McCabe & Peterson, 1984, 1991; Peterson & McCabe, 1983).

What is currently understood about personal narrative story grammar development is generally reflective of natural maturation uninfluenced by intensive, systematic, and explicit narrative-based language intervention. Only until recently has research revealed the extent to which developmental expectations for story grammar bear little relation to what young children can accomplish, given focused intervention. The results of the *Story Champs* studies reported earlier indicate that preschoolers are capable of producing more complete stories with story grammar elements of initiating events, attempts to solve the problem, and a consequence or ending. Interventions that feature explicit instruction and intentionally target key elements related to academic achievement can have a powerful and rapid impact on the language that young children understand and produce. Also, there are a number of noteworthy aspects of these studies. For example, interventions were brief, lasting from 10 to 20 min. Sessions were either daily or a few times a week, but none extended longer than 6 weeks.

Participants were extremely diverse in English language proficiency and ethnicity, and most had significant language limitations if not language impairment. The arrangements represent a relatively low dose of intervention for high-risk groups of children. Generally, the ease with which improvements were made suggests that the standards represented in the Common Core, at least for narrative structure, are not unrealistic, but, instead, are on target. It is also possible that for many students, including those who have language impairment and those who are culturally and linguistically diverse, the standards may underestimate their potential.

Few studies have examined the impact of narrative interventions on language complexity features that mirror the literate language in academic reading and writing material. However, there is much that can be gleaned from studies investigating *Story Champs* intervention. In the Spencer and Slocum (2010) study described earlier, the interventionists intentionally did not prompt children to use temporal coordinating conjunctions (e.g., *then*) or subordinating temporal (e.g., *when*) or causal (e.g., *because*) conjunctions. One of the secondary research questions was whether explicit prompting was necessary for children to begin using literate language features indicative of quality narratives. They found that all five of the children started using "then" as a simple temporal tie marking a sequence of story content. The use of "then" did not require any prompting or explicit attention to it; rather, repeated modeling through the *Story Champs* stories was sufficient. In contrast, only one of the participants increased her use of adverbial subordinate clauses through modeling alone. Interestingly, this participant primarily used right branching causal subordination, but at the very end of the study, she included one instance of a left branching temporal subordinate clause.

These findings reveal that more complex forms of language may not emerge in storytelling without explicit attention (see Petersen, Gillam, Spencer, & Gillam, 2010 for similar findings). In a study with participants with language impairment, Spencer et al. (2014) explicitly taught children to use language complexity elements, but this research team made the introduction of such elements contingent on mastering story grammar. In their study, they started their individual narrative intervention with an exclusive focus on story grammar. Then, as children were able to reliably produce initiating events, attempts, and consequences, the interventionist began prompting children to use *then*, *because*, *when*, and *after*. By prompting for the children to provide more causal or temporal information, a message was sent to the student that the listener needs more information to better understand why or when something had happened in the story. These are authentic prompts for structures that support meaning. Again, drawing on the idea of theory of mind, this explicit approach to instruction may have drawn attention to the needs of the listener. Although this group of participants had language impairments, these complex language elements appeared in children's stories within a few 10- to 15-min sessions. The repeated practice, coupled with focused models and supportive prompts embedded in authentic storytelling activities, was likely responsible for this rapid increase in the use of subordinate clauses.

In Weddle et al.'s (2015) study, interventionists used the results of weekly NLM story retells to determine which story grammar and language complexity features to focus on. As an example of one of these groups, the child with the most advanced English language worked on temporal and causal subordination; another child worked on English verbs because she would always tell the story in English except for the verbs, which were always in Spanish; a third child worked on increasing the number of story grammar components; and the fourth child was encouraged to use the word *then* to temporally tie events together. Results revealed that the inclusion of the language complexity targets in narrative retell assessments corresponded to the targets that were explicitly prompted during intervention for each child. Of the seven participants who were being considered for special education, only one was ultimately referred

for a comprehensive language evaluation, and that child was diagnosed with language impairment. A closer look at the narratives of the child who had language impairment illuminates something interesting. As a 3-year-old with language impairment, he began producing subordination at the exact same time he started producing story grammar elements. For example, the first time this child retold a story he said, "Sad because he hurt," and this pattern was replicated in his own personal stories as well. This suggests that language complexity can develop concurrently with basic story production.

## SUMMARY OF EVIDENCE

Taken together, the studies reviewed here, including our own, provide evidence that, with explicit language instruction, the development of complex language can be accelerated. The relationship between what is taught and what is learned is apparent. Although all the children in these studies who used subordinate clauses produced right branching causal subordination before producing left branching temporal subordination, the model stories and explicit prompts by the interventionists also focused more on right branching causal subordination. Importantly, subordination was within the zone of proximal development even for the youngest child with the most significant delays. The reader should be reminded that most of these children neither were typical language learners nor were they monolingual English speakers, and few of the preschool children were from middle- to upper-socioeconomic status homes.

A review of the research on young children's development of complex language, as well as our own research findings, suggests that, with minimal but high-quality explicit instruction, young children can learn to understand and produce mainstream story grammar features and complex language beyond what is developmentally expected. Research indicates that the CCSS and other newly developed state standards are not impractical for incoming kindergarteners, even when they are culturally and linguistically diverse or when they have language impairment. These new standards may in fact not be high enough once language instruction is commonplace.

## CONCLUSIONS

The results of preschool narrative-based language intervention research suggest that current story grammar and complex language developmental milestones for young children are the result of nonsystematic, natural language interaction and that such developmental norms do not represent a ceiling through which language cannot grow. The results of multiple studies reviewed in this article indicate that young children can indeed accelerate their comprehension and use of canonical story grammar and complex language even beyond what has been expected previously, suggesting that much of the higher language standards adopted for young children are obtainable when explicit language instruction is provided. Such high standards do not appear to be out of reach for children who are culturally and linguistically diverse when the appropriate level of support is provided.

The outcomes of the narrative-based language intervention reviewed in this article are relatively proximal to the intervention itself. That is, the intervention promotes an explicit focus on specific, complex language targets with repeated opportunities for children to listen to and use those targets in a personal-themed narrative context. The outcomes are patently reflective of this intervention, with measures focused on the macrostructure of fictional narrative retells that are personal-themed, the macrostructure of personal narrative generations, and specific complex language features (i.e., causal and temporal subordinating clauses) measured within those contexts. Language intervention research, unless longitudinal, cannot demonstrate the extent to which gains in early childhood language facilitate more distal outcomes, such as reading comprehension and writing.

Nevertheless, the research described in this article does suggest that young children, including those who have language impairment and who are culturally and linguistically diverse, can increase their understanding and use of story grammar and complex language beyond what developmental norms would suggest and, in some cases, beyond what is expected in newly proposed school-age education standards. Such findings imply that the research focus should extend to more distal outcomes, where the extent to which purposefully advancing receptive and expressive language in young children will result in significant improvements in later reading comprehension and writing.

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