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The Effects of Multi-Tiered Systems of Language Support on Oral Language, Reading Comprehension, and Writing in Second and Third Grade Students in India

Brenna Scadden Nelson

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ABSTRACT

THE EFFECTS OF MULTI-TIERED SYSTEMS OF LANGUAGE SUPPORT ON ORAL LANGUAGE, READING COMPREHENSION, AND WRITING IN SECOND AND THIRD GRADE STUDENTS IN INDIA

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Bachelor of Science

This study investigated whether multi-tiered narrative intervention improved oral language comprehension, reading comprehension, and writing in second and third grade students in India. There were 121 participants across second and third grade. Classrooms were randomly assigned to a treatment, an alternate-treatment, or a no treatment condition. The treatment group participated in 8 weeks of Story Champs intervention, the alternate-treatment group participated in 8 weeks of shared storybook intervention, and the no treatment group served as a control. Results indicated that oral narrative intervention delivered through a multi-tiered system of language support (MTSLS) causally impacted the oral language, reading comprehension, and narrative writing of second and third grade students in India. An MTSLS utilizing oral narrative instruction may help the students of India meet national and international benchmarks in language, reading comprehension, and writing.

Keywords: multi-tiered systems of language support, narrative intervention, shared storybook, Story Champs, India, elementary, expository, writing, oral language
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Introduction

An abundance of research has established the dependence of academic success on adequate reading and writing skills, yet the majority of students around the world continue to fall short of the performance expected of them. Mullis, Martin, Foy, & Hooper (2017) reported that of the 61 countries participating in the international PIRLS 2016 reading assessment, 53% of fourth-grade students could not read at the “High Benchmark” level, which required locating significant actions in the text and making inferences to explain relationships between intentions, actions, and feelings. These high benchmark requirements from the PIRLS are in close alignment with fourth-grade reading expectations in the U.S. (Common Core States Standards, 2010), wherein over 50% of students are not meeting grade level expectations. Furthermore, 75% of students across the U.S. and internationally cannot write at grade level (National Center for Education Statistics, 2012; Schleicher & Belfali, 2016). Furthermore, national and global surveys show limited progress in the reading comprehension and writing skills of students over the past 20 years, and if this trend is maintained, students will continue to fall short of the reading and writing skills they need to have academic success (National Center for Education Statistics, 2012; Perksy, Daane, & Jin, 2003; Mullis et al., 2017). There is a clear need to improve reading and writing instruction both nationally and internationally.

Current Approach to Elementary Reading Comprehension

Shared storybook intervention is a heavily researched approach to improving literacy. Shared storybook intervention is designed to strengthen foundational oral language skills, with a particular emphasis on vocabulary (Ewers & Brownson, 1999;
Lonigan, Shanahan, & Cunningham, 2008; Walsh & Blewitt, 2006). Ewers and Brownson (1999) randomly assigned 66 kindergarteners to active or passive reading conditions. Each group listened to a single storybook episode, immediately after which the active group was asked what or where question about the new vocabulary and the passive group listened to a recast containing a familiar synonym. Results showed that not only did children with higher vocabulary acquire significantly more words than their lower vocabulary peers, but also that active participants acquired significantly more words than the passive participants. These results supported the role of vocabulary in reading comprehension and suggested that active participation facilitates greater understanding of vocabulary. Walsh and Blewitt (2006) also found that active participation leads to greater gains in vocabulary knowledge. In their study, preschoolers were assigned to one of three conditions: vocabulary-eliciting questions, noneliciting questions, and no questions (control). Children assigned to both of the question groups showed greater gains in vocabulary knowledge than the control group. Furthermore, Goldstein et al. (2016) reported similar results from a cluster randomized experiment in which one group of preschoolers listened to prerecorded audio of a book with an embedded lesson which taught challenging vocabulary words and story questions, while another group of preschoolers listened to the same prerecorded audio of a book without the embedded lesson. The preschoolers receiving embedded lessons demonstrated significant gains in vocabulary while preschoolers in the comparison condition did not.

In a meta-analysis of the impact of shared storybook reading on early literacy skills of preschool and kindergarten students, the National Early Literacy Panel (NELP) analyzed predictors of reading and writing growth such as alphabet knowledge,
phonological awareness, rapid automatic naming, writing, oral language, reading readiness, and print knowledge (Lonigan & Shanahan, 2009). Shared storybook intervention significantly impacted oral language outcomes as well as writing and print knowledge, but did not significantly impact alphabet knowledge, phonological awareness, or reading readiness. NELP also concluded that measures of complex oral language skills, such as listening comprehension and grammar, were stronger predictors of reading success than measures of simple vocabulary. Additionally, when vocabulary outcomes were removed from the shared storybook meta-analysis, the effect size on complex oral language was small ($d = .35$).

Although shared storybook reading has some evidence that it supports oral language development, particularly vocabulary, the narrow focus on vocabulary in shared storybook interventions may be part of the reason students are not successfully meeting CCSS in the U.S. and international benchmarks around the world. In order for all students to develop the level of reading comprehension they need for overall academic success, something more than just a focus on vocabulary may be needed.

**Current Approach to Elementary Writing**

According to the cognitive model of the writing process, ideas are translated into written language through two subprocesses: transcription and text generation. Transcription entails using orthographic symbols to represent language, and text generation involves creating, organizing, and elaborating ideas (Berninger, Abbott, Abbott, Graham, & Richards, 2002; Berninger, Cartwright, Yates, Swanson, & Abbott, 1994; Hayes, 2012).
Recent systematic reviews of writing intervention studies in the U.S. suggest that research has focused only on transcription, and not text generation, with younger students (Datchuk and Kubina, 2012; Graham, McKeown, Kiuhara, and Harris, 2012; McMaster, Kunkel, Shin, Jung, and Lembke, 2017; Spencer & Petersen, 2018). Yet, both U.S. and global writing standards highlight the need for younger students to be competent in not only orthography, but also the creation, organization, and elaboration of ideas central to good writing. For example, Common Core State Standards (CCSS) in the United States indicate that first grade students should be able to “write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure” (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010, p. 19).

In one of the few international studies done on writing, the International Association for the Evaluation of Education endeavored to identify common teaching practices and assessment standards for written composition. The study concluded that while writing is essential in every academic system, it remains difficult to assess on a global scale because writing is an expression of the regional culture. However, the study still identified five elements of writing that applied cross-culturally across each participating country and reflected the two-fold transcription (readability and legibility) and text-generation (content, organization, and style) process of writing (Gorman, Purves, & Degenhart, 1988; Purves, 1992). In addition to this international study, individual countries have adopted standards that include text generation. For example, Australian curriculum states that first grade students should “provide details about ideas or events,
and details about the participants in those events” and the Portuguese curriculum states that second grade students should “formulate key ideas to include in a small informative text” (Australian Curriculum, Assessment and Reporting Authority, p.1; Buescu, Morais, Rocha, & Magalhães, 2012).

Despite including text-generation in international standards, there has been little significant change in instruction methods of teachers and therefore in the percentage of students that reach grade-level writing benchmarks (National Center for Education Statistics, 2012; Perksy et al., 2003; Mullis et al., 2017). Writing instruction needs to evolve to better reflect the importance of both transcription and text-generation in the writing process.

**Narrative Multi-Tiered Systems of Language Support as a Solution**

Strong academic oral language is foundational to reading and writing success. Several studies have specifically identified oral vocabulary and narrative ability as key factors in reading comprehension (Barton-Hulsey, Sevcik, & Romski, 2017; Griffin, Hemphill, Camp, & Wolf, 2004; Ouellette, 2006). For example, in a review of 204 empirical studies, the National Reading Panel (2000) found that explicit vocabulary instruction improved reading comprehension when tailored to the abilities of students. In a randomized control trial, Clarke, Snowling, Truelove and Hulme (2010) found that oral-language training brought about the largest gains in the reading comprehension of fourth-graders when compared to text-comprehension training and oral-text combination training. It was also the intervention in which students made the largest gains in follow-up testing eleven months after the study concluded.
Explicit instruction of narrative language could improve both the reading comprehension and writing of students. Early narrative proficiency and understanding of story structure has been shown to be one of the best predictors of reading comprehension and written language (Wellman et al., 2011). Narration requires the use of complex language, and thus also serves as a bridge between oral and written language (Scott & Windsor, 2000; Spencer & Petersen, 2018; Westby, 1985). Even more, narratives provide a set of distinct skills that can be taught and assessed in a short amount of time in a manualized manner by teachers, paraprofessionals, and other educators and at a young age.

Researchers have investigated the use of a tiered narrative language intervention in a variety of arrangements (Spencer & Petersen, 2012a). Over the past ten years, this research has led to the multi-tiered systems of language support (MTSLS) initiative in the United States. In general, MTSLS is an outline for identifying students who have language difficulties for whatever reason so that appropriate instruction can be given to each child. The MTSLS framework provides multiple tiers of intervention in which children transition from general classroom language instruction to more intense intervention according to their instructional needs. Need is determined by frequent and valid sampling of student performance. Intensity is adjusted by increasing the duration and frequency of instruction as well as the expertise of the interventionist. Increasing the expertise of the interventionist requires involvement of educators other than the classroom teachers in the delivery of interventions. Finally, in the MTSLS framework, tiered placement is determined without considering the students’ special education classification (Troia, 2005).
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**Story Champs as an MTSLS**

Multiple studies have investigated the efficacy and effectiveness of a multi-tiered language curriculum, *Story Champs* (Spencer & Petersen, 2012; 2016). *Story Champs* provides both the manualized language curriculum suitable for large group classroom instruction directed by general education teachers as well as the more intensive tiered interventions necessary to help students who need greater support. This MTSLS implementation has had a major focus on narration.

*Story Champs* has evidence of efficacy and effectiveness across many studies in the United States. For example, the curriculum has been shown to improve oral narrative outcomes for diverse preschoolers in the U.S. when delivered to a whole class of students (Spencer, Petersen, Slocum, & Allen, 2014), to small groups of children who had delayed language skills (Spencer & Slocum, 2010), and to individual children from linguistically diverse backgrounds (Spencer, Kajian, Petersen, & Bilyk, 2014). Individualized interventions have been shown to improve the language of children with autism (Petersen, Brown, Ukrainetz, Wise, Spencer, & Zebre, 2014) and small group interventions have improved the narrative skills of young English learners (Weddle, Spencer, Kajian, & Petersen, 2015). Specifically, Spencer, Petersen, and Adams (2015) studied the implementation of tier 2 narrative language instruction in diverse preschoolers. The students were divided into small groups and participated in differentiated, tier 2 instruction focusing on oral narratives for a total of 30-40 minutes each week, for 9 weeks. Student progress was measured weekly with results indicating that the treatment group made significant gains in narrative retells compared to the control group. This demonstrates the effectiveness of implementing tier 2 instruction to
Y oung learners and the causal relationship between targeting oral language and improved narrative retell skills. Spencer et al (2018) also studied the effects of large group narrative intervention focused on retelling narratives. Participants included four Head Start classes made up of 71 preschool students. Large group instruction was provided for a total of 12 sessions which lasted 15-20 minutes. Data (i.e., personal story generation, retell, question answering) were collected immediately before and after intervention in addition to 4-weeks post-intervention. Preschoolers who participated in the treatment group scored significantly higher on measures of story retell and answering questions post-intervention and at the 4-week follow-up compared to the control group. Most recently, Story Champs was investigated in a fully-implemented MTSLS context with approximately 700 kindergarten students (Petersen, Staskowski, & Spencer, 2016), with result indicating that students in the treatment condition had significantly stronger oral narrative language outcomes than students in the no-treatment control condition. While more research in the area is needed, previous studies have found narrative interventions across multiple tiers to not only be feasible, but effective in improving the narrative language skills of young learners. To date, no research has investigated the extent to which MTSLS using Story Champs would improve student oral and written language outcomes outside of the U.S.

MTSLS in India

The current study expanded on previous research by examining the impact of Story Champs curriculum on student language performance in New Delhi, India. This was a quasi-experimental study and was the first attempt to implement MTSLS in the country of India. There is a great need for language-based instruction in that country. In 2009, India ranked 72nd of 74 participating countries on the reading section of the
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Programme of International Assessment (OECD, 2010). The impact of limited language skills on other areas of academic learning has come to the recent attention of researchers in India with the recognition that vocabulary knowledge is closely linked to the difficulties many students experience in handling the demands of content textbooks (Maheswari, Swamy, & Shankar, 2018). Additionally, the National Council of Educational Research and Training in India (2014) agrees with other international standards with the statement that “writing is not a mechanical skill; it involves the ability to organize thoughts and coherently use a variety of cohesive devices”. Researchers cite the existence of 31 education boards with regulatory power, multiple possible home-languages for students, and the low numbers of speech-language pathologists in the schools of India as some of the apparent contributing factors to the lack of adequate language instruction (Annamalai, 2003; Association of Speech Language and Hearing Professionals India; Ramanathan, 2016; Maheswari, Swamy, & Shankar, 2018).

It was hypothesized that MTSLS in India would result in statistically significant differences between participants who were assigned to the three different conditions, with large effect sizes for oral language, reading comprehension, and writing in favor of the group assigned to the MTSLS condition. The hypotheses for oral language, narrative reading comprehension, and narrative writing were based off of results obtained using an MTSLS implementation using Story Champs in the United States. Furthermore, although no research to date has investigated the extent to which oral narrative intervention would improve expository language, the researchers hypothesized that the group assigned to the MTSLS condition would also have statistically significant, higher outcomes on expository measures because both narration and exposition require complex language for
the clear production and comprehension of decontextualized language. Thus, it is possible that children who improve their use of complex language in a narrative context may also generalize that complex language to exposition.

The specific research question being addressed is: To what extent does a multi-tiered system of language support improve second and third grade Indian students' oral language comprehension, reading comprehension, and writing when compared to students in an alternate treatment condition and when compared to students in a no-treatment control condition?

**Method**

**Participants**

Participants were drawn from second and third-grade classrooms throughout three schools in New Delhi, India. Prior to this study, teachers from these schools met regularly via telecommunication software to discuss evidence-based instruction methods and to evaluate the progress of their students. The researchers in the current study had periodically offered trainings on improving literacy engagement and skills in the classroom during these telecommunication meetings. IRB approval for this study was given in April 2018. None of the teachers had previously implemented a MTSLS instruction program in their schools but the researchers committed to train all participating teachers on the most effective intervention following the conclusion of the study.

This was a quasi-experimental study, with randomization occurring at the classroom level. Each classroom was randomly assigned to one of three groups: a treatment group, an alternate-treatment group, and a no-treatment control group. Student
demographics by condition are reported in Table 1. No information could be gathered on home language, but the India Census (2011) recognizes the presence of 22 official languages and 87 unofficial languages in Delhi; official instruction occurred in both English and Hindi in the participating schools. All English teachers are required by Indian law to have a bachelor’s degree in English (Ramanathan, 2016). No data could be collected on the socioeconomic background of the students.

Table 1

Student demographics by treatment group

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<thead>
<tr>
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<th>Treatment Group</th>
<th>Alternate-Treatment Group</th>
<th>No Treatment Group</th>
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<td>N = 31</td>
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<tr>
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</tr>
<tr>
<td>School B</td>
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<td>15</td>
</tr>
<tr>
<td>School C</td>
<td>0</td>
<td>0</td>
<td>27</td>
</tr>
</tbody>
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*Note.* Treatment Group = *Story Champs* intervention; Alternate-Treatment Group = shared storybook intervention.

**Procedures**

The researchers met with all participating teachers and administrators for 2, 1-hour training sessions via videoconferencing to explain the purpose and schedule of the study and to obtain participation consent. Following the administration of pre-tests by the classroom teachers, all 12 classrooms with 121 students were randomly assigned to three groups: a treatment group, an alternate-treatment group, and a no-treatment control group. An overview of the schedule is provided in Appendix A.

**Treatment group: Large group, tier-1 narrative intervention.** All the students in the Treatment Group received large group, Tier-1 oral language intervention from their
classroom teacher twice a week for 30 minutes over 8 weeks. Teachers assigned to the
treatment group were taught to conduct each whole-class session according to the same
*Story Champs* large group procedures described in Spencer, Petersen, Slocum, and Allen
(2015; Appendix B). This program directed teachers to choose from pre-constructed
stories with story structure, complex language, and vocabulary targets (Appendix C).
With pictures displayed on a digital presentation for the whole class to see, the teacher
modeled a story while pointing to corresponding pictures and attaching brightly colored
story grammar icons to the pictures. The teacher encouraged the children to name each
part of the story (e.g., “character, problem, feeling, action, ending”) and then retold the
story while the class produced gestures representing each part of the story. Next, the
teacher asked questions about parts of the story and called on individual children to
answer (e.g., “Who was this story about?” and “What did she do to fix the problem?”).
Once the student responded, the whole class repeated the answer using choral responding.
Finally, the children were paired up to tell the story in its entirety to a peer. Partners
helped monitor using a printed checklist with each of the story grammar icons to guide
them. When one partner finished telling the story, the roles switched.

Teachers assigned to the treatment group were trained via a 2-hour
videoconferencing session how to lead their classrooms in *Story Champs*. They were also
provided with a video of a simulated session and given the *Story Champs* manual and
digital stories. This whole classroom instruction conducted by the classroom teacher was
considered Tier 1 instruction in the MTSLS system, and was continued for 8 weeks,
yielding a total of 16 sessions. Throughout the study, the researchers met for four
additional sessions with teachers in the treatment group. During these sessions, the
teachers showed videos of their classroom instruction, which allowed the researchers to observe and provide feedback regarding the teachers’ fidelity of implementation.

**Treatment group: Small group, tier-2 narrative intervention.** After six weeks of large group instruction, brief progress monitoring tests were administered to all students in the treatment group to determine whether the Tier-1 whole-class instruction was sufficiently intense to improve the students’ language. From the results of the progress monitoring tests in conjunction with teacher feedback, the researchers identified 16 students who could benefit from additional instruction. These students were assigned to receive tier-2 small-group sessions in addition to the tier-1 whole-class instruction for the duration of the study. These small group sessions were led by two trained undergraduate students in the U.S. via videoconferencing while an adult provided supervision and technological assistance in India. These interventionists taught groups of eight elementary students in India separately from the tier-1 instruction, which continued to be led by the classroom teacher at a different time in the day. The interventionists led their groups in tier-2 instruction for two 30-minute sessions, equaling 60 minutes of additional instruction. Since students assigned to tier-2 intervention continued to participate in the Tier 1 whole-class instruction, they received a total of 120 minutes of explicit language instruction the week of Tier 2 intervention.

**Small group, tier-2 program and materials.** The Tier-2 intervention adhered to the small group procedures of *Story Champs* (Spencer & Petersen, 2012b), modified for the limitations of videoconferencing (Appendix D). The teachers in India choose two stories from the program deemed to be culturally relevant to the children. These stories came with accompanying pictures that were displayed on the students’ computer screen.
in India and on the interventionists’ computer screen in the U.S. Simultaneously, in
another window on the computer screen, the interventionists and students could view
each other in order to maintain visual contact. The same story grammar icons used in Tier
1 instruction were used as visual supports to label each major part of the story. These
icons were also visible on the interventionists’ and students’ computer screens. Story
gestures representing the major parts of the story were also used during each repetition of
the story to increase the children’s active engagement while they listened to the
interventionists and their peers tell the story.

**Tier-2 intervention steps.** Spencer and Slocum (2010) were the first to implement
the *Story Champs* small group procedures following a six-step procedural sequence
within each session. Visual materials were systematically withdrawn so children told the
story initially with pictures and icons for support, and by the end of the session, told the
story without pictures or icons. The steps also moved from the interventionist modeling
the story (step 1), the group retelling the story (step 2), individuals retelling the story
(steps 3-4), and finally to individuals generating personal stories (steps 5-6). These steps
are described in detail in the *Story Champs* manual (Spencer & Petersen, 2012) and in
Spencer and Slocum (2010).

**Alternate-treatment group.** All the students in the Alternate-treatment Group
participated in Tier-1 shared storybook intervention with their classroom teacher twice a
week for 30 minutes over 8 weeks. The teachers implemented whole-class shared
storybook lessons with a particular emphasis on vocabulary instruction following
Spencer, Goldstein, and Kaminski (2012) procedures (Appendix E). This program
directed teachers to select a different grade-level book during each intervention session
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that contained a select number of vocabulary words likely to be new to their students. The teacher then read the book to the entire class, drawing attention to the vocabulary words and making the instruction as interactive as possible by encouraging students to repeat the definitions and find ways that the words connected to their everyday experiences.

Teachers also orchestrated vocabulary-related activities for the students to complete after the story had been read and embedded practice opportunities in the classroom to help the students practice using the words. Throughout the study, the researchers met for four additional sessions with teachers in the alternate-treatment group. During these sessions, the teachers showed videos of their classroom instruction, which allowed the researchers to observe and provide feedback regarding the teachers’ fidelity of implementation.

**No-treatment group.** Teachers assigned to the no-treatment group were trained on test administration procedures but were not provided *Story Champs* nor *Shared Storybook* training. The no-treatment group had language (reading and writing) instruction for 30 minutes five times a week for 8 weeks. Teachers were asked to continue activities that were in place at the outset of the school year (business as usual). All participating schools followed the National Council of Educational Research standards (2005), which state that students should develop the “ability to read with comprehension, and not merely decode” and that they should also develop “the confidence to express his or her thoughts in an organized manner [in writing]” (p. 7-8).

The curriculum focused on recognizing syntactic, semantic, and graphophonemic cues in reading as well as drawing inferences and relating text to previous knowledge. Writing instruction focused on legibility, the use of cohesive devices, creativity, and developing a sense of audience.
Measures

Narrative listening and reading retells, narrative and expository curriculum-based reading comprehension assessments, and narrative and expository writing samples were used as outcomes in this study. The administration of each verbal assessment was audio recorded. Writing samples were stored digitally. The teachers in India administered the pretest measures, and the researchers conducted posttests in person in India at the conclusion of the study.

CUBED Narrative Language Measures (NLM). The Narrative Language Measures: Listening (NLM Listening) and the Narrative Language Measures: Reading (NLM Reading) are English language subtests of the CUBED assessment (Petersen & Spencer, 2016). Each form of the NLM includes a story with thematically relevant content for young students, such as getting lost or making friends. Students completed the NLM Listening, which requires students to listen to a brief story and then retell that story as well as the NLM Reading, which requires students to read a brief story and then retell that story. For this study, the character names were changed from the original name to a name common in India (Appendix F). These tests provided information on the students’ ability to understand and use complex oral and written language. The NLM also has subsections in which students are asked questions about the story content and about the meaning of less frequent words used in the story. Each NLM form takes approximately 2-3 minutes to administer and score. Only the narrative retell section of the NLM was analyzed for this study.

NLM Listening administration. To administer the NLM Listening, an examiner brought an individual student to a quiet room and followed standardized procedures.
Based on the script, the examiner said, “I’m going to tell you a story. Please listen carefully. When I’m done, you are going to tell me the same story. Are you ready?” The examiner read the model story word for word at a moderate pace with normal inflection. When the examiner finished reading the story, he/she said, “Thanks for listening. Now you tell me that story.” This initiated the Retell subtest. If a student was reluctant to retell the story, the examiner encouraged the student by saying “It’s OK, just do your best.” Or “I can’t help you, but you can just tell the parts you remember.” Only these two prompts were allowed while the student retold the story. When the student finished retelling the story, the examiner asked comprehension and vocabulary questions about the story. The story questions and vocabulary questions sections were not analyzed in this study.

**NLM Reading administration.** With the NLM Reading, instead of the examiner reading the story to the students, the student read the passage out loud. To administer the NLM Reading, an examiner brought an individual student to a quiet classroom, placed a written story in large print in front of the student and said, “Please read this out loud. Do your very best reading. I’ll help you if you need it. When you’re done I might ask you to tell me the story.” The examiner placed his or her phone next to the examiner’s form and covertly started a timer on their phone when the student began reading the first word of the story. While the student read the story, the examiner followed along using the NLM Reading record sheet. The examiner put a slash (/) through words decoded incorrectly. If a student failed to decode a word within 3 seconds, the examiner told the student the word and marked a slash through it. The examiner inconspicuously placed a bracket ( ] ) after the last word read in 1 minute, but the student’s reading was not interrupted so that the student could continue to read the entire story. Self-corrections within 3 seconds, repetitions, and
insertions were not considered errors. This reading fluency information was not analyzed in the current study. When the student finished reading the entire story, the examiner removed the passage from in front of the student and initiated the Retell subtest by saying, “Thanks for reading. Now you tell me that story.” The administration procedures for the Retell, Story Questions, and Vocabulary Questions for the NLM Reading were exactly the same as described above for the NLM Listening. The story questions and vocabulary questions sections were not analyzed in this study.

**Scoring of the Retell subtest.** Since the Retell subtests do not differ between the NLM Listening and the NLM Reading assessments, the scoring procedures are identical. To score the Retell subtest, examiners listened to the audio recording of the student’s retelling of the story and used the scoring section on the record sheet to rate the student’s inclusion and completeness of each story grammar element. Two points were awarded for elements that were complete and clearly present in the student’s story. If the student included an incomplete or unclear element, it was awarded only one point. No points were awarded for story grammar elements that were not present in the student’s story. Because the problem, attempt, consequence, and ending are the most essential story grammar elements for a minimally complete episode, those elements are highlighted on the scoring rubric. When a student earned two points on a combination of those story grammar elements, they were given additional points in the episode scoring section, depending on the combination of complete and clearly present elements. To score the language complexity section, specific words that mark subordination (i.e., because, so that, when, after) were worth one point for each use up to three points.
Test fidelity of administration and scoring reliability. Undergraduate student research assistants who administered and scored the assessments participated in a two-hour training conducted by the researchers. Research assistants demonstrated 100% administration fidelity of the NLM Listening and NLM Reading assessments in a practice session before administering the posttests. All assessment sessions with participants were audio recorded.

To evaluate the inter-rater reliability of the NLM Listening and NLM Reading, independent raters rescored a random selection of 20% of the Retell subtests from audio recordings. Point-by-point agreement was calculated by dividing the number of agreements by number of agreements plus disagreements multiplied by 100. The mean scoring agreement for the NLM Listening was 92% (range = 80-100%). When ± 1 was allowed for each point, the mean scoring agreement for the NLM Listening was 97% (range = 90-100%). The mean scoring agreement for the NLM Reading was 94% (range = 74-100%). When ± 1 was allowed for each point, the mean scoring agreement for the NLM Reading was 98% (range = 90-100%).

Narrative and Expository curriculum-based reading comprehension assessments. Two curriculum-based reading comprehension assessments using multiple-choice questions were administered to all participants (Appendix G). One curriculum-based reading comprehension assessment measured narrative language comprehension and the other measured expository language comprehension. This measure was selected because the teachers in New Delhi requested a measure that was reflective of end-of-year national examinations. These assessments were obtained from the English Test Store and were modified to use character names common in India. Each narrative and expository
reading comprehension assessment included 5 factual multiple-choice questions. These tests were group-administered by the teachers to the entire class. Each student was given a copy of the assessment and asked to read the passage carefully and independently. Teachers instructed the students not to work with any other student to complete the test. Students were given 15 minutes to complete the test.

**Narrative and Expository Writing Samples.**

**Writing sample administration.** Both narrative and expository writing samples were collected for this study. To collect the narrative writing sample, the classroom teacher gave each student a paper with the prompt, “Tell about a time you lost something” written at the top. The classroom teacher also wrote this prompt on the whiteboard. No other prompts were given. Students were directed to complete the test on their own and to not work with other students or have additional assistance from the teacher. Students were given 15 minutes to complete the test. To collect the expository writing sample, the classroom teacher gave each student a paper with the prompt, “Describe your favorite animal” written at the top. All other administration procedures were identical to the collection of the narrative writing sample.

**Scoring of the narrative writing sample.** The NLM Flow Chart (Spencer & Petersen, 2016; Appendix H) uses a decision-making tree approach to quantify the extent to which stories include story grammar elements and to characterize sentence complexity. Research concerning the validity of the NLM Flow Chart is summarized in the examiner’s manual (Spencer & Petersen, 2016). Scorers begin at the top of the flow chart for each element and answer yes/no questions until they reach the level that reflects the student’s performance. The flow chart includes two distinct sections: Story Grammar and
Language Complexity. The scores from these sections are added together to give a composite score.

**Scoring the Story Grammar section.** The Story Grammar section is modeled after the story schema outlined by Stein and Glenn (1979) and includes character, setting, problem (initiating event), plan/attempt, consequence, ending (resolution), and emotion (internal response). Story sequence is also analyzed in the Story Grammar section. These elements are given a score of 0-3 points. Additional points are assigned for episodic complexity and including more than one problem, plan/attempt, and consequence. Thus, stories with complete episodes receive higher scores than basic and/or incomplete stories.

**Scoring the Language Complexity section.** The Language Complexity section is composed of language features that are reflective of the oral and written academic language expected of children attending elementary school in the United States and in India. The elements assessed in this section include prepositions, verb and noun modifiers, vocabulary and rhetoric, temporal ties, causal ties, and dialogue. All Language Complexity elements are assigned 0-3 points based on their frequency and complexity, except for dialogue, which is assigned only 0-2 points.

**Scoring of the expository writing sample.** The expository writing samples were scored using a rubric from Calkins (2013). This rubric was composed of six elements: overall, lead, transitions, ending, organization/elaboration, craft/vocabulary (Appendix I). The overall category scored the quantity and quality of facts included in the writing sample. The lead category scored quality of the beginning of the expository sample and the transitions category scored the quantity and quality of transitions included. The ending category scored the quality of the ending of the piece. The
organization/elaboration category scored the quality and quantity of the details included for individual facts. Finally, the craft/vocab category scored the quantity of tier-2 and tier-3 words in the piece. Each of these elements were assigned 0-4 points based on their completeness.

Scoring reliability. Undergraduate student research assistants who scored the assessments participated in a two-hour training conducted by the researchers. To evaluate the inter-rater reliability of the narrative and expository writing sample scoring, independent raters rescored a random selection of 20% of the writing samples. Point-by-point agreement was calculated by dividing the number of agreements by number of agreements plus disagreements multiplied by 100. The mean scoring agreement for the narrative writing sample was 59% (range = 43-79%). When ± 1 was allowed for each point, the mean scoring agreement for the narrative writing sample was 89% (range = 79-100%). The mean scoring agreement for the expository writing sample was 53% (range = 17-83%). When ± 0.5 was allowed for each point, the mean scoring agreement for the expository writing sample was 93% (range = 83-100%).

Results

ANCOVA Assumptions

Before carrying out an ANCOVA, the researchers verified that the data met ANCOVA assumptions. The dependent variables and covariate variable were measured on a continuous scale, the independent variable consisted of three categorical, independent groups, and the groups met the independence of observations requirement.

Outliers. The data were evaluated to check for outliers, defined as values more than 3 IQRs from the end of the box plots for each measure. No significant outliers were
present in the data of the post NLM Listening, post NLM Reading, post narrative curriculum-based reading comprehension assessment, post expository curriculum-based reading comprehension assessment, or post narrative writing sample. One significant outlier was present in the data of the post expository writing sample, which was winsorized to the next lowest score in the data set.

Shapiro-Wilk test of normality. A Shapiro-Wilk test for each dependent variable was conducted (Table 2). Results indicated that 2 out of the 6 measures were not significantly different from the expected normal distribution (Post narrative writing, \( p=.180 \) and Post listening retell, \( p=.084 \)). However, Skewness and Kurtosis as well as visual inspection indicated that all outcome measures had reasonably normal distributions, with no skewness or kurtosis values + or -1 (Trochim & Donnelly, 2006).

Table 2

<table>
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<th>Kurtosis</th>
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ANCOVA Results

Table 3 reports the unadjusted and adjusted means for each outcome. The pretest narrative writing variable was used as the covariate across all posttest measures. This covariate was used because all participants completed this pretest.

Table 3

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<td>EWS</td>
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Note. NLML = NLM Listening; NLMR = NLM Reading; NCB = Narrative Curriculum-Based Reading Comprehension; ECB = Expository Curriculum-Based Reading Comprehension; NWS = Narrative Writing Sample; EWS = Expository Writing Sample

NLM Listening. A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between the covariate (pretest narrative writing) and posttest listening retell did not differ significantly as a function of the independent variable, F(2, 75) =1.52, MSE = 63.45, p = .23, partial eta squared = .04.

The ANCOVA was significant F(2, 77) =6.35, MSE = 269.19, p < .05, partial eta squared = .14. Follow up tests were conducted to evaluate pair-wise differences among the adjusted means. Based on the LSD procedure, the adjusted mean for the treatment group was significantly higher than the alternate-treatment group, p <.01 and the control group,
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$p < .05$. The alternate-treatment group was not significantly different from the control group, $p = .74$.

**NLM Reading.** A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between the covariate (pretest narrative writing) and posttest reading retell did not differ significantly as a function of the independent variable, $F(2, 75) = .05$, MSE = 2.15, $p = .95$, partial eta squared = <.01. The ANCOVA was significant $F(2, 77) = 19.51$, MSE = 756.48, $p < .001$, partial eta squared = .34. Follow up tests were conducted to evaluate pair-wise differences among the adjusted means. Based on the LSD procedure, the adjusted mean for the treatment group was significantly higher than the alternate-treatment group, $p < .001$ and the control group, $p < .001$. The alternate-treatment group was not significantly different from the control group, $p = .54$.

![Figure 1: Comparison of adjusted means for CUBED NLM measures: NLM Listening and NLM Reading](image)

**Narrative curriculum-based reading comprehension.** A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between
the covariate (pretest narrative writing) and posttest reading retell did not differ significantly as a function of the independent variable, $F(2, 86) = .02$, $MSE = 0.81$, $p = .99$, partial eta squared = <.001. The ANCOVA was not significant $F(2, 88) = 2.21$, $MSE = 0.80$, $p = .12$, partial eta squared = .05.

**Expository curriculum-based reading comprehension.** A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between the covariate (pretest narrative writing) and posttest reading retell did not differ significantly as a function of the independent variable, $F(2, 86) = 1.75$, $MSE = 1.41$, $p = .18$, partial eta squared = .04. The ANCOVA was not significant $F(2, 88) = 0.50$, $MSE = 1.43$, $p = .61$, partial eta squared = .01.

![Figure 2: Adjusted means for curriculum-based reading comprehension measures: narrative and expository](image)

**Narrative writing sample.** A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between the covariate (pretest narrative writing) and posttest reading retell did not differ significantly as a function of the independent variable, $F(2, 85) = .07$, $MSE = 60.57$, $p = .94$, partial eta squared = .
The ANCOVA was significant $F (2, 87) = 15.09$, $MSE = 59.27$, $p < .001$, partial eta squared = .26. Follow up tests were conducted to evaluate pair-wise differences among the adjusted means. Based on the LSD procedure, the adjusted mean for the treatment group was significantly higher than the alternate-treatment group, $p < .01$ and the control group, $p < .001$. The alternate-treatment group was not significantly different from the control group, $p = .07$.

**Expository writing sample.** A preliminary analysis evaluating the homogeneity-of-slopes assumption indicated that the relationship between the covariate (pretest narrative writing) and posttest reading retell did not differ significantly as a function of the independent variable, $F (2, 86) = .10$, $MSE = 7.30$, $p = .91$, partial eta squared = <.01. The ANCOVA was not significant $F (2, 88) = 1.07$, $MSE = 7.15$, $p = .35$, partial eta squared = .02.

![Figure 3: Adjusted means for writing samples: Narrative and Expository](image)
Discussion and Future Directions

To date, no research has been published on an MTSLS in the country of India. This study was a preliminary investigation of the impact Story Champs curriculum could have on the oral language comprehension and production, reading comprehension, and writing of second and third grade students in this country.

Oral Language Comprehension and Production

NLM Listening. The results of the study indicated that students assigned to the treatment group had significantly higher scores on the NLM Listening narrative retell task when compared to students in the alternate-treatment and no-treatment groups. These findings align with previous research which reported that oral narrative language intervention had a causal impact on students’ narrative language comprehension and production. This study extends previous research findings in several ways. First, this study showed that even when oral narrative language intervention is primarily conducted by teachers with training via videoconferencing and delayed feedback, moderately large effect sizes can still be achieved. In all previous studies, either the researchers, teachers, or speech-language pathologists who implemented the oral narrative language intervention did so after receiving training in person. In previous studies, teachers also received frequent supervision and feedback while they were implementing the intervention. In this study, teachers received feedback only through videoconferencing. No real-time feedback was given. This indicates that the oral narrative language intervention conducted using Story Champs included sufficiently detailed procedures to ensure that the active ingredients of the intervention were applied, which resulted in significantly improved narrative retell ability. This means that large group Story Champs
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can potentially be implemented by teachers or other educators without direct in vivo training and supervision. In addition, this study employed videoconferencing to facilitate tier-2 intervention, which has not been done in other studies on MTSS for language. This potentially means that students can be provided with the tier-2 intervention they need through a trained interventionist not in their immediate area.

This study also showed that oral narrative language intervention improved the narrative language comprehension and production of students from a considerably different cultural and linguistic background than students in previous studies. All Indian students are required to learn and converse in three languages, yet the English Story Champs intervention significantly improved the oral language of the students in this study with very few modifications to the model stories. This indicates that the Story Champs procedures could possibly be applied cross-culturally while maintaining efficacy.

Strong academic oral language is a key factor in reading comprehension and writing (Barton-Hulsey, Sevcik, & Romsiki, 2017; Griffin, Hemphill, Camp, & Wolf, 2004; Ouellette, 2006). Oral language provides the opportunity for instruction and measurement without the added complexities of decoding and transcription inherent in reading comprehension in writing. If students are given a strong foundation by strengthening their oral language abilities, they may be better able to succeed in reading comprehension and writing.

Reading Comprehension

**NLM Reading.** The results of this study indicated that student performance in the treatment group was significantly higher on the NLM Reading measure when compared
to the alternate-treatment and no-treatment control groups. This study adds to the very few studies that report a causal relationship between oral narrative language intervention and reading comprehension.

When compared to a more traditional approach to language instruction (shared storybook), this study indicated that students assigned to the treatment group (*Story Champs*) had stronger reading comprehension outcomes after only 8 weeks of instruction. This finding shows that providing students with explicit instruction on the structure of narratives as well as the opportunity to practice retelling narratives improves reading comprehension more than teaching them individual vocabulary words, even when those vocabulary words are taught in the context of a story with accompanying activities. However, it should be noted that this study was limited by not directly analyzing vocabulary outcomes, which is the focus of shared storybook reading. There appears to be an active ingredient somewhere in the difference between *Story Champs* and shared storybook reading. Future research should investigate whether that active ingredient is the pictures and icons used, the explicit instruction in story grammar elements, the carefully constructed narratives which employ academic language, the expectation that students produce the narratives, or another unique element of the *Story Champs* intervention.

The relationship between oral narrative language and reading comprehension is further evidenced through the results of this study. This study demonstrated a directional transference of improved oral narrative language to improved reading comprehension. Schools across the world have found that reading comprehension is particularly difficult to improve in their students. Longitudinal data indicate that gains in reading comprehension have been nearly stagnant for over 20 years (National Center for
Education Statistics, 2012; Perksy, Daane, & Jin, 2003; Mullis et al., 2017) with the majority of students not understanding grade-level reading material. This study demonstrates that a focus on oral language can directly improve reading comprehension. Thus, although the findings are preliminary, it is possible that MTSLS could greatly impact reading comprehension in India.

**Narrative and Expository Curriculum-Based Reading Comprehension.**

Although the students in the treatment group had significantly higher reading comprehension using the NLM Reading measure, these results were not replicated using the narrative and expository curriculum-based reading comprehension assessments. The results of the study were not statistically significant on these measures. Curriculum-based reading comprehension assessments were included because the teachers indicated that they wanted a measure that more closely aligned with the format of national standardized reading tests. However, specific Indian reading tests were unavailable to the researchers, and the tests selected, approved, and administered by the Indian teachers had no external evidence of reliability or validity. Furthermore, fidelity of test administration for these measures was not recorded. The teachers in India were responsible for the administration of these reading comprehension tests and no audio or video files were recorded. Because many standardized high-stakes tests use a multiple-choice format to measure reading comprehension, future studies should use a valid and reliable multiple-choice measure to evaluate whether or not oral narrative intervention significantly improves performance on such tests.

**Narrative writing sample.** The results of this study indicated that students assigned to the *Story Champs* treatment group had significantly higher scores on narrative
writing when compared to students in the alternate-treatment and no-treatment groups. This suggests that multi-tiered oral narrative intervention not only positively impacted reading comprehension, but that it also generalized to the narrative writing of students. This finding means that oral narrative instruction may provide the text-generation component crucial to helping more students meet writing benchmarks. Additionally, much like the results of the other measures in this study, the results of the narrative writing sample show that oral narrative intervention can improve the narrative writing of students from a different cultural and linguistic background than those students in the United States. Thus, oral narrative intervention may be an important key in empowering students to meet writing benchmarks.

The alternate-treatment group was not significantly different from the no-treatment group on the narrative writing sample measure, again suggesting that providing students with explicit instruction on the structure of narratives and the opportunity to practice retelling narratives results in greater improvement in writing than teaching them vocabulary words. Just as future research should investigate the active ingredients that make an impact on reading comprehension, future research should also investigate the active ingredients that impact narrative writing ability.

Writing is important in nearly every aspect of the academic setting. Global writing standards highlight the need for younger students to be competent in the two-fold process of writing (transcription and text-generation), yet the percentage of students reaching grade-level writing benchmarks closely mirrors the percentage of those reaching reading benchmarks, with little significant improvement occurring over the past 20 years (Australian Curriculum, Assessment and Reporting Authority, p.1; Buescu, et.al, 2012;

*Expository writing sample.* The results of the study indicated that there was no significant difference between groups on the expository writing outcome. This is the first time a study has examined the relationship between oral narrative intervention and expository writing outcomes. These findings suggest that such a low dose of large group, teacher-delivered oral narrative language intervention may not transfer to expository writing. It may be that to improve expository writing, students need explicit instruction in tier-3, content-specific vocabulary words as well as organizational elements specific to expository writing. Furthermore, this was a relatively low-dose study in which students participated in only 8 hours of classroom instruction and minimal tier-2 support. It is possible that with greater intensity, oral narrative intervention may transfer to expository writing. Future research should investigate (a) the extent to which expository language should be explicitly targeted in oral language intervention as well as which elements should be targeted in order to improve expository writing and (b) whether a more intensive dose of oral narrative language instruction would significantly improve students’ expository writing.

**Conclusion**

The results of this study indicate that oral narrative intervention delivered through an MTSLS can causally impact the oral language, reading comprehension, and narrative
writing of second and third grade students in India. With the discrepancy between international reading and writing standards and the achievement of students, there is a great need for effective language-based instruction. This is especially true in India, which houses the largest education system in the world and faces several barriers to ensuring academic success for all students (Annamalai, 2003; Association of Speech Language and Hearing Professionals India; Ramanathan, 2016; Maheswari et al., 2018). An MTLS utilizing oral narrative instruction may help the students of India meet national and international benchmarks in reading comprehension and writing.
References


Appendix A

An overview of the study schedule.
Appendix B

A sample large-group lesson plan from the Story Champs manual.

**Enhanced Story Structure - Retell**

**Materials**
- Choose any BLITZ Level B story from story book
  - Illustrations
    - If using digital presentation, click on the purple Level B button and select the corresponding story
- Story Grammar Icons (icons are included in the digital presentation)
  - character, setting, problem, feeling, action, ending, end feeling
- Champ Checks
  - Use purple LEVEL B (Photocopied)

1. **Model Story**
   - Display 5 illustrations
   - Read the story
   - Place Story Grammar icons on or near illustrations
   - As needed: Name the Story Grammar parts and point to icons
   - As needed: Students name the Story Grammar parts

2. **Play Story Gestures**
   - Reread the story
   - As needed: Model the Story Gestures as Story Grammar parts are read
   - As needed: Help students play Story Gestures as they listen

3. **Team Retell**
   - Repeat teaching steps for each question
     - Do not allow students to raise their hands; every student should have a response ready
     - Call on an individual student to answer the question and to retell the part of the story
     - Help the individual student to retell the part if needed
     - Model what all the students need to repeat
     - All students repeat the sentence together
       - "What happened in the first picture?" or "Who was the story about?"
       - "Where was he/she in this story?" or "What was he/she doing?"
       - "What was his/her problem?"
       - "How did he/she feel about his/her problem?"
       - "What did he/she do to fix his/her problem?"
       - "How did the story end?"
       - "How did he/she feel at the end of the story?"

4. **Partner Retell**
   - Put students into pairs and pass out Champ Checks
   - Students take turns retelling the story with a partner
   - Help students as needed; praise

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Appendix C

A sample story from the Story Champs manual.

STORY 13: BRYNN’S MELTED MESS

Last week, Brynn was getting a huge, chocolate candy bar at the store because she helped clean the dirty, cluttered house. After Brynn got her big candy bar, it suddenly melted in the sweltering car because it was so hot. When it melted, she felt extremely disappointed because her candy bar was a liquefied, gooey mess. Brynn decided to try and cool the candy bar down using the car’s air conditioner. Although she put the candy bar right up to the cool air, when she opened up the wrapper, it was still totally melted. Brynn was very unhappy. After Brynn settled down, she decided to ask her mom to help. She calmly said to her mom, “When I opened the candy bar wrapper, it was a melted mess. Can I get another candy bar because mine is ruined?” When Brynn’s mom saw the melted chocolate, she kindly bought her another one because Brynn asked nicely. After Brynn got her new candy bar, she had learned her lesson. She quickly gulped it down so that it didn’t melt. After she ate the absolutely yummy candy bar, Brynn was totally thrilled because it was delicious.

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Appendix D

A sample small-group lesson plan from the Story Champs manual.

Basic Story Structure - Retell

**MATERIALS**
- Choose a **CLASSIC** or **BLITZ Level A** story from story book
- **Illustrations**
  - If using illustration cards, select cards from corresponding story (for BLITZ stories, use only cards 1, 2, 3, 7 and 8)
  - If using digital presentation, click on the green **Level A** button and select the corresponding story
- **Story Grammar Icons** (icons are included in the digital presentation)
  - character
  - problem
  - feeling
  - action
  - ending
- Choose a **Story Game**
  - Each student should have 1 cube, 1 bingo card, OR 5 sticks (game materials are not needed to play Story Games)

1 – Model Story
- Display 5 illustrations
- Read the story
- Place Story Grammar icons on or near illustrations
- As needed: Name the Story Grammar parts
- As needed: Students name the Story Grammar parts

2 – Team Retell
- Leave illustrations on table
- Pick up icons and give each student 1-2 icons; keep one for yourself if necessary
- Starting with the person who has the Character icon and moving through the parts in order, each person retells the part of the story
- Students place icons on or near illustrations
- Summarize the story quickly and ensure that all parts are included

3 – Individual Retell 1
- Leave illustrations and icons on table
- Select one student to retell entire story
- Help the student retell all parts of the story
- Everyone, but the storyteller, plays a Story Game

4 – Individual Retell 2
- Remove illustrations and leave icons on table
- Select one student to retell entire story
- Help the student retell all parts of the story
- Everyone, but the storyteller, plays a Story Game

5 – Individual Retell 3 (repeat for a 4th student)
- Remove icons from table
- Select one student to retell entire story
- Help the student retell all parts of the story
- Everyone, but the storyteller, plays a Story Game

**REMEMBER!**
- Assign students to steps 3-5 so the order in which they retell and tell stories changes frequently
- **Use 2-Step Promoting to help students**
  1. Ask a question
  2. Model what the student should say
- Make corrections immediately
- Differentiate targets for each student
Appendix E

Shared storybook reading procedures.

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<tbody>
<tr>
<td><strong>During the Story: Explicit Instruction</strong></td>
<td><strong>Example</strong></td>
</tr>
<tr>
<td>Connect the vocabulary word to the context of the story. Provide information about the meaning of the word using an explanation of the word in the story. Provide a clear, child-friendly definition or example related to the story.</td>
<td>Look at the picture of Ellie. Ellie is enormous! [Picture of Ellie Elephant climbing on the bus—bus is tilting.] She is really big! She is almost too big for the bus!</td>
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<tr>
<td>Give opportunities to repeat and produce the word. Say the word and ask children to repeat the word. Say the definition of the word and ask children to provide the word in response to the definition.</td>
<td>Enormous. Say enormous. Enormous means really big. What word means really big? Enormous? Great job!</td>
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<tr>
<td>Make connections between the word and children’s lives. Give examples that provide information about the meaning of the word by relating to the child's everyday experiences. Use the same language as the definition.</td>
<td>Let’s see. Can you think of something that is enormous? What about… a school bus! A mountain! Or a building! Those are things that are really big.</td>
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<tr>
<td>Provide an intervention activity. Give children an opportunity to complete an activity (pantomime, etc.) related to the word and its meaning. Ask children to provide the definition of the word. Provide children with the word and ask children to answer with the definition. Model the correct definition.</td>
<td>Now, pretend you are going to give Ellie a hug. Remember, she is enormous, so make your arms really big! Whew! Tell me, what does enormous mean? Really big! That’s right!</td>
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<tr>
<td><strong>After the Story: Review</strong></td>
<td><strong>Example</strong></td>
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<tr>
<td>Review word and definition. Review the vocabulary word and definition. Remind children of the story context and include an opportunity to respond.</td>
<td>Remember Ellie? She is really big. She is… [pause for child response] enormous! Great work.</td>
</tr>
<tr>
<td>Provide opportunities to use and demonstrate knowledge of the word. Have children answer questions or list examples that relate to the word. Provide opportunities for children to say the word. Include nonexamples.</td>
<td>Can you think of something enormous? A mountain! Say, a mountain is enormous. How about a mouse? No, not enormous. How about an elephant?</td>
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<tr>
<td><strong>In the Classroom: Opportunities to Practice</strong></td>
<td><strong>Example</strong></td>
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<tr>
<td>Embed practice opportunities in classroom routines. Identify several classroom activities or routines that can provide opportunities for children to practice using the word. Make a plan to prompt children to use the word during these activities.</td>
<td>At the block center, children can build an enormous tower. Set up center with picture cards to sort—Things that are enormous and things that are small.</td>
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Third Grade Benchmark: STORY 2

Examiner says, “I’m going to tell you a story. Please listen carefully. When I’m done, you are going to tell me the same story. Are you ready?” Examiner reads the story word for word at a moderate pace with normal inflection.

One day, Nichi was walking around a zoo. She was with her class that was studying wild animals. Nichi didn’t pay attention to her class because she was staring at a strange, colorful monkey that slowly swayed in circles. She eventually looked up from the twirling monkey. But her class was gone. Nichi was afraid because she was alone. So then she decided to look by the huge elephants. Although Nichi carefully searched the exhibit, she couldn’t find anyone who she knew. She was lost. So then she felt anxious. After Nichi looked around some more, she decided to ask a kind, attentive man, an employee who was watching everyone, if he knew where her class was. Nichi nicely said, “I need help so that I can find my class.” He said, “They are probably in the snake exhibit.” The polite employee led Nichi to the room full of snakes and she was reunited with her class.

When Nichi found them, she felt relieved since she wasn’t alone. Then she stayed with her class.

Examiner says, “Thanks for listening. Now you tell me that story.” After student appears to be done, examiner says, “Are you finished?” Prompts (Up to 3x), “If it’s OK. Just do your best.” and/or “I can’t help, but you can just tell the parts you remember.”
Appendix G

Narrative curriculum-based reading comprehension assessment

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**Elementary Reading Test**

*Teacher instructions: Each child should be given a copy of this exam. This exam can be administered to a group of students at the same time. Students should be asked to carefully read each passage and then to answer the questions below each passage. Students should be given 15 minutes to complete the test.*

**Passage 1:** Please read the following passage silently. Circle the correct answers to the questions.

Aarav has been worried all week. Last Tuesday he received a letter from the local police. In the letter he was asked to call at the station. Aarav wondered why he was wanted by the police, but he went to the station yesterday and now he is not worried anymore. At the station he was told by a smiling policeman that his bicycle had been found. Five days ago, the policeman told him, the bicycle was picked up in a small village four hundred kilometers away. It is now being sent to his home by train. Aarav was most surprised when he heard the news. He was amused too, because he never expected the bicycle to be found. It was stolen twenty years ago when Aarav was a boy of fifteen.

1. Aarav was worried because
   a) He received a letter.
   b) He went to the police station yesterday.
   c) The police would catch him.
   d) He didn’t know why the police wanted him.

2. The policeman who talked to Aarav was
   a) Pleasant
   b) Worried
   c) Surprised
   d) Small

3. Why was Aarav very surprised when he heard the news?
   a. Because his bicycle was stolen 5 days ago.
   b. Because his bicycle was found when he was a boy of fifteen.
   c. Because he thought he would never find the bicycle.
   d. Because the bicycle was sent to him by train.

4. When was Aarav’s bicycle found?
   a) Last Tuesday
   b) Five days ago
   c) Twenty years ago
   d) Yesterday

5. Which of the following statements is not true?
   a. The police asked Aarav to go to their station.
   b. The policeman told Aarav the good news five days ago.
   c. Aarav is no longer anxious.
   d. Aarav’s bike was returned to him.

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https://englishateststore.net/index.php?option=com_content&view=article&id=33&Itemid=565

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Appendix H

NLM Flow Chart.

[Diagram of NLM Flow Chart with various criteria for writing conventions, language complexity, story grammar, and episode complexity.]
Appendix I

Expository writing sample rubric

<table>
<thead>
<tr>
<th>Expository Writing Rubric</th>
<th>1 POINT</th>
<th>1.5 PTS</th>
<th>2 POINTS</th>
<th>2.5 PTS</th>
<th>3 POINTS</th>
<th>3.5 PTS</th>
<th>4 POINTS</th>
<th>SCORE</th>
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<tbody>
<tr>
<td><strong>OVERALL</strong></td>
<td>The author drew a picture. The author drew/ labeled a picture.</td>
<td>The author wrote, but did not include facts/ was vague about the topic.</td>
<td>The author wrote 1 or more facts about the animal itself. These facts were not distinctive.</td>
<td>The author wrote 2 or more facts that are relevant and distinctive.</td>
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<td><strong>LEAD</strong></td>
<td>The writer started by drawing or saying something.</td>
<td>The writer told what their topic was.</td>
<td>The writer named his topic in the beginning and said “because” gave a reason why in the first sentence, got the readers’ attention.</td>
<td>The writer wrote a beginning in which they named the subject and said ‘because’, giving adult-like descriptors (try to interest readers).</td>
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<tr>
<td><strong>TRANSITIONS</strong></td>
<td>The author did not tell multiple things they knew about the topic.</td>
<td>The writer put different things they knew about the topic but did not use conjunctions to transition.</td>
<td>The author told different parts about her topic using at least one conjunction to transition.</td>
<td>2 or more conjunctions to transition.</td>
<td>The author told about different parts using 3 or more conjunctions to transition.</td>
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<tr>
<td><strong>ENDING</strong></td>
<td>The author wrote 1 sentence or less.</td>
<td>The author did not write an ending, but did have more than once sentence. (The author ended on a fact).</td>
<td>The author wrote an ending.</td>
<td>The author wrote multiple sentences at the end to wrap of their piece.</td>
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<tr>
<td><strong>ORGANIZATION/ ELABORATION</strong></td>
<td>The author did not have any writing.</td>
<td>The author wrote information, but there is no organization or elaboration.</td>
<td>The author told about their topic, but did not elaborate on any of the points.</td>
<td>The author had different parts and 3 or more of the parts were elaborated (conjunctions within a point).</td>
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<tr>
<td><strong>CRAFT/ VOCAB</strong></td>
<td>The author did not have any words (just drawings).</td>
<td>The author did not use any adjectives or adverbs.</td>
<td>The author did not use any tier-1 words, but did use at least 1 adjective and/or adverbs.</td>
<td>The author had 1 tier-2 word.</td>
<td>The author included 2 or more tier-2 words or at least 1 tier-3 word.</td>
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