

## RESEARCH-TO-PRACTICE

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### Implementing a Multi-tiered Model of Narrative Language Intervention in Head Start Preschool Classrooms

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This implementation study examined the efficacy and feasibility of a multi-tiered narrative intervention when Head Start teachers and teaching assistants delivered all of the interventions and progress monitoring probes. In six Head Start classrooms, 105 children were assigned to receive the intervention or to receive their typical instruction. Children who attended the three classrooms that implemented the multi-tiered intervention showed significantly better story retelling and language comprehension skills than the children who attended preschool in the control classrooms. Additional questions addressed the feasibility of a multi-tiered system in Head Start classrooms. Findings indicate that Head Start teachers and teaching assistants can deliver large group, small group, and individual lessons with ease; they can administer brief progress monitoring probes and score children's retells without great difficulty. After a few months implementing the new program, teachers and teaching assistants became more comfortable with the procedures and considered a multi-tiered system to be more doable in their classrooms.

*Keywords:* Head Start, MTSS, implementation, language, narrative

Typical conversational language that preschool students are expected to understand and use at

home and in the community is usually very different from the language demands encountered at school. Preschool is an excellent time to begin helping students use and understand the more complex, academic language that they will need to read, write, and comprehend in later grades. Oral language activities that are founded on narration (storytelling) can help bridge the gap between oral and written language. The vast majority of preschool students would benefit from an increased focus on narrative-based academic language, yet those students who are at risk for later reading difficulties, including children from low income households and who are culturally and linguistically diverse, may need even more intensive, differentiated language instruction.

Multi-Tiered Systems of Support (MTSS) are a promising approach to differentiated instruction that is trickling into early childhood education (Buisse & Peisner-Feinberg, 2013). MTSS entails the use of frequent progress monitoring and the delivery of instruction at different levels of intensity (tiers). Tiered systems are designed and implemented in a school-wide fashion to make prevention, rather than remediation, possible for students of various ability levels (Greenwood & Kim, 2012). Although there is an abundance of research evidence on MTSS for students in K-3, these research findings do not necessarily apply to the preschool setting. Early childhood education introduces new factors to consider for the implementation of MTSS for language. It is important to recognize that real classrooms do not operate in a clean and completely organized manner, as is the case in the laboratory. School-based interventions are ultimately applied in chaotic, busy environments. This poses real challenges for educators who attempt to apply an empirically supported intervention in their natural setting. Therefore, it is important to know whether or not it is feasible to implement MTSS for language in preschool settings. With few exceptions (e.g., Benedict, Horner, & Squires, 2007), the application of MTSS in preschool is relatively new, and MTSS for language has been given even less attention.

Story Champs (Spencer & Petersen, 2012a), the narrative intervention curriculum examined in this study, was designed specifically for multi-tiered implementation in preschool and K-3 classrooms. Story Champs explicitly targets oral narrative-based academic language, which is an important precursor to reading comprehension. A number of previous studies have examined the efficacy of Story Champs components (e.g., small group instruction). However, the current study represents the first attempt to integrate all of the intervention and assessment components to form a multi-tiered system of language support in Head Start preschools, and to examine whether preschool MTSS using Story Champs is feasible.

## THE CURRENT STUDY

This project was built upon four previous investigations of Story Champs in Head Start preschools; however, in the earlier studies researchers and research assistants delivered the lessons and completed all of the assessments. The purpose of the current study was two fold. First, we investigated how well Story Champs would improve story retelling and language comprehension, second, we examined whether a multi-tiered system of language instruction would be feasible for Head Start teachers and teaching assistants to implement, and whether they could use the intervention and assessment tools effectively in their natural environments. There were five specific research questions:

1. To what extent does a multi-tiered narrative intervention improve student's narrative language and language comprehension skills when it is implemented by Head Start teachers and teaching assistants?
2. To what extent do Head Start teachers and teaching assistants implement multi-tiered narrative intervention with fidelity?
3. To what extent do Head Start teachers and teaching assistants administer a narrative retell assessment with fidelity?
4. To what extent do Head Start teachers and teaching assistants score a narrative retell assessment with reliability?
5. To what extent do Head Start teachers and teaching assistants perceive multi-tiered narrative intervention and assessment to be feasible and do their perceptions improve with time?

## METHOD

Following a traditional MTSS approach, outcomes were collected seasonally (fall, winter, spring) on the children in six classrooms (105 preschoolers). These included measures of story retelling and language comprehension. Across the year, Head Start teachers and teaching assistants implemented all four components of the MTSS model: large group narrative instruction, small group narrative intervention, individual narrative intervention, and progress monitoring probes using a narrative retell task (Spencer & Petersen, 2012b). Throughout all tiers of Story Champs instruction, story illustrations and brightly colored icons were used to teach story structure (character, problem, feeling, action, and ending). Instructional strategies included active student responding while children retold stories and scaffolding of visual supports. Videos of the large group (<https://www.youtube.com/watch?v=V4HzbfRiS6A>) and small group (<https://www.youtube.com/watch?v=TqIUxtBbUrU>) procedures can be viewed online. And the retell assessments can be downloaded from [www.LanguageDynamicsGroup.com](http://www.LanguageDynamicsGroup.com).

While teachers and teaching assistants delivered all interventions and administered progress monitoring probes across the year, research staff provided initial training, modeling, and coaching. Researchers monitored the fidelity with which the teachers and teaching assistants delivered the Story Champs lessons and administered the progress monitoring probes, as well as observed how accurately they were able to score the progress monitoring narrative retells. In addition, teachers and teaching assistants completed an implementation feasibility questionnaire at regular time points across the year to document their comfort with the interventions and assessments, the level of support they received and/or needed to implement the program, the ease and time efficiency of the program, and the students' engagement during the intervention.

## SUMMARY OF RESULTS

- MTSS for language using Story Champs, when delivered by the Head Start teams, was effective at producing statistically significant improvements on story retelling and language comprehension, with medium effect sizes.
- Head Start teachers and teaching assistants were able to implement the Story Champs intervention and administer the narrative retell probes with fidelity and score the

children's retells reliably. Although the teachers' and teaching assistants' fidelity and reliability scores were lower than the research teams' in the current and previous studies, it was encouraging to see that their fidelity and reliability were within acceptable limits.

- The teacher reports about feasibility of the program in their classrooms yielded consistent patterns. The first month of implementation was the most difficult for the Head Start teachers and teaching assistants. They reported less comfort with the procedures, receiving fewer supports from the other staff and administrators, more difficulty with implementing the procedures, and lower child engagement when they began the interventions. However, meaningful improvements were noted in all areas as the school year progressed and they became more familiar with the procedures.

## RECOMMENDATIONS FOR IMPLEMENTATION

Head Start teachers are in a unique position to address language comprehension and prevent reading comprehension difficulty with the children they serve. Children who participate in an explicit and differentiated language intervention such as Story Champs will likely be much more prepared for kindergarten than children who do not. It is particularly important to focus on academic language for young children who are at risk for future reading comprehension difficulty (McNamara & Kendeou, 2011) because children who have stronger language skills do better in school (Mehta, Foorman, Branum-Martin, & Taylor, 2005).

- When a tiered approach is implemented, all children can receive an intensity of intervention (e.g., large group, small group, one-on-one) based on their individual needs. Importantly, the language skills that the children need to learn resemble the written language that lays the foundation for later reading comprehension and academic language (Catts, Fey, Tomblin, & Zhang, 2002).
- Some of the teachers took it upon themselves to extend the concepts into other parts of their day (e.g., circle time, snack time) and used the icons to help children understand books read aloud in the classroom. This is a helpful strategy so that the story structure and academic language (e.g., grammar, vocabulary) can be reinforced throughout the day and across the week, which enhances retention.
- We recommend that when centers or classrooms are considering adopting a multi-tiered framework or curriculum, that sufficient administrative supports are also put into place so that learning something new does not overwhelm teachers. As with any new program, there is a phase of learning how to use it. Strong, supportive leaders can help promote a smooth transition of the new intervention and enhance its sustainability long term.
- Learning a new program while in the process of managing a classroom can be challenging. Teachers reported that classroom management was difficult because the children who were not receiving small group intervention were playing freely. Because explicit small group instruction was not commonplace in these classrooms, the best time

for intervention was during center time. For future implementations, teachers should consider other potential scheduling options that might reduce this obstacle.

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