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# What's the Story with Storytime?: An Examination of Preschool Teachers' Drama-Based and Shared Reading Practices During Picturebook Read-Aloud

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**Abstract**
Preschool picturebook read-alouds have the power to capture the attention of young students by providing an immersive experience that stimulates imagination while addressing learning objectives. The instructional strategies or practices that teachers use during picturebook read-alouds impact student engagement with the story and narrative comprehension. Too little is known about teacher practices during read-alouds, particularly their use of drama-based instructional practices while reading narrative picturebooks. To examine the frequency and quality of teacher read-aloud practices, we developed the Teachers' Use of Strategies for Storytime Drama rubric, an observational tool that captures shared reading, drama-based, and expressive read-aloud practices preschool teachers may use during read-alouds. In general, teachers rarely used commonly recommended read-aloud practices, and when used, quality was often low. Read-aloud practices varied by picturebook type. Books that incorporated a true narrative alongside sequenced events were associated with more frequent strategy use. Drama-based strategies during read-alouds in particular supported children's retelling of the picturebook story. These outcomes align with our hypotheses and with research-based recommendations that teachers carefully choose picturebooks to have increased opportunities for dialogic and dramatic strategies that support students' language skills. Implications for practice are discussed as they relate to preschool teachers' incorporation of drama-based strategies during read-alouds.

**Keywords** Read-alouds · Drama-based instruction · Early childhood · Teacher practices

## Introduction

Read-alouds (reading picturebooks to children) are a popular educational strategy used by educators to facilitate children's exploration and learning of numerous topics. Read-alouds have the potential to capture the attention of young children by providing an immersive learning experience that stimulates imagination while addressing important learning objectives (Trelease, 2013). When teachers choose picturebooks with robust narratives, engaging pictures, and riveting characters, the read-aloud experience is more supportive of young children's linguistic development (Hoffman et al., 2015). One way that teachers can immerse students in read-alouds and capitalize on the potential benefits is through drama-based instruction (DBI). DBI involves encouraging children to take on character roles and experience the story from characters' perspectives, delivering a unique experience beyond traditional read-aloud strategies. DBI practices provide an added benefit to read-alouds because student learning is enhanced when instruction capitalizes on their sensorimotor engagement and perspective taking (Bernstein et al., 2022; Kilinc et al., 2023). The inclusion of drama-based strategies creates an interactive and engaging read-aloud context that, when combined with well-chosen books, provides strong opportunities for student engagement and learning (Lee et al., 2020). Conversely, when poorly done, read-alouds can be unengaging experiences that result in limited learning. The overall quality and frequency

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of teachers' traditional read-aloud practices likely varies significantly, and very little is known about teachers' use of DBI strategies during picturebook read-alouds (Justice et al., 2008; Robinson, 2021).

Read-alouds foster young children's competencies in multiple domains, including language, literacy, and socioemotional development (Kozak & Recchia, 2019; Lennox, 2013; Wasik et al., 2006). Imagine a dynamic, drama-based, read-aloud of the popular children's picturebook, *Jabari Jumps*, by Gaia Cornwall, beginning with children excitedly gathering in a circle to listen to their teacher read the story. The picturebook contains vivid illustrations and text describing a boy who needs the help of his father to overcome his fear of jumping off the high dive at the neighborhood pool. To build on children's prior knowledge, a teacher might ask questions about their personal experiences or what they already know about feeling nervous and being brave. As they read the story, the teacher uses emphatic facial expressions and voices while pointing at the illustrations to draw attention to notable aspects that support learning. The teacher asks questions to check for story comprehension and encourages predictions of what will occur. Embracing dramatic strategies, the teacher guides the children in pretending they are at the pool and climbing a very tall, wet, slippery ladder to get to the high dive. Halfway up they collectively experience a moment of great fear, freeze, and come down. The teacher guides conversation strategies to overcome fear. Like Jabari, they climb the ladder successfully and experience the triumph of jumping off the high dive.

The teaching practices described above are effective, evidence-based reading practices that support and enhance children's literacy and language skills. Drama-based strategies such as acting out the story or taking on the role of the story characters have demonstrated positive effects for story comprehension and recall in young school-age children (Ionescu & Ilie, 2018; Pellegrini & Galda, 1982). Cognitive and sociocultural learning theories offer explanations for the effectiveness of such interactive read-alouds in student learning. According to contemporary embodied cognitive theories (e.g., Glenberg, 2011; Macedonia, 2019), the benefits of picturebooks for young learners come from the multimodal interactions that occur in read-alouds through visual (illustrations & text), auditory (teacher reading), and sensorimotor (physical enactment of the story) interactions. The presence of multiple modalities in picturebooks provides support for learner construction of both *symbolic* (i.e., words) and *iconic* (i.e., pictures and imagery) mental representations (Bruner, 1964; Mayer, 2002). Simultaneous provision of verbal and visual representations allows skilled teachers to make connections between the two modalities (Paivio, 2014). Teachers can further enhance the read-aloud learning context by providing *enactive* representations (Barnes et al., 2023; Bruner, 1964) such as gesture and facial expressions, which promote social engagement and communication among teachers, students, and their peers. Sociocultural learning perspectives (e.g., Vygotsky, 1978) suggest that read-aloud benefits stem from social interactions children have with their peers and the teacher during picturebook readings.

It is critical to identify effective teaching practices during picturebook read-alouds that support learner comprehension as well as language and literacy skills. The effectiveness of picturebook read-alouds for student story comprehension depends on quality read-aloud practices (Beecher et al., 2017; Lennox, 2013). Systematic observations in classroom contexts are of high importance to better understand both traditional and drama-based read-aloud practices and their effectiveness. However, no measures of teacher read-aloud practices exist that include drama-based read-aloud practices. To address this need, we created the Teachers' Use of Strategies for Storytime Drama (TUSSD) rubric (Schmidt et al., 2021) to characterize the types of read-aloud practices teachers apply during story time and the quality of those practices. The TUSSD, described further below, collects systematic observational data that is useful for teachers and researchers in understanding picturebook read-aloud teaching practices.

## Picturebook Read-Aloud Teaching Practices

In the following sections, we review the 11 instructional practices included in the TUSSD: questioning techniques, print referencing, referencing illustrations, teacher feedback, teacher pantomime, directed pantomime, directed imagination, vocal variety, facial expressions and character development. We first review instructional practices from learning strategy and dialogic reading strategy research, that improve student learning outcomes. We then review practices from DBI that are often used during picturebook reading. These practices are not mutually exclusive so there is overlap in approaches. In other words, a preschool teacher using DBI practices may also use dialogic reading approaches, and vice versa. The TUSSD includes interactive, drama-based, dialogic read-aloud practices that have been shown in the literature to support and improve children's literacy and language development.

### Questioning Techniques

During picturebook read-alouds, teachers use specific types of questions to guide discourse (Whitehurst et al., 1988). Questions that are open-ended or require children to make predictions, are associated with improved listening and reading comprehension with young children (Flynn, 2011; Towson et al., 2017). These types of questions can also elicit higher levels of verbal language from children (Deshmukh et al., 2019; Hargrave & Sénéchal, 2000). Questions that

emphasize basic recall and "yes" or "no" responses from children are less effective. As examples, a teacher might ask children to explain why Jabari moved to the back of the line to avoid jumping from the high dive or they might ask whether Jabari jumped from the high dive. The first question requires deeper cognitive processing, and it is anticipated students regularly exposed to this type of question will enjoy greater performance on learning outcomes than children asked "yes" or "no" questions. Wiseman (2011) found that teachers who engaged students in predicting story events, connecting the story to their personal experiences, and exploring connections beyond the story were able to effectively co-construct meaning with children. Certain types of books, such as those with a true narrative story, may lend themselves to higher level question types that address prediction and relating story events to children's personal experiences (Hoffman et al., 2015).

#### Print Referencing

When a teacher draws student attention to the text (or printed words) in the book (e.g., defining words, identifying words that start and end the story, identifying punctuation), they are print referencing. For example, during story time, teachers may ask children questions about the print, make comments about the print, or run a finger under the word "pool" while reading it (Justice et al., 2009). These forms of print referencing support text awareness (Justice et al., 2010), alphabetic knowledge (Piasta et al., 2012), and literacy (Piasta et al., 2020; Zucker et al., 2009).

#### Referencing Illustrations

Evidence indicates that providing pictures and text together improves learner vocabulary and comprehension (Carney & Levin, 2002; Levin & Mayer, 2012). Therefore, referencing illustrations during read-alouds should support student comprehension by explicitly connecting text to illustrations. In the case of *Jabari Jumps*, drawing attention to the illustrations (e.g. the tall ladder, the other children jumping from the diving board, Jabari's final jump) throughout the reading of the story helps integrate the verbal and visual depictions. Referencing of illustrations in this manner fosters young children's vocabulary acquisition (Flack & Horst, 2018), story comprehension, and subsequent story recall (Carney & Levin, 2002; Nikolajeva, 2003). Thus, choosing picturebooks with engaging pictures that align with the narrative fosters use of this strategy.

#### Teacher Feedback

Teacher feedback is an effective instructional practice that has been shown to have an effect on student motivation, achievement (Hindman et al., 2022), and behavior (Wisniewski et al., 2020). However, Wisniewski et al. (2020), found that feedback is often more effective for cognitive (e.g., providing information to facilitate task performance) and physical outcomes than for motivational or behavioral outcomes. Lennox (2013) illustrates that teacher feedback during read-alouds most often occurs through teacher-student dialogue and typically involves short interactions in which the teacher asks the student(s) to perform a task (e.g., identify an image) followed by the teacher giving general praise.

The TUSSD includes two types of feedback; task-relevant feedback (e.g., how well children perform tasks) and self-relevant feedback (e.g., "good job" or "nice idea") (Hattie & Timperley, 2007). For example, consider a child hearing *Jabari Jumps*, and predicting that Jabari will get scared and climb back down the ladder. The teacher could provide task-relevant feedback by saying, "Oh, that's a good prediction because he has been feeling scared to jump. Let's see what happens next". Or the teacher could provide superficial feedback by saying, "Yes, that's good". While self-relevant feedback is less effective, it is also the most common type of feedback seen in schools (Hattie & Timperley, 2007).

### Drama-Based Instruction (DBI) Read-Aloud Practices

Evidence from the DBI literature (Adomat, 2012; Goldstein & Lerner, 2018; Kilinc et al., 2023) suggests that incorporating drama elements during literacy instruction may improve student story comprehension, language acquisition, and emotion regulation. Meta-analyses of DBI interventions (Lee et al., 2015, 2020) found positive, medium-to-large effects on student achievement, language development, critical thinking, problem solving, and socioemotional skills. In addition, DBI strategies are inclusive and support the academic and socioemotional development of diverse learners (Kilinc et al., 2017). These DBI practices are theoretically supported by embodied theories of cognition that state that physically experiencing or imagining aspects of stories enhance children's learning (Glenberg et al., 2004). In terms of language and socioemotional development, this means that language and socioemotional development can be fostered through learning experiences that encourage embodiment (Ionescu & Ilie, 2018). The following sections review drama practices that can accompany picturebooks and support student learning during read-aloud instruction.

#### Pantomime

Pantomime is a DBI practice that encourages physical enactment to experience a story through movement and imagination. During a read aloud of *Jabari Jumps*, a teacher

encouraging children to put on floaties and goggles and jump with a splash into the pool, or a teacher modeling clinging to a slippery ladder and closing her eyes in fear are great ways to encourage physical involvement with a story. The former we define as directed pantomime and the latter as teacher pantomime. Evidence from embodied cognition studies examining learning from story-relevant gestures (Guilbert et al., 2021; Macoun & Sweller, 2016) and with manipulatives supports the benefits of these practices whether the actions are observed or performed by children (Marley et al., 2007; Biazak et al., 2010).

#### Directed Imagination

Studies examining language comprehension from an embodied cognitive perspective show a connection between physical activity and beneficial imagery generation (Glenberg et al., 2004; Marley et al., 2010). In these studies, children are taught to physically represent and imagine themselves acting out key parts of stories. In the context of Jabari's story, having children imagine standing at the bottom of the high dive ladder and slowly looking up, up, all the way to the top engenders greater understanding and fosters story comprehension, while simultaneously connecting the story to children's personal experiences.

#### Vocal Variety and Facial Expressions

Changes in pitch or tone of voice and speaking faster as the story gets exciting or slower to emphasize the mood of the story are forms of vocal variety that teachers use during picturebook read-alouds (Kerry-Moran, 2015). Vocal variety is used to keep children engaged in the read-aloud and is often employed to distinguish characters' speech in narrative style picture books. Teachers also use exaggerated and excited facial movements to emphasize events during read-alouds, especially during important climatic moments of stories. These dramatic changes in vocal variety and facial expression engage students in the story, and strengthen story comprehension (Fisher et al., 2004).

#### Character Development

Encouraging students to take on a being outside of themselves and to understand or experience the emotions of characters as well as express events from the characters' point of view is character development. This concept encourages development of Theory of Mind, or a person's ability to understand and account for the mental states of others (Premack & Woodruff, 1978). Theory of Mind research indicates that as children age they improve in ability to understand the internal mental states of others, including story characters (Astington & Jenkins, 1999; Nicolopoulou & Richner, 2007). Practices that help students develop understanding of characters' internal states may be a mechanism that improves children's socioemotional skills. For example, when discussing Jabari's story in *Jabari Jumps*, classroom teachers might ask the students how they would feel if they really wanted to do something but were afraid to try. The teacher might ask the students to explain how Jabari felt when he finally jumped off the diving board. Narrative picturebooks often lend themselves to use of this strategy more than sequence and expository picturebooks.

### The Present Study

Given that children's learning is enhanced when teachers engage in high-quality use of these evidence-based read-aloud practices, including drama-based strategies, it is important to create and test measures that can account for the full range of teacher practices during read-alouds. This study addresses this need, sharing such a measure and presenting results from a study that implemented this measure to understand how teachers used both traditional and drama-based read-aloud practices to support student story comprehension.

The present study examines teacher practices during their business-as-usual read-alouds (sessions in which none of the teachers were instructed how to read the books) using the TUSSD. We coded video observations of preschool teachers' classroom read-alouds for the frequency and quality of the aforementioned read-aloud practices (see Table 1) and assessed student story recall and comprehension following the read-aloud. The following research questions were addressed:

1. What is the frequency and quality of teacher picturebook read-aloud and drama-based practices and do they correlate?
2. Does the use of picturebook read-aloud and drama-based practices differ by teacher demographics, treatment status or book type?
3. What is the relationship between picturebook read-aloud and drama-based practices and preschool children's story recall?

## Method

### Study Design and Overview

This study is part of a year-long, job-embedded DBI professional development (PD) intervention for preschool teachers. The intervention was developed as part of a collaboration between a professional children's theater company and university researchers (see Kilinc et al., 2016 for more information). The DBI PD, Early Years Educators at

**Table 1** TUSSD practices and descriptions

| Strategy name | Practice type | Description |
|---|---|---|
| Print referencing | Shared reading | References that the teacher makes about the actual text of the book |
| Picture referencing | Shared reading | References that the teacher makes about the illustrations of the book, directing students' attention to what is happening in the pictures |
| Questioning techniques | Shared reading | Teachers engage students by asking questions about the story, encouraging them to recall events, analyze the events, predict future events, and connect the story to their lives |
| Feedback about task | Shared reading | Teacher gives feedback on how well tasks are understood or performed—corrective feedback |
| Feedback about self as person | Shared reading | Teacher gives personal evaluations and affects (usually positive) about the learner—simple praise (simple yes responses, nodding or repeating student answers were coded as not present) |
| Directed pantomime | Drama-based | Teacher directs statements asking students to embody the story—using the body to illustrate the story |
| Pantomime | Drama-based | Teacher acts out parts of the story, role plays, uses props—the use of iconic movements to illustrate the story |
| Directed imagination | Drama-based | Teacher asks students to imagine in their minds that something exists without asking them to pantomime or interact with the imagined object |
| Character development | Drama-based | Teacher encourages students to take on a being outside of themselves through voice and body and to experience emotion through the character as well as express events from the characters' point of view |
| Vocal variety | Expressive | Teacher uses inflection and voices while telling the story |
| Facial expressions | Expressive | Teacher uses vivid facial expressions to emphasize moments in the story or to express emotions from the story |

Play (EYEPlay), pairs Teaching Artists (TAs, i.e., theater or drama professionals who work with classroom teachers) with classroom teachers to demonstrate engaging, interactive, drama-based read-alouds, using a model that scaffolds the level of support provided by the TAs to teachers over time. As time progresses, the TAs step back, and eventually the preschool teachers take over full control of implementing DBI in their classrooms. This gradual transition is anticipated to support sustainability once the PD is complete, and TAs are no longer working with the teachers.

As part of this larger project, trained research assistants visited classrooms six times across the school year to video record business-as-usual read-alouds as well as drama lessons, and to complete direct assessments for students' language, literacy, and emotion knowledge, as well as story recall, after two read-alouds. Although the present study uses data from an evaluation of a drama intervention, the focus of this study is teachers' typical storytimes, rather than intervention effects. The data used for the current study are recordings of teachers' business-as-usual read-alouds during the fall (Time 1), winter (Time 2), and spring (Time 3) as well as student-level measures of story time recall in control classrooms during Times 2 and 3. See Table 2 for an overview of study procedures.

## Participants

Twenty-eight preschool teachers from three school districts in a southwestern, metropolitan city were recruited to participate. Teachers were on average 44.17 years old, with ages ranging from 23 to 69. See Table 3 for demographics. At the beginning of the school year, teachers were randomly assigned to the intervention ($N=14$) or the control group ($N=14$). Up to eight students were randomly selected to participate in each classroom, with a final sample of 196 preschoolers (43% female), ages 31.74 to 68.63 months ($M=50.71$, $SD=6.44$). Based on parent report, participating students were 69% Hispanic/Latino, 10% White, 8% Black, 4% Native American, 1% Asian, and 9% Biracial. 28% of students were bilingual English–Spanish speakers, and 10% of students were identified as having special needs or disabilities. Bilingual students were identified based on the results of a parent survey administered at the beginning of the school year. Students were considered bilingual if their parent indicated that they spoke both English and Spanish at home. All procedures were reviewed and approved by our university institutional review board and school district leadership.

## Instrumentation

### Teacher Demographics

Teachers completed a survey at the beginning of the school year and reported their demographic information, including age, education, and years of experience.

**Table 2** Overview of study data

| Treatment status | Time 1 (Fall) | Time 2 (Winter) | Time 3 (Spring) |
|---|---|---|---|
| Intervention | • Business-as-usual story time (teachers selected their own book)–6 observations<br>• Teacher survey (demographics) | • Business-as-usual story time–13 observations (teachers selected their own book) | • No teacher data |
| Control | • Business-as-usual story time (teachers selected their own book)–7 observations<br>• Teacher survey (demographics) | • Business-as-usual story time–12 observations (teachers read *Lost and Found*)<br>• Student SRM | • Business-as-usual story time–7 observations (teachers read *Kitten's First Full Moon*)<br>• Student SRM |

### Book Type

The type of book teachers used for storytime was identified based on the designations described by Donovan & Smolkin (2001). A *narrative* story includes the narrative elements, such as character, setting, plot, and resolution. For example, *Jabari Jumps*, would be classified as a narrative story because it has the essential narrative elements. An *expository* text is a topic-oriented information book. A *sequence* story may include a character or a single basic problem, but lacks the key elements of a complex story. Several of the books were a combination of book types (i.e., narrative and sequence) and were coded as *mixed*.

### Teachers Use of Story Time Strategies for Drama (TUSSD)

The TUSSD comprises 11 instructional read-aloud practices (see Table 1 for descriptions). Each practice was coded for presence (0 = *absent* or 1 = *present*) and quality (using a five-point scale: 0 = *not present*, 1 = *low quality*, 2 = *low-moderate quality*, 3 = *high-moderate quality*, 4 = *high quality*) during one-minute observation intervals. Quality ratings were "low" if the application of a strategy was similar to what one would expect in everyday conversation and "high" if exceptional. For example, a low-quality questioning technique would involve the teacher asking "yes" or "no" or simple recall questions, and a high-quality questioning technique would include open-ended questions that encourage the students to predict what happens next or that helps students connect the story to their personal experiences (see Appendices A and B for coding form and rubric). Interrater reliability for each teacher practice was calculated with intraclass correlations (ICCs) between two coders using a single-measurement, consistency agreement, two-way mixed effects model. ICCs for teaching strategy frequency were generally good ($\alpha > .70$) with the exception of vocal variety ($\alpha = .52$) and teacher pantomime ($\alpha = .68$). Reliabilities for quality scores were also good with the exception of facial expressions ($\alpha = .38$) and picture referencing ($\alpha = .56$).

**Table 3** Teacher Demographics ($N = 28$)

| Demographic characteristic | *n* | M (*SD*)% |
|---|---|---|
| Age (years) | 24 | 44.17 (12.4) |
| Gender | | |
| Female | 28 | 100.0 |
| Male | 0 | 0.0 |
| Teaching experience (years) | | |
| Total | 24 | 11.33 (8.2) |
| At current school | 26 | 6.23 (8.2) |
| Ethnic background | | |
| American Indian or Alaska native | 1 | 3.6 |
| Black/African American | 3 | 10.7 |
| Hispanic/Latino | 14 | 50.0 |
| Native Hawaiian or Pacific Islander | 1 | 3.6 |
| White/Caucasian | 7 | 25.0 |
| Level of education | | |
| Associates degree | 1 | 3.8 |
| Bachelor's degree | 8 | 30.8 |
| Coursework beyond bachelor's | 6 | 23.1 |
| Master's degree | 11 | 42.3 |
| Bachelor's degree major | | |
| Early childhood education | 16 | 61.5 |
| K-8 education | 6 | 23.1 |
| Special education | 3 | 11.5 |
| Bilingual education | 5 | 19.2 |
| Other | 3 | 11.5 |
| Graduate degree major | | |
| Reading | 2 | 16.7 |
| Language development | 1 | 8.3 |
| Early childhood education | 6 | 50.0 |
| K-8 education | 1 | 8.3 |
| Special education | 3 | 25.0 |
| Bilingual education | 4 | 33.3 |
| Other | 1 | 8.3 |

### Story Recall Measure (SRM)

The SRM assesses student comprehension of story events. The SRM was developed by the authors to capture students' understanding of two books: *Lost and Found* by Oliver Jeffers and *Kitten's First Full Moon* by Keven Henkes. The SRM includes *free recall* where students are asked to recall as many story elements (e.g., character, setting, problem) as possible and *cued recall* where students are asked questions about the story. Students are scored on both the free and cued recall using a partial credit model (0 = *no credit*, 1 = *partial credit*, 2 = *full credit*). 25% of SRMs were randomly selected for double scoring and interrater reliability was assessed by calculating intraclass correlations (ICCs) using a single measurement, consistency type, one-way random effects model. The reliability of the scores for both *Free Recall* (Time 2: ICC = .93; Time 3: ICC = 1.00) and *Cued Recall* (Time 2: ICC = .96; Time 3: ICC = 1.00) were excellent (> .90; Koo & Li, 2016).

## Procedures

In fall, at the beginning of the school year (Time 1) and in the winter (Time 2), all teachers were video recorded during their business-as-usual story time with their students. At Time 1, all teachers chose a picturebook for their story time. At Time 2, intervention teachers selected their own picturebook for their business-as-usual story time, while control teachers used *Lost and Found*. Control teachers were asked to read *Lost and Found* as part of the larger project to provide a comparison for intervention classrooms, where TAs delivered a drama lesson to intervention students using the same book. Participating children in each classroom were assessed immediately after each read-aloud on story recall by trained research assistants. Because of the larger study design, only student storytime recall assessments for control group classrooms were used for the present study. During the spring (Time 3), TAs again delivered a drama lesson to students in intervention classrooms (not included in this study), this time using the narrative book *Kitten's First Full Moon*. Control group teachers were video recorded reading the same book to their students, and students completed the story recall assessment. Again, student storytime recordings and story recalls were examined only for control group classrooms.

Teacher read-aloud videos were independently coded by three undergraduate research assistants who were trained to use the TUSSD by the first author. To account for varying story time lengths, only the middle five minutes of each video was coded. The five minutes were divided into one-minute segments that were scored for frequency and quality of each read-aloud strategy. The segments were then summed to create a final frequency score and averaged to create a final quality score for each strategy. Interrater reliability was established through multiple trainings on the codes and quality rubric facilitated by the TUSSD author. Disagreements were resolved through regular discussion between the research assistants to reach consensus. The first author master coded 20% of all video observations. The master coder's scores were used in the final dataset.

## Analyses

Descriptive statistics were computed to determine the frequency and quality of teacher reading practices. Bivariate correlations among teacher demographics, TUSSD read-aloud practices, and student story retell scores were examined. One-way ANOVAs were performed to examine differences in TUSSD practice use by narrative type and intervention status. ANOVAs were followed up with Bonferroni adjusted pairwise comparisons to protect the type I error rate at $\alpha = .05$. All analyses were conducted using SPSS Version 28.

# Results

## RQ1. What Is the Frequency and Quality of Teacher Picturebook Read-Aloud Practices and Do They Correlate?

The most frequently applied practices were vocal variety, facial expressions and questioning techniques, followed by referencing illustrations and print referencing at Time 1 and teacher pantomime at Time 2 and Time 3. Teacher application of pantomime, character development, facial expressions, asking questions, feedback about self, print referencing and referencing illustrations strategies was of higher quality than the other strategies. However, the application of these strategies was at generally low levels of quality. Directed pantomime and imagination, where the teacher asks the student to act out or imagine story elements, were infrequently used practices. See Fig. 1 for detailed descriptives.

The frequency of drama strategies were correlated, with directed pantomime positively relating to directed imagination ($r[41] = .49$, $p = .001$), teacher pantomime ($r[41] = .36$, $p = .02$), and character development ($r[41] = .47$, $p = .002$). Vocal variety use was positively associated with facial expression ($r[41] = .64$, $p < .001$), teacher pantomime ($r[41] = .36$, $p = .02$), and asking questions ($r[41] = .40$, $p = .01$).

The quality of teaching practices during the read-alouds were also correlated. Quality of directed pantomime was positively related to directed imagination ($r[41] = .62$, $p < .001$), teacher pantomime ($r[41] = .50$, $p < .001$), and character development ($r[41] = .52$, $p < .001$). Facial

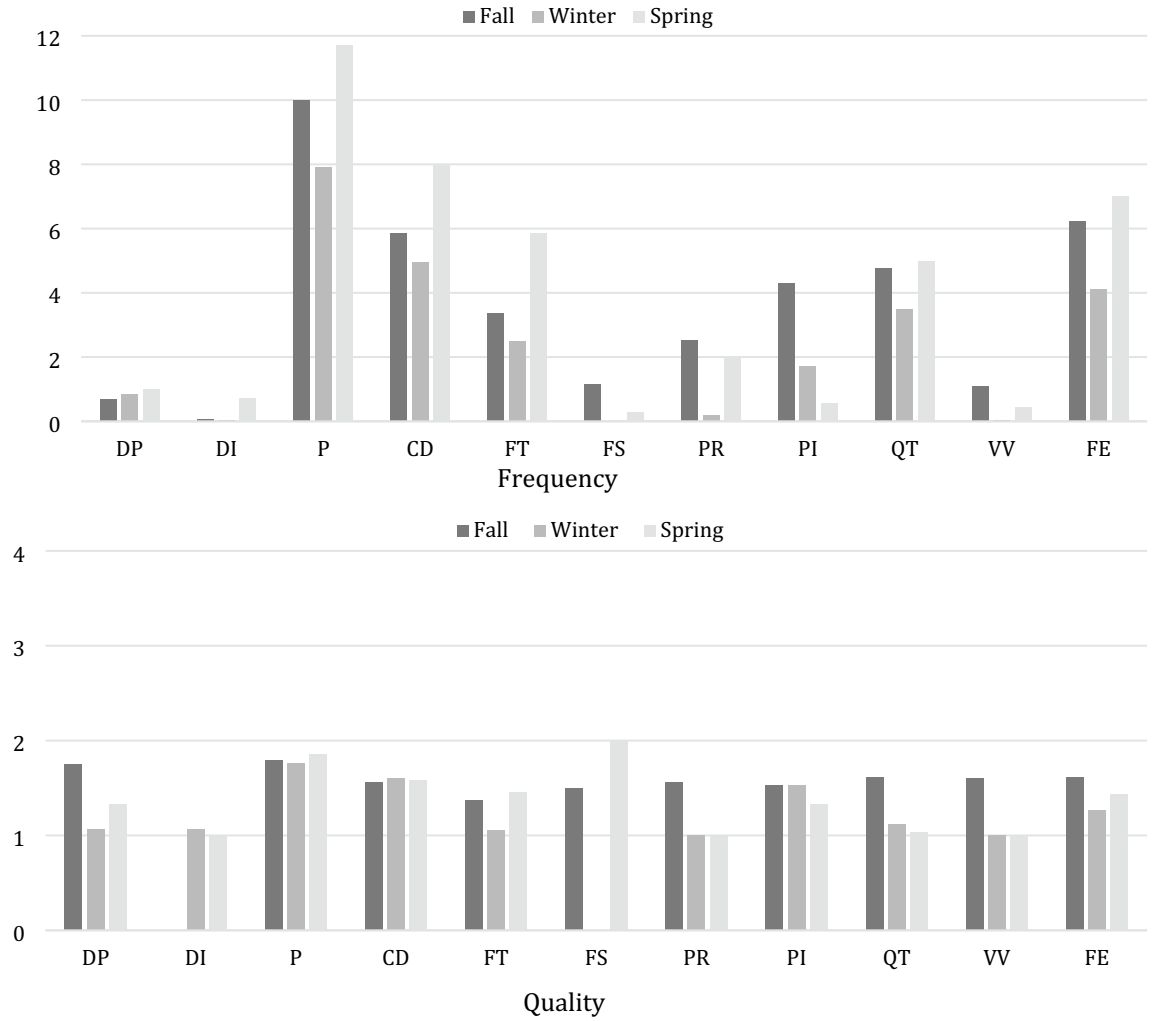


**Fig. 1** Mean frequency and quality of TUSSD strategies by time point. Fall: $N = 13$; Winter: $N = 21$; Spring: $N = 7$. *DP* Directed Pantomime; *DI* Directed Imagination; *VV* Vocal Variety; *FE* Facial Expression; *P* Pantomime; *FT* Feedback about Task; *FS* Feedback about Self; *PR* Print Referencing; *PI* Picture Referencing; *CD* Character Development; *QT* Questioning Techniques

expression quality was positively associated with directed imagination ($r[41] = .35$, $p = .02$) and vocal variety ($r[41] = 0.44$, $p < .001$). Quality of feedback about the task and self were positively correlated ($r[41] = .40$, $p = .01$). Higher teacher pantomime quality was associated with higher-quality picture referencing ($r[41] = .35$, $p = .03$), character development ($r[41] = .57$, $p < .001$), and asking question ($r[39] = .37$, $p = .04$). Picture referencing quality was also related to character development ($r[41] = .33$, $p = .04$) and asking questions ($r[39] = .38$, $p = .02$).

The frequency and quality of the practices were correlated. The higher use of a strategy was significantly associated with higher quality with the exception of print reference ($r[41] = .29$, $p = .07$) and asking questions ($r[39] = .29$, $p = .08$), which were marginally significant at $p < .10$. See Table 4.

## RQ2. Does the Use of Picturebook Read-Aloud Practices Differ by Teacher Demographics, Treatment Status, or Book Type?

The frequency of use and quality of the read-aloud practices during story time was unrelated to teacher age and years of experience. However, teachers with higher education used significantly more vocal variety ($r[12] = .61$, $p = .03$) and facial expressions ($r[12] = .59$, $p = .04$) during storybook reading. Teachers did not significantly differ on frequency or quality of practices at Time 1, but at Time 2 intervention teachers used significantly more vocal variety ($M = 10.10$,

**Table 4** Zero-order correlations among TUSSD strategies across time points ($N = 41$)

| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Directed pantomime | .77* | .61* | .16 | .22 | .33* | −.21 | −.14 | .13 | .11 | .43* | .06 |
| 2 | Directed imagination | .48* | .46* | .08 | .17 | .10 | −.11 | −.05 | −.23 | .02 | .26 | −.31 |
| 3 | Vocal variety | −.22 | −.09 | .32* | .15 | .18 | .08 | .24 | −.002 | .10 | −.11 | .04 |
| 4 | Facial expression | .001 | −.03 | .64* | .55* | .10 | .01 | .11 | −.02 | .08 | −.05 | .08 |
| 5 | Pantomime | .36* | .08 | .36* | .30 | .54* | −.13 | .14 | .18 | .04 | .23 | .16 |
| 6 | Feedback about task | −.20 | −.10 | .04 | −.09 | −.22 | .72* | .30 | .31* | .09 | .03 | −.06 |
| 7 | Feedback about self as person | −.17 | −.09 | .26 | .03 | .04 | .59* | .64* | .10 | .08 | .16 | .06 |
| 8 | Print referencing | −.09 | −.11 | .13 | .05 | .12 | .20 | .45* | .29 | .10 | .24 | .07 |
| 9 | Picture referencing | .09 | .06 | .21 | .21 | .03 | .19 | .12 | −.08 | .81* | .24 | .32* |
| 10 | Character development | .47* | .17 | −.12 | −.05 | .21 | .05 | .16 | .15 | .29 | .96* | .29 |
| 11 | Questioning techniques | −.18 | −.21 | .40* | .14 | .12 | .40* | .76* | .23 | .28 | .10 | .29 |

Correlations below the diagonal represent bivariate correlations among frequency of teacher strategies. Correlations above the diagonal are among quality of teacher strategies. Correlations on the diagonal are correlations between frequency and quality of teacher strategies

*$p < .05$

$SD = 5.88$) compared to control teachers ($M = 5.91$, $SD = 3.56$), $p = .03$, $d = 0.76$.

### Do Teachers' Picturebook Read-Aloud Practices Differ by Book Type?

Teachers' use of vocal variety varied by book type, $F(2, 37) = 4.75$, $p = .02$. Post hoc tests revealed that teachers used vocal variety significantly more with sequence ($M = 14.89$, $SD = 8.89$) compared to narrative books ($M = 8.11$, $SD = 5.27$), $p = .02$, $d = 0.93$. Teachers' feedback about task significantly varied by book type, $F(2, 37) = 10.65$, $p < .001$. Post hoc tests revealed that teachers reading a mixed narrative-sequence book used the most ($M = 2.67$, $SD = 2.31$) feedback about task compared to sequence ($M = 0.56$, $SD = 1.33$), $p = .004$, $d = 1.13$, and narrative book types ($M = 0.14$, $SD = 0.45$), $p < .001$, $d = 1.52$. Print referencing quality significantly varied by book type, $F(2, 37) = 4.22$, $p = .02$. Post hoc tests revealed that teachers reading a mixed narrative-sequence book used the highest quality print referencing ($M = 2.47$, $SD = 1.36$) compared to narrative book types ($M = 0.85$, $SD = 0.89$), $p = .02$, $d = 1.41$.

## RQ3. What Is the Relationship Between Picturebook Read-Aloud and Drama-Based Practices and Preschool Children's Story Recall?

Drama-based strategies during story time were significantly and positively correlated with student story retell. Specifically, frequency of directed pantomime ($r[62] = .29$, $p = .03$), directed imagination ($r[62] = .25$, $p = .047$), and teacher pantomime ($r[62] = .26$, $p = .04$), were associated with student responses to cued recall during Time 2 (*Lost & Found*). Quality of directed pantomime was also positively correlated with cued recall at Time 2, $r(62) = .31$, $p = .02$.

Frequency of directed pantomime ($r[45] = .43$, $p = .003$) and directed imagination ($r[45] = .39$, $p = .01$) were similarly related to students freely recalling story components during Time 3 (*Kitten's First Full Moon*). Teachers' quality of directed imagination was also positively associated with free recall, $r(45) = .31$, $p = .04$. Quality of character development positively correlated with student free recall of the story, $r(45) = .31$, $p = .04$). Teacher's frequency of facial expressions was also positively correlated with student responses to cued recall, $r(45) = .34$, $p = .02$. Unexpectedly, the quality of questions teachers asked during read-alouds was negatively associated with both free recall ($r[45] = -.49$, $p < .001$) and cued recall ($r[45] = -.35$, $p = .02$). See Table 5.

## Discussion

Picturebook read-alouds are vital to building and strengthening children's literacy and language skills. The instructional practices that teachers use to deliver read-alouds are key to maximizing student performance on these outcomes. This study examined the frequency and quality of a variety of teacher practices during picture book read-alouds (e.g., drama-based, dialogic) and factors that could contribute to variability in their use (e.g., teacher age, education, treatment status, and book type). The findings suggest that the TUSSD read-aloud practices were generally not employed often, and when used, they were of low quality on average. Teacher education, treatment status, and book type (e.g., narrative vs. sequence) were meaningful in explaining differences in teachers' use and quality of different read-aloud practices during story time.

**Table 5** Bivariate Correlations among TUSSD Constructs and Student Recall Measure Scores (Control Group Teachers Only, Teacher $N = 11$)

| | Winter ($N = 62$) | | | | Spring ($N = 45$) | | | |
|---|---|---|---|---|---|---|---|---|
| | Frequency | | Quality | | Frequency | | Quality | |
| | FR | CR | FR | CR | FR | CR | FR | CR |
| Directed pantomime | .21 | .29* | .25 | .31* | .42* | .27 | .27 | .18 |
| Directed imagination | .19 | .25* | .15 | .24 | .39* | .20 | .31* | .11 |
| Pantomime | .25 | .26* | .02 | .07 | −.11 | .08 | .22 | .21 |
| Vocal variety | .07 | .04 | .05 | −.01 | −.15 | −.02 | .20 | .06 |
| Facial expression | .24 | .24 | .18 | .10 | .22 | .34* | .02 | .03 |
| Feedback about task | | | | | −.14 | −.15 | −.14 | −.15 |
| Feedback about self as person | −.11 | −.18 | −.10 | −.20 | −.03 | .01 | −.14 | −.07 |
| Print referencing | −.03 | −.10 | −.01 | −.08 | −.26 | −.11 | −.07 | .10 |
| Picture referencing | .001 | .05 | −.04 | .03 | −.21 | −.21 | −.23 | −.15 |
| Character development | .11 | −.08 | .11 | −.08 | .20 | .03 | .31* | .11 |
| Questioning techniques | .19 | .09 | .04 | −.01 | −.28 | −.15 | −.49* | −.35* |

Missing correlations are due to strategies not being observed in classrooms for which we had SRM data

*FR* Free recall; *CR* Cued recall

*$p < .05$

## Frequency and Quality of Teacher Read-Aloud Practices

Consistent with previous research (e.g., Justice et al., 2008; Lennox, 2013), on average, teachers in this study used the TUSSD read-aloud strategies infrequently during story time. Vocal variety, facial expressions, and questioning techniques were the most frequently used read-aloud practices. With few exceptions (i.e., print referencing and asking questions), frequency and quality of the various read-aloud practices were positively correlated. The correlations between frequency and quality of use suggest that the more teachers employ or engage in read-aloud practices the more adept they become at their implementation. These correlations may also suggest that teachers select and utilize practices with which they are most familiar or comfortable, resulting in higher quality scores. The exception for use of questioning techniques, which were frequent but low quality, was unexpected due to the robust literature on dialogic book reading that shows how high-quality questions support language and literacy development (Pillinger & Vardy, 2022). Study sample teachers asked low quality questions frequently, such as yes/no and basic labeling, limiting opportunities for children to produce elaborate or complex language in response (Wiseman, 2011). It is possible that pre-service teachers are not explicitly taught read-aloud strategies beyond basic questioning techniques, and have limited opportunities to learn additional strategies once they are in the field (Weadman et al., 2023).

## Associations Among Frequency and Quality of Read-Aloud Practices

Certain correlational patterns emerged in our observations of strategy use across types and categories that were meaningful. In general, drama-based read-aloud practices were positively correlated with one another, suggesting that individual DBI practices are often utilized together. This is not to say that DBI strategies occur in isolation, as positive correlations between drama and non-drama practices were also observed. This may reflect teachers' confidence in the use of certain strategies, resulting in improvements in quality with frequent use over time.

Teachers who provided feedback did so frequently without preference for a certain type of feedback (i.e., task or person). Higher use of feedback about self as person was associated with more print referencing and asking questions. An explanation for this relationship is when children answer questions about the print correctly, teachers may intuitively respond with "yes, that's right!" or "good job" (Hattie & Timperley, 2007). Similarly, quality of feedback about task was correlated with quality of picture referencing.

## Read-Aloud Practices by Teacher Demographics and Treatment Status

Unexpectedly, years of experience was unrelated to frequency and quality of read-aloud practices in this study. Others (e.g., Burgess et al., 2011) have found support for more experienced teachers valuing and using

read-aloud practices during story time. Higher levels of education, however, were associated with frequent use of vocal variety and facial expressions. Varied vocal tone and content-appropriate facial expressions are critical for engaging young learners and enhancing story comprehension (Goulding et al., 2017; Morrison & Wlodarczyk, 2009). Notably, intervention teachers used significantly more vocal variety compared to control teachers at Time 2, whereas no group differences were observed during Time 1. One way the drama-based professional development program may support teachers during story time is by providing tools to better engage their students during story time. Although we expected more differences between intervention and control teachers between Times 1 and 2, there are several factors that could explain the lack of differences. First, due to the research design of the larger study, intervention teachers selected their own picturebooks to read at Time 2 (see Table 3), whereas control teachers were asked to read a specific book to provide a business-as-usual comparison to intervention classrooms, in which professional teaching artists read the same book during a drama lesson. The program-selected book, *Lost and Found*, may be a higher quality book compared to the books intervention teachers selected on their own for story time, and it may have been easier for control teachers to engage with the book. It is possible that while intervention teachers are learning to incorporate DBI strategies during their coached drama lessons, they have yet to generalize these newly acquired skills to their own business-as-usual story times.

### Teacher Read-Aloud Practices Differ by Book Type

Teachers' use of read-aloud practices varied significantly by book type. Contrary to expectations, sequence books and mixed sequence-narrative books were associated with more frequent use of teacher vocal variety and feedback about task and print referencing quality. It is likely that certain book types afford differing levels of opportunity for teachers to apply read-aloud practices that engage children (Robinson, 2021). Engaging young readers is critical to future student success (Guthrie, 2004). However, teachers may feel less of a need to engage with students through multiple modalities when reading narrative-driven books, assuming that the story itself will naturally keep students engaged in ways expository text will not. In other words, they let the book do the work for them. Expository and sequence books, on the other hand, may provide opportunities to ask questions or engage in extratextual talk by necessity to keep students engaged. Narrative picturebooks are the most common book type read by preschool teachers, and this trend continues into grade school (Pentimonti et al., 2011), with students receiving more exposure to narrative compared to expository books (Yopp & Yopp, 2006). However, Price and colleagues (2012) found that although preschool teachers provided more frequent and higher quality instruction during expository books compared to story books, they perceived informational storybooks as less enjoyable to read. Teachers may choose narrative-driven picturebooks based on perceived enjoyment or comfort level and miss opportunities to meaningfully engage their students during story time. These findings illustrate the importance of selecting books that provide opportunities for teachers to utilize read-aloud practices that facilitate literacy and language development.

### Read-Aloud Practices and Preschool Children's Story Recall

As expected, read-aloud practices during storytime were associated with children's story recall. Specifically, drama-based strategies (i.e., directed pantomime, directed imagination, teacher pantomime, character development) were associated with later story recall. These strategies engage young learners to step into the story and put themselves in the story characters' shoes. The results suggest there is an added value of infusing drama-based strategies into story time. Teacher pantomime may have supported student comprehension. Character development, which helps children relate to story characters and understand their choices and feelings, also positively predicted story retells. Paired with well-known practices such as questioning techniques, picture and print referencing, feedback, and facial expressions, these strategies may be powerful tools in supporting and improving student literacy.

Surprisingly, higher frequency and quality of questions teachers asked during story time was associated with poorer story recall. It is possible that when teachers ask more questions, particularly during narrative-driven stories, they interrupt young learners' attention to the story and direct it elsewhere. Indeed, Gianvecchio and French (2002) found that teachers' interruptions during storytime (i.e., remarks and questions) which were irrelevant to the story were associated with student disengagement, but relevant remarks and questions increased class attention. It is possible that there is a diminishing returns effect at play, in which there is a threshold after which questions become disruptive rather than promoting deeper cognitive processing.

### Implications for Practice

This study highlights a need for continued focus on the intentional selection, practice, and use of picturebook read-aloud practices, including DBI practices, during preschool story time. Drama-based instruction is a highly effective way to engage young children and facilitate

learning during story time (Mages, 2006). Drama-based instruction in classrooms is not needed solely for the purpose of improving typically valued learning outcomes but also to make learning joyful and engaging for teachers and their students. Preschool student enjoyment of picturebook read-alouds has significant implications for later reading and academic achievement (Carroll et al., 2019). Teaching using drama with narrative picturebooks like *Jabari Jumps* has the potential to ignite student imagination, connect students with characters and stories that are responsive to their cultural and community funds of knowledge, and to improve student learning from read-alouds. If a larger evidence base can be established demonstrating the role of drama in improving learning as measured by academically-relevant measures, the case for including drama in daily instruction is easier to make to policymakers. We imagine these read-aloud practices, if applied with high quality and matched to appropriate texts, have the power to improve children's language, literacy, and socioemotional development.

Findings from the current study suggest that effective read-aloud strategies are rarely applied. Opportunities for use the of more dynamic, interactive, dialogic, DBI, and eclectic teacher-generated approaches to picturebook read-alouds are abundant during read-aloud sessions. With quality training, teachers can learn to employ more effective strategies, thereby strengthening children's literacy and language development (Lennox, 2013; Wasik et al., 2006).

### Strengths, Limitations, and Future Directions

A strength of this study includes observing teacher read-alouds in authentic classroom contexts, providing the current study with high ecological validity. The development of an observational tool that captures both the frequency and quality of a variety of teacher read-aloud practices is another strength of the current study. Further, the TUSSD, as an observational rubric, produced scores with both high degrees of reliability and validity evidence, with high-levels of interrater agreement and coded practices correlating with children's story recall scores. One study limitation is that intervention teachers chose the books they read for their recorded read-alouds, whereas control teachers were provided with a high-quality picturebook. The teacher-chosen books may have limited opportunities for teachers to demonstrate various read-aloud strategies. It is possible that the researcher selected picturebooks provided greater opportunities for teachers to exhibit read-aloud practices. Another possible limitation is that only the middle five minutes of each storytime observation were coded with the TUSSD. It is possible that this selected time period does not accurately represent teacher read-aloud practices during story time due to variability in overall storytime lengths, and which story content the middle five minutes actually captured. Currently, teacher read-alouds are being re-coded with the TUSSD to include the full length of story time. We are also coding TA-facilitated drama lessons with the TUSSD so that we can directly compare practices used during drama lessons with control teacher practices during business-as-usual read-alouds, as well as student recall of the story. Future research should examine matching read-aloud instructional strategy with book type to determine whether certain instructional strategies are more beneficial with specific book types.

## Conclusion

In sum, the current study contributes to a deeper understanding of preschool teacher picturebook read-aloud practices. Understanding the read-aloud practices of teachers is important if quality instruction is desired (Lennox, 2013). Picturebook read-alouds, in preschool contexts, support and build students literacy, language, and socioemotional skills. Our findings revealed that overall teacher use of read-aloud practices was generally limited and of low quality, and practices differed based on picturebook type. Drama-based practices were found to support student recall of the story, an important outcome measure that is predictive of later reading comprehension (Dickinson & Porche, 2011). The findings from the current study underscore the need for future studies to explicate which practices are most important for student engagement and learning during story time. Further research examining the use of DBI can inform new professional development programs to support teachers in applying these practices, and motivate teachers to apply them more consistently during their picturebook read-alouds. DBI strategies are meaningful but underutilized instructional strategies that preschool teachers can apply to maximize student engagement, literacy, language and socioemotional skills.

## Appendix A

Table 6.

**Table 6** TUSSD coding form with example data

| | Segment 1 | | Segment 2 | | Segment 3 | | Segment 4 | | Segment 5 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2:42–3:42 | | 3:42–4:42 | | 4:42–5:42 | | 5:42–6:42 | | 6:42–7:42 | |
| | Present | Quality | Present | Quality | Present | Quality | Present | Quality | Present | Quality |
| Print referencing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Referencing pictures | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Questioning techniques | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Feedback about task | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Feedback about self as person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Teacher pantomime | 1 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 |
| Directed pantomime | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| Directed imagination | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Character development | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Vocal variety | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 |
| Facial expressions | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 | 1 | 3 |

Presence scale: 1 = present 0 = not present; Quality scale: 0 = not present, 1 = low quality, 2 = mid-moderate quality, 3 = high moderate quality, 4 = high quality

## Appendix B

Table 7.

**Table 7** TUSSD Coding Rubric

| Code | Name | Description | Examples of behavior | 1 = low quality | 2 = mid-moderate quality | 3 = high-moderate quality | 4 = high quality |
|---|---|---|---|---|---|---|---|
| PR | Print referencing | References that the teacher makes about the actual text of the book | "This is a long word, how many letters does it have?" "Show me where to start reading on this page" "what letter is this?" or "What do you think the animals are saying here?" | Teacher draws attention to the text of the book to students, i.e. This is a sight word or this is where the story begins - pointing at the first words. | Teacher draws attention to the actual text and words in the book and explains how the words are used including defining words for students | Teacher draws attention to the actual text of the book asking questions about how the author has used the text. | Teacher repeatedly draws attention to the actual text of the book and asks questions related to the text and how to utilize the text. |
| PicR | Picture referencing | References that the teacher makes about the illustrations of the book, directing student attention to what is happening in the pictures | "What animals do you see in this picture?" "What do you think the picture means?" "Where are the animals going" - any questions or statements that direct the children's' attention to the illustrations in the book rather than the story unfolding through the words. | Teacher draws attention to the book illustrations | Teacher draws attention to the book illustrations and invites the students to engage with the illustrations | Teacher uses the book illustrations to engage the students and to explain details of the story | Teacher uses the book illustrations to engage the students, explain the story, make predictions and to make inferences about the story based on the illustrations. |
| QT | Questioning techniques | Teacher engages students by asking questions about the story, encouraging them to recall events, analyze the events, predict future events, and connect the story to their lives. | "What is wrong here?" "Have you felt this way?" "How do you think the story will end?" "etc. questions that help the students engage with the story, talk about what is happening and relate it to themselves, life and/or other stories. | Teacher engages the students in thinking about the story with simple questions such as yes/no questions or basic recall questions. | Teacher engages the students with relevance questions - questions that help the students relate their experiences to the story. Open-ended questions. | Teacher uses open-ended questions that require the students to think creatively about the story and to anticipate or predict future events in the story. | Teacher uses open-ended questions to engage the students in thinking beyond the story, in analyzing events of the story, and in making connections to other stories or to life in general. |
| FT | FB about task | Teacher gives feedback on how well tasks are understood or performed - corrective feedback | Providing corrective information, distinguishing from correct and incorrect answers, providing more information so that the students can learn something more correctly or more completely | Teacher may point out an error to a student with little or no further direction | Teacher points out an error and gives the correct answer | Teacher points out an error and guides the student to the correct answer | Teacher points out an error, guides the student to the correct answer and then connects it to the process of understanding or performing the task |

**Table 7** (continued)

| Code | Name | Description | Examples of behavior | 1 = low quality | 2 = mid-moderate quality | 3 = high-moderate quality | 4 = high quality |
|---|---|---|---|---|---|---|---|
| FS | FB about self as person | Teacher gives personal evaluations and affect (usually positive) about the learner - simple praise (simple yes response, nodding or repeating student answer are not to be considered feedback about self and should be coded not present) | "Good job", "that's right", "way to go", etc. | Basic praise such as "good job" "you're so smart", etc. | Praise with some specificity such as "good job pointing out the whale" | Praise with specificity followed by statement or question about other information, i.e. "good job pointing out the whale what sound does a whale make?" | Specific praise followed by additional teaching including open ended questions or asking for further information, i.e. "good job finding the whale, what do you think the whale is going to do next in the story." |
| DP | Directed pantomime | Teacher directs statements asking students to embody the story - using the body to illustrate the story | Acting like fish swimming in a pond, moving arms and faces like fish | Teacher asks the students to move like something in the story - with no follow up connecting the movement to the story | Teacher asks the students to embody some aspect of the story and follows up with general comment(s) to connect the movement to the story | Teacher gives specific suggestions for the students to embody the story and follows up with specific comment(s) to connect the movement to the story | Teacher gives clear directions to the students and encourages creativity in the embodiment of the story and follows up with specific comment(s) to connect the story to the movement |
| DI | Directed imagination | Teacher directs the students to imagine elements of the story without the need for movement | "Imagine a mountain in front of you, can you see the colors, the trees, and the clouds floating above the mountain?" | Teacher suggests that students imagine an aspect of the story with little or no wait time and just general comments | Teacher suggests that students imagine an aspect of the story and gives a brief wait time with general follow up comments to connect back to the story | Teacher directs students to imagine an aspect of the story, giving sufficient wait time and then follows up with questions to get the students to share what they imagined | Teacher directs students to imagine an aspect of the story, gives sufficient wait time and then follows up with student sharing and then asks questions to help the students connect back to the story |
| Pan | Teacher pantomime | Teacher acts out parts of the story, role plays, uses props, - the use of iconic movements to illustrate the story | Acting out parts of the story, showing a stuffed fish and having it "swim" as part of the story, | Teacher moves arms or body in simple movements that tell or illustrate the story | Teacher moves body in a way that tells or illustrates the story or uses props to enact the story but with moderate enthusiasm | Teacher enthusiastically moves body or uses props to help tell the story | Teacher enthusiastically moves body and/or uses props to tell the story and to illustrate what is happening in the story as well as to increase excitement for the story. |

**Table 7** (continued)

| Code | Name | Description | Examples of behavior | 1 = low quality | 2 = mid-moderate quality | 3 = high-moderate quality | 4 = high quality |
|---|---|---|---|---|---|---|---|
| CD | Character development | Teacher encourages students to take on a being outside of themselves through voice and body and to experience emotion through the character as well as express events from the characters' point of view. | Examples: Can you walk like Tom? How is Tom feeling right now? Why did Tom do that? Let's be farmer John. Put on your jacket, pick up your hoe, what would farmer John do now? Directing students to act like a character, etc. (This may be coded to more than one code) | Teacher encourages children to pretend they are a character including making the sounds of, or talking like, a character without movement (if there is movement and sound record it under both character and pantomime) | Teacher encourages children to portray a character different from themselves and makes a slight effort to help the children see how the character may respond to a situation differently than they would | Teacher encourages children to portray a character different from themselves and tries to help the children see situations from the characters' point of view | Teacher encourages the students to imagine that they are a character other than themselves and encourages them to view the story situation from their characters' point of view and express ideas of how the character would respond to story situations |
| VDE | Vocal variety | Teacher uses inflection and voices while telling the story | Marking the climax with a change in pitch or tone of voice, speaking faster when things are getting exciting or slower when the mood of the story is more mellow, etc. | Teacher uses voice inflection, changes in pitch and tone, to emphasize or bring attention to parts of the story. | Teacher uses exaggerated changes in pitch and tone to give inflection to his/her voice during story reading to draw attention to parts of the story or to engage students. | Teacher uses exaggerated and excited changes in pitch and tone to give inflection to her/his voice and uses occasional voices for characters to enliven the story | Teacher uses exaggerated and excited changes in pitch and tone to give inflection to her/his voice and uses a variety of voices for characters to enliven the story |
| FDE | Facial expressions | Teacher uses vivid facial expressions | Making a big "O" face if something goes wrong in the story, showing exaggerated emotional faces to correspond with the emotions in the story, etc. | Teacher may use facial expressions to emphasize parts of the story but they are small movements | Teacher uses moderately exaggerated facial expressions to emphasize events in the story. | Teacher uses exaggerated facial expressions to illustrate events in the story | Teacher uses exaggerated and excited facial expressions to emphasize events in the story especially the climax and other high points of the story. |

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