SYSTEMATIC ASSESSMENT OF
BOOK READING:

SABR

Manual

Laura M. Justice
Tricia A. Zucker
Amy E. Sofka

Preschool Language and Literacy Research Lab
The Ohio State University
College of Education and Human Ecology
Columbus, Ohio

© 2010
Acknowledgments

Development of the SABR was supported by a grant from the U.S. Department of Education’s Institute of Education Sciences to the University of Virginia and The Ohio State University for Project STAR (Sit Together and Read). We appreciate contributions from our colleagues at the STAR collaborative site at the University of Toledo, Joan Kaderavek and Aileen Hunt, and also are thankful to our colleagues and students at the University of Virginia with whom we consulted in the preparation of this work, including Xitao Fan, Marcia Invernizzi, Beth Cottone, Anita McGinty, Allison Ward, Jill Pentimoni, and Cathy van Dyke. We also express our sincere gratitude to the preschool teachers and children who have participated in Project STAR and provided us with rich information on the quality of storybook reading in preschool programs.
TABLE OF CONTENTS

Overview and Coding Structure of the Systematic Assessment of Book Reading (SABR) 4
- Coding Structure
- Quality Domains
- Observation Constructs
- Overview of Constructs
  - Instructional Support Constructs
  - Book-Reading Context Construct
- Behavioral Codes

Observing Book Reading with the SABR 7
- Materials
- General Coding Procedures
- First Viewing: Instructional Support Codes
- Second Viewing: Book-Reading Context Codes
- Final Steps: Duration, Rating Scales, & Comments

Detailed Descriptions of SABR Codes 16
- 1 – Language Development
- 2 – Abstract Thinking
- 3 – Elaborations
- 4 – Print/Phonological Skills
- 5 – Session Climate

Global Rating Scales 62
- Reading Delivery
- Behavior Management

Comments Section 71
- Positive Notes/Open-ended Comments
- Negative Notes/Open-ended Comments

Summary: Coding with the SABR 75

SABR Scoring Procedures 80

Reliability Training for the SABR 81

Appendices 85
- Sample SABR Score Sheet
- Tutorial for Identifying Utterance Boundaries
- STAR Text Specific Notes
- Examples of Interesting Print Salient Features
The Systematic Assessment of Book Reading (SABR) is an objective observational tool that was developed to assess the presence and frequency of specific teacher behaviors during small- and large-group classroom-based reading sessions in early childhood classrooms. This instrument focuses exclusively on teacher behaviors.

Coding Structure of the SABR

The SABR coding system comprises two quality domains, five observation constructs, and 21 specific behavioral codes.

Quality Domains

The SABR separates observations into two quality domains:

I. The **Instructional Support** domain examines the way in which teachers provide content and literacy-related supports to students within the book-reading session; items in this domain study explicit techniques the teacher uses to facilitate children’s literacy, concept, and vocabulary development. These codes study *what* the teacher is doing to teach students within the reading context.

II. The **Book-Reading Context** domain examines the way in which teachers organize the book-reading contexts to actively involve pupils; items in this domain study the emotional support the teacher provides. These codes study *how* the teacher organizes and delivers the reading session.
Observation Constructs

SABR differentiates the two quality domains into five observation constructs:

- The **Instructional Support** domain includes four constructs: (a) Language Development, (b) Abstract Thinking, (c) Elaborations, and (d) Print/Phonological Skills.
- The **Book-Reading Context** domain includes one construct, (e) Session Climate that is comprised of three codes and two ratings scales.

Overview of Constructs

Teacher behaviors observed within the SABR constructs focus on **extratextual behaviors**, or conversation and behaviors beyond the actual reading of the text. Actual reading of the book is not coded; only teacher behaviors and talk occurring around the reading of the text are coded. A brief description of each construct is provided below.

I. Instructional Support Constructs

*Language Development*. The **Language Development** construct examines the extent to which the teacher highlights words during reading and discusses word meanings. This construct includes instances of expanding on a child’s verbal contribution.

*Abstract Thinking*. The **Abstract Thinking** construct examines the teacher’s use of modeling and open-ended questioning to engage children in predicting, hypothesizing, remembering, reasoning, and inferencing about aspects of the book’s content. All of these codes involve an inferential level of demand.

*Elaborations*. The **Elaborations** construct examines the extent to which the teacher elaborates on word meanings, expands on children’s own topics, or encourages children’s dramatic expansions of the text. This construct also assesses the extent to which the teacher elaborates on characters’ emotions and ways the text links to children’s own lives.
Print/Phonological Skills. The Print/Phonological Skills construct examines the extent to which the teacher includes verbal references (questions, directives, comments) regarding the forms and features of print or book organization. Additionally, explicit references to phonology, or the sounds of language (e.g., rhyme, alliteration), are examined within this construct.

II. Book-Reading Context Construct

Session Climate. The Session Climate construct examines the extent to which the teacher demonstrates enjoyment of reading and respect towards the children during reading. This construct also examines the extent to which the teacher invites children to manipulate the book during book reading. The Book-Reading Context domain also includes two ratings of the quality of the teacher’s dramatic reading style and approaches to behavior management.

Behavioral Codes

Within these constructs, the SABR focuses on 21 specific teacher behaviors. Eighteen codes of interest fall within the Instructional Support domain. Three codes of interest fall within the Book-Reading Context domain.

In addition, two optional global rating scales evaluate the Book-Reading Context. The Reading Delivery rating examines the voicing and dramatic qualities of the teacher’s reading of the text. The Behavior Management rating assesses whether the teacher uses proactive or reactive approaches to managing children’s behavior during the reading session.

Descriptions of all codes are presented in subsequent sections.
Materials

Coding requires these materials: (a) paper copy of SABR score sheet, (b) a DVD to be coded, (c) a copy of the book the teacher reads aloud on the video, and (d) a DVD player that displays elapsed time (e.g., Windows Media Player).

- SABR score sheets are available in Appendix A and on the shared drive in this location: STR → Measures → SABR → scoresheetSABRblank.

- Copies of STAR books are available at your research site. Page numbers have been marked.

- See your Project Director for information on the location of DVDs for coding and the most user-friendly media software available at your site.

General Coding Procedures

1. The SABR was developed specifically for videotape observation. Before coding begins for a video, coders provide information on the session in the Reading Session and Coding Information section on page 1. This required information includes:

   - Teacher’s study ID #
   - Video number (not week of study #)
   - Coder’s ID (computing ID or initials)
   - Coding date
   - Title of the book

There are several optional scoring categories at the top of the score sheet that are presented in italics. Complete these sections as necessary to provide additional details of the session. For example, coders should check “other” if a substitute teacher conducts the book-reading session.
2. SABR **coding starts** at the moment video recording begins; thus, the first 15 seconds of elapsed time on the media player matches the first 15-second interval.

- If text-related discussion does not begin at the moment the video recording starts (e.g., teacher is setting up video camera) coders should **note the start time of the book-reading session**, that is the moment when book-related discussion (or procedural discussion) begins. Coders note the start time in the top left corner of the first score sheet page. For most videos, codable teacher behaviors begin at the moment the video recording begins. The only exception to this is if an unrelated activity (e.g., naptime, learning centers, camera setup) was recorded before the book reading. In these rare cases, fast forward to the beginning of the book-reading session and note the time you started coding on page 1 of the scoresheet. (You must note this time to calculate the total duration of the actual reading session at the end of coding.) Also place a slash mark through the elapsed time row of the scoresheet to indicate that those intervals were intentionally skipped. If no time is noted on page 1, it is assumed the start of the reading session is the start of the video.

- “Extratextual talk” is any utterance beyond reading of the text. Extratextual talk is the focus of coding; no codes are to be assigned for a teacher’s reading of the text. Direct reading of environmental print or other forms of print in illustrations is considered reading of the text (i.e., not coded because not considered extratextual talk).

- If a teacher inserts 1 or 2 of her/his own words while reading a section of text as miscues or to adapt the text in a way that makes it more understandable for young children, do not consider this as extratextual talk. Only insertions of 3 words or more are extratextual talk. Of course, 1-2 word extratextual utterances when the teacher is not reading are coded; this rule only governs insertions during reading of the printed text.
3. The entire book-reading session is **coded up to 30 minutes**. Intervals (see #4 below for description of interval coding) continue for several pages up to the 120th interval. If a session continues beyond 30 minutes, stop coding at the 120th interval and note that reading has continued beyond the 30-minute mark in the Comments Section.

- For sessions that last less than 30 minutes, coders **stop coding** when the teacher’s attention shifts away from book-related discussion or when s/he transitions to another activity. **Record the exact end time** of the book-reading session in minutes and seconds on the final page of the score sheet. (If the book-reading session did not start immediately on the video, use the start time noted on page 1 to calculate the duration of the book-reading session.)

- For all videos, observers **code after-reading group discussion** that is related to book concepts (e.g., encouraging students to act out portions of the story; interactive/shared MODELED writing to review or respond to the story; reviewing visual supports introduced before/during the story, such as graphic organizers or props/puppets); however, **story extension activities** that go beyond large-group discussion (e.g., story-related crafts; story-related center activities/games; story-related songs; individual student written story responses; story-related cooking; using props/puppets introduced after reading to review the story) are **not** considered part of the book-reading session and should not be coded. Likewise, if after-reading discussion occurs and the book is not the focus of attention (i.e., the book is no longer visible or in the teacher’s hand/lap), coding should stop.

- The **guiding principle** that drives these rules is that only the book-reading session should be coded. Again, the book-reading session is defined as before, during, and after reading talk.

4. Most SABR codes use a **15-second interval coding strategy**. Interval coding requires coders to record observations within a 15-second period of time. The coder watches the video for 15 seconds
and, at the end of the interval, pauses to record all codes that occurred in that interval. Coders are permitted to record codes before pausing as well. Interval coding begins on the first page of the SABR score sheet. The first 4 pages contain a list of Instructional Support codes down the rows and successive time intervals across the columns. Book-Reading Context codes begin on page 5 of the score sheet.

- When coding, coders place a diagonal slash in the appropriate cell to reflect that a codable behavior occurred in an interval. Only one slash is needed across the cell, even if the behavior is seen more than once in that interval. If no codable behaviors occurred during the interval, place a slash through the elapsed time row (the top row) to indicate that the interval was not skipped.

- Coders must carefully watch elapsed time so they can pause every 15 seconds to record codes. If a coder neglects to pause at the exact 15 second mark, rewind to the last accurately coded interval and recode the inaccurately timed interval. Because teacher behaviors are recorded sequentially it is essential that codes are recorded for accurate 15-second intervals. The elapsed time of the video is shown at the top of the score sheet to facilitate accurate pausing.

4. After coders mark all codes that occurred in a 15-second interval, they should record the focal page numbers read during that interval. Coders should refer to a copy of the book that has page numbers already marked to determine the numbers of the 2-page spread that was read or was the focus during the interval.

- It is sufficient to only record the page number of the left-hand page of a two-page spread because during data analysis it will be obvious that the book was open to a two-page spread.

- If you cannot see the book clearly during reading due to camera positioning, coders must use their best judgment to mark the page that is being discussed. Record that you could not see the pages of the book on the final pages of the score sheet so the quality of this aspect of the data is known. If
the teacher reads a new page, mark this as the page(s) for that interval. Or if the discussion clearly
shifts to a new page (i.e., talking about the page before the teacher reads it), mark that as a focal
page for that interval.

5. All SABR codes use teacher utterance as the unit to be coded. The coder must parse the
teacher’s speech into utterances and then code these utterances.

- If coders are unfamiliar with identifying utterance boundaries, a brief tutorial is presented in
  Appendix B.

- If the teacher abandons an utterance, this behavior is not coded because this usually results
  in inferring a code. Never infer a code. If an utterance is partially inaudible, but the coder can
  accurately deduce the overall meaning of the utterance they may assign a code(s).

- Sometimes, utterances cross an interval boundary. If an utterance extends into a subsequent
  interval, the interval in which the utterance was completed receives the code. For example, a
  teacher says: “Baby Blair’s cereal is probably Rice /// Krispies” (the symbol /// represents the
  boundary between intervals 10 and 11). This single utterance is scored only one time for a
  particular code, and the coding occurs in interval 11.

- Coders should carefully attend to interval boundaries for code 3d because a codable teacher
  utterance may occur in the next interval following a child’s utterance.

6. The SABR codes are not exhaustive. As a result, some teacher utterances will not be coded as
representing any SABR constructs. Coders should not feel compelled to assign a code to every teacher
utterance that occurs. For example, filler utterances are not coded (e.g., You know what?), vague
affirmations are not coded (e.g., Alright; Okay.), and additional forms may not receive a code.
• If coders observe a remarkable or extreme behavior during coding that does not match a code, they should record comments in the open-ended Comments Section. There is a section to note positive behaviors (e.g., innovative instructional techniques, noteworthy socio-emotional support during reading, effective behavior management techniques) and a section for negative behaviors (e.g., teacher disrespect, teacher negativity, extreme student misbehavior, poor reading, or overcontrol).

7. The SABR codes are not mutually exclusive. This means that one teacher utterance can represent multiple codes. Coders should feel comfortable assigning more than one code to a single teacher utterance.

8. Two optional 5-point rating scales are used to assess the extent to which teachers use a dramatic reading style and effective behavior management approaches on the last page of the score sheet. These global rating scales are used because pilot work revealed that it was difficult to achieve high inter-observer agreement using the more in-depth interval scoring method for these codes.

**Instructional Support Codes**

The Instructional Support codes focus on instructional techniques teachers use to support literacy and language skills. Coding occurs at the utterance level. The first four pages of the SABR score sheet include the four Instructional Support constructs:

1. Language Development,
2. Abstract Thinking,
3. Elaborations, and
4. Print/Phonological Skills.

There are a total of 18 codes across these constructs.
Instructional Support codes include some codes that require literal language and some that require inferential language. Codes marked as L (literal) are coded when talk is concerned with a literal meaning, that is, it is perceptually focused (e.g., focused on perceptual attributes of objects or events, such as size or color). Codes marked as I (inferential) are coded when talk is inferential or conceptually focused and requiring inferencing about information not perceptually present (e.g., feelings, cognitive states, judgments). When a teacher’s utterance includes an inferential level of linguistic demand it will typically receive one of the Abstract Thinking codes (2a, 2b, 2c, 2d) or another inferential code (i.e., 1d word definition). Examples of teacher utterances that fall along different points on a continuum spanning from literal to inferential are presented below.

Examples:

1. **Literal** – *T: That is a big, blue ocean.*
   Code 1c. Describe Noun because the color (blue) and size (big) of the ocean are both perceptually present descriptions of the noun (ocean).

2. **Literal & Inferential** – *T: That is a beautiful, blue ocean.*
   Code 1c. Describe Noun because the color (blue) of the ocean is perceptually present. And code 2b. Judgment/Inference/Evaluation because the modifier “beautiful” indicates the teacher’s evaluation or opinion about the text, a non-perceptual quality.

3. **Inferential** – *T: That is beautiful.*
   Code 2b. Judgment/Inference/Evaluation because the modifier “beautiful” indicates the teacher’s evaluation or opinion about the text, a non-perceptual quality.

When coding for Instructional Supports it is important to consider if teacher’s utterances contain a literal or inferential level of demand as this concept informs coding decisions.

It is also important to consider whether the teachers’ utterance pertains to story content or the text itself; if teacher talk does not reference to the story/text it is not coded for Instructional
Support codes. In other words, Instructional Support codes only apply when extratextual talk pertains to the story/book directly.

Note: If a teacher uses a Literal utterance about perceptually present objects, and turns the page during this utterance assign the appropriate Literal code and do not be concerned that the object/event was not perceptually available to students during the entire utterance.

Book-Reading Context Codes

Book-Reading Context codes focus on the quality of transactions between the teacher and students; nonetheless, the focus remains on teacher behaviors that shape the book-reading context. Pages 5 and 6 of the score sheet contain one construct and two optional global rating scales:

(5) Session Climate construct

(6) Reading Delivery rating

(7) Behavior Management rating

The unit of analysis for Book-Reading Context codes remains the teacher utterance; however, some contextual codes require observation of nonverbal behaviors (e.g., children encouraged to touch/manipulate the book), in addition to assessing at the utterance level. All nonverbal behaviors represent discrete events that can be observed within an interval. There are 3 codes in Session Climate construct. The behaviors assessed with the Reading Delivery rating and the Behavior Management rating represent the teacher’s overall approach to reading aloud and managing children’s behavior throughout the book-reading session, respectively.

Final Steps: Duration, Rating Scales, & Notes

After all interval coding is completed, coders complete the final page of the SABR score sheet including: (1) recording the duration of the book-reading session, excluding any footage at the beginning of the video that did not contain book-related discussion (e.g., camera setup); (2) marking the rating scale descriptions that best represent the teacher’s dramatic reading style and behavior
management approaches; and (3) recording any observed positive or negative behaviors in the

Comments Section. This can include open-ended comments as well.

Collectively these coding procedures capture essential information on the quality of instructional and social transactions that occur during storybook reading. Please carefully study the coding categories and examples in the tables below.
The following tables define all 21 SABR codes and the two optional rating scales by providing detailed descriptions and examples of each codable behavior.

- The first set of codes includes the 18 *Instructional Support* interval codes for these constructs: (1) Language Development, (2) Abstract Thinking, (3) Elaborations, and (4) Print/Phonological Skills.

- The second set of codes includes the 3 *Book-Reading Context* interval codes for the (5) Session Climate construct and the two ratings for Reading Delivery and Behavior Management.

  - **TIP**: For coders who are new to the SABR, you may find it most helpful to first review all definitions and examples for the codes before studying the more detailed notes that provide specific rules for differentiating between codable behaviors.
(1) Language Development

The *Language Development* construct examines the extent to which the teacher highlights words during reading and discusses word meanings. This construct includes instances of expanding on a child’s verbal contribution.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Definition</th>
<th>Specific Coding Notes and Examples</th>
</tr>
</thead>
</table>
| 1a. Describe Story Actions [L] | Teacher *discusses perceptual-level story events and/or actions* depicted in illustrations or in the printed text. | Note(s): (1) To code this category, the teacher must label/describe/request information regarding *story actions/events/brief episodes*, which usually includes the use of a *verb* (in any tense); (2) The difference between code 1a and code 1b (see below) is that they focus on verbs and nouns, respectively; (3) Do not code if the teacher says “The <character> says/is saying/said” and then proceeds to read, or restate, the text. This is not considered extratextual talk; (4) If the teacher talks about her actions (e.g., *I’m turning the page*) or children’s actions (e.g., *Kelly is looking at the book*) do not mark this code as this code targets events/actions in the text; (5) Story actions/events are obvious when represented as verbs in the printed text. Story actions/events can be more difficult to identify when looking for movement in illustrations. As a rule of thumb, **assume that perceptual-level actions can be present in almost all illustrations because illustrators use a variety of semiotic codes to represent movement** (e.g., codes of line, capillary, and position). Rather than analyzing whether movement is obviously depicted through these visual literacies, coders should generally assume movement is present if teachers use a reasonable verb to describe story actions.

**Example(s):**

1. **Question/Request/Comment** about *events and actions* related to the initiating events, problems, solutions, and/or goals of story plot.
   - *T*: *What are they doing?*
   - *T*: *What’s happening in this picture?*
   - *T*: *It is raining.*
| Describe Story Actions [L] cont’d | - *T:* They are **going** on a bear hunt.  
- *T:* In this book, Violet **plays** a lot of instruments.  
- *T:* They **are putting** on their coats.  
- *T:* He is **eating.**  
- *He was eating.* (past tense of perceptual-level events is appropriate for this code) *T:* That crawfish is pinching his claws. (Note: it is appropriate to assume the pinching movement is present in illustration even though we cannot determine if the claw is actually opening and closing as depicted in the illustration.) |
<table>
<thead>
<tr>
<th>1b. Teacher provides or asks for a <strong>label/name/notice</strong> a <strong>noun</strong> depicted in the illustrations, the printed text, or tangible objects referenced during reading. Teacher asks child to <strong>locate a noun</strong>.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Note(s):</strong> (1) <strong>This code cannot include an attribute of the noun</strong> (e.g., adjective or adverb modifying the noun) because that is code 1c – see definition below; (2) This code <strong>can include one or more prepositional phrases that focus on location/position</strong> (e.g., <em>in the water; under/on/over/etc. the table</em>); however, the prepositional phrase cannot require a selective focus on noun characteristics as that is code 1c; (3) This code can include multi-word nouns (e.g., exclamation point) or proper nouns (e.g., Play-Doh, Sanitation Department, New York), but does not include common modifiers in this code (e.g., popsicle sticks = 1c, frying pan = 1c); (4) <strong>Even inaccurate noun labels receive this code.</strong> For example, if the teacher provides an incorrect noun label this code is marked (e.g., about crawfish in a freshwater pond, <em>T: See the crabs</em>.). Likewise, if a teacher provides corrective feedback on a child's incorrect label of a noun (e.g., <em>T: That is not a bird, it's a flower</em>) this code is marked; (5) In regards to talk about print, <strong>these units of print are considered an object and marked as code 1b</strong>: title/name, illustration/picture, word, letter, sentence, author/illustrator, any punctuation (e.g., question mark), book orientation (it’s upside down), print directionality (the print goes from left to right); however, how to read is <strong>not</strong> coded for 1b; (6) <strong>Do not mark this code for requests for the child to clarify/repair/repeat their utterance</strong> (e.g., <em>T: The what?; T: It’s what?</em>); (7) <strong>If the subject of an utterance is a pronoun, the pronoun word alone is <strong>not</strong> sufficient for this code</strong> – the utterance must include (a) a directive for the children to notice a noun (e.g., <em>T: Look at him. T: See that? T: There he is.</em>), or (b) a request for children to provide the label (e.g., <em>T: What’s this</em>?), or (c) a specific label/name for a noun. In regards to the last type, here are some examples when a pronoun is <strong>not</strong> sufficient: Utterances that describe how a noun is moving/changing should be coded for 1a and are also coded for 1b only when the noun is named with more than a pronoun (e.g., 1a only = <em>T: He/she/it/something/one is running</em> (or...</td>
</tr>
</tbody>
</table>
1b. Label/Locate/Notice Noun [L] cont’d

other verb) or *They/we are running* (or other verb), but 1a and 1b = *T: The boy is running*).
Likewise, utterances that describe non-perceptual qualities should receive an inferential code and are also coded for 1b only when the noun is named with more than a pronoun (e.g., 2b only = *T: This one/he/she is happy*, but 2b + 1b = *T: The frog is happy*); (8) Rote counting of objects/nouns is code 1b, but other descriptions of quantity are coded as 1c.

**Example(s):**
1. Question/comment/request that provide a label for an object or character in illustration or encourage children to notice an object/character.
    - *T: What is this?/What are these?*
    - *T: Who’s that on the stairs?* (Note: noun label request + prepositional phrase)
    - *T: That’s a watch.*
    - *T: See the giraffe?*
    - *T: That’s not a giraffe.*
    - *T: That’s a runner.*
    - *T: Notice this ant.*
    - *T: That’s a letter.*
    - *T: That’s an “A.”*
    - *T: Look at this word.*
    - *T: It’s called...*
    - *T: This is “tadpoles.”* (the printed word “tadpoles”)
    - *T: What’s this one?* (Note: “one” functions as pronoun + question form)
    - *T: Look at this one.* (Note: “one” functions as pronoun here to encourage children to notice a noun.)
| 1b. Label/Locate/ Notice Noun [L] cont’d | • T: See the bear. (Note: The teacher is pointing to a dog, but it does not matter that she provided the wrong label, she still labeled a noun and the code is marked).
  • T: That’s mommy. (Note: The teacher is pointing to a person. It is not clear from the picture/text if this is actually a mother or other caregiver. Nonetheless, code 1b is marked, as well as code 2b because the teacher inferred this is a mother.)

2. Request for child to locate a simple noun in illustration
  • T: Find the...
  • T: Find the... + prepositional phrase(s)
  • T: Where is...?
  • T: They are in the + prepositional phrase(s)
  • T: Where’s Arthur?
  • T: Do you see a vegetable?
  • T: There’s the...
  • T: Show me the seed beside the car.
  • T: She’s upside down. (“upside down” is a preposition phrase identifying location)
  • T: The dog is outside. (“outside” serves as a preposition identifying location)

1. Labeling a tangible object or matching a tangible object with pictured object in illustration.
  • T: Find a Kleenex box like this one in the book.
  • T: This is a book. (points to real text)
  • T: Find the “R” that is like this R magnet.

2. Rote counting of pictured objects (excludes subitized modifiers, which is 1c).

---

1 Counting and Subitizing differ in that counting includes counting all items present, whereas subitizing includes rapid, accurate judgment of the number of elements present. Adults often subitize for small sets of items. For example, a teacher might say “There’s four frogs” because she subitized or immediately knew how many objects were in a scene. Subitizing is coded as quantity for 3b; whereas counting is coded as 1b.
| 1b. Label/Locate/ Notice Noun [L] cont’d | • *T:* Can you count the students in Miss Bindergarten’s class?  
• *T:* There are one, two, three, four, five tadpoles.  
• *T:* Let’s count the words in our title. 1, 2, 3, 4... |
1c. Describe characteristics of a noun or requires selective analysis of a noun/noun parts.

Teacher describes characteristics of a noun or requires selective analysis of a noun/noun parts.

Note(s): (1) This code includes a noun that is modified by any adjective or adverb, including possession or selective analysis; (2) This code requires the noun to be perceptually present and include perceptual properties (e.g., weight, color, size, texture, shape), kind/type, or quantity (more, less, some, all, only, one, single, a lot/little); (3) This code can include a prepositional phrase or determiners that include a selective focus on characteristics of a noun (e.g., which, that) or parts of the noun (e.g., the end of the book; the back of the truck/chair); (4) The difference between 1c and 1a is that they focus on nouns and verbs, respectively; (5) If a teacher provides corrective feedback on a child's incorrect description of a noun (e.g., T: Actually, that is baby bear's chair, not mama bear's chair), code 1c is marked; (6) In regards to book and print organization, when a teacher discusses physical parts of a book (e.g., a “page” or “spine” or “top/bottom”) these are considered analysis of noun parts and 1c is marked; however, when a teacher discusses how to read (e.g., where to begin reading) 1c is not marked; (7) If the subject of an utterance is a pronoun, this does not influence the decision to code 1c; rather the modifier is the indicator of 1c. Therefore, code these examples as 1c: T: It’s a few; T: He is tall; T: He can open his that far too, because all these utterances require selective analysis through the use of a modifier/possessive.

Example(s):
1. Questions/requests that require children to locate a modified noun in an illustration.
   - T: Show me the biggest tomato.
   - T: Where is the white flower?
   - T: Is that the fast one? (Note: “one” functions as pronoun here)
   - T: Show me one word on this page. (Note: “one” functions in the numerical sense here)
1c. Describe Characteristics of Nouns [L] cont’d

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• <em>T:</em> Show me the only word on this page.</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> What is that beside the brown bear? (Note: also coded 1b because requesting label with “what is that?”)</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> How many people are in the plane? (Note also coded 1b because labels “plane.”)</td>
</tr>
</tbody>
</table>

2. Questions/requests that require children to locate an object defined by its function or characteristics.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• <em>T:</em> Find the one that is… (Note: this determiner requires selective analysis)</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> Find the one that is… and is …</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> Do you see one that…?</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> See the outside edge? (in this case, “outside” is an adjective modifying edge)</td>
</tr>
</tbody>
</table>

3. Questions/requests/comments that describe attributes of object, including colors, shape, quantity, properties, or possession.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• <em>T:</em> Does the cheetah have spots?</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> That one is soft.</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> Tell me its shape/size/color/quantity/possession/etc.</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> See the red one.</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> It’s an oval.</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> A big acorn!</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> There are four tadpoles and a frog. (Note: also code 1b because labels frog)</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> She has some blocks.</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> That is a (modifier – e.g., skinny) one.</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> That’s baby bear’s chair.</td>
</tr>
<tr>
<td></td>
<td>• <em>T:</em> That’s his/her chair.</td>
</tr>
</tbody>
</table>
Describe
Characteristics of
Nouns [L] cont’d

1c.

- T: That’s their/our nest.
- T: What type/kind of (object) is that?
- T: This type/kind is...+ perceptual attribute/characteristic.
- T: The word “angry” is all squiggly.
- T: The first letter in each character’s name is a bright color.
- T: What’s the first/next/last letter?
- T: Name the colors of each flower.
- T: I see a bird’s nest.
- T: What is this ocean animal called?
- T: I see an uppercase “A.”
- T: That’s a letter “S.”

4. Naming or locating parts of objects.

- T: Find the broken part.
- T: This is the stem.
- T: She’s got hair. (Hair is a part of the girl. This applies to any body part – e.g., face/nose/arm/fingernail/etc.)
- T: This is the spine/front/back/end of the book. (all parts of the book)
- T: Show me the bubbles on the letter B.
- T: What letter does this word start with? (initial letter is a part of the word unit)
- T: The end! (of the book)
- T: Look at the boy on this page. (“Page” is always coded 1c as it is a noun part)
- T: This is the top. (noun parts are always 1c – top/bottom, end/beginning)
<table>
<thead>
<tr>
<th>1d.</th>
<th>Teacher asks for or provides a <strong>word definition</strong>.</th>
</tr>
</thead>
</table>

**Note(s):** (1) This **code includes the following definition forms:** “this means…”; “this is” + essential qualities/synonym; “this is” + [superordinate category/type/kind]; (2) The focal word does **not** have to be repeated in every utterance to receive this code IF a definition is being provided. (3) Teachers can use phrases like “What type/kind is it?” to target a 1d. Word Definition OR a 1c. Noun Description. Therefore, given the standalone utterance “What type/kind is it?” coders should mark both code 1c and 1d for this initial question since teacher intent cannot be inferred (e.g., mark 1c and 1d = T: *What kind of animal is this? What kinds of animals does Miss Bindergarten teach?*). If subsequent utterances indicate that the teacher is seeking 1c noun types/characteristics mark these later utterances as 1c (e.g., T: *Yes, it is a Dalmatian.* ) OR if subsequent utterances indicate the teacher is seeking 3d superordinate types/categories mark these later utterances as 1d (e.g., T: *Yes, there are some land animals, a few pond animals, and one dinosaur.* )

**Example(s):**

1. **Definition requests/comments** occur when a teacher asks for or provides a word’s meaning.
   - T: *What is a…?*
   - T: *What kind...is this?*
   - T: *It is a ... + category/essential qualities*
   - T: *What does... mean?*
   - T: *Do you know what “furious” means?*
   - T: *That means....*
   - T: *This is like....*
   - T: *This refers to....*
   - T: *This stands for....*
   - T: *This is a kind of + category.*
<table>
<thead>
<tr>
<th>1d.</th>
<th>[I] Word Definition cont’d</th>
</tr>
</thead>
</table>
|     | • *T*: This is + essential qualities…*/This is not + essential qualities…*
|     | • *T*: Do you know what a word is?  
|     | • *T*: What does “eject” mean?  
|     | • *T*: It [eject] is when you release something or let it go.  

2. **Requests/comments that establish a category** include a superordinate category or explain this is one group/type/kind.

   - • *T*: Cheetahs and tigers are both **members of the cat family**.
   - • *T*: The occupied sign is a **kind of** signal to tell others….

3. **Requests/comments with examples/non-examples** include a demarcation of the word’s meaning for vocabulary development.

   - • *T*: Some other **enormous** things are elephants, skyscrapers, eighteen-wheel trucks, and whales. But, a needle and your pinky finger are **not enormous**.
   - • *T*: Find the ones that are not vegetables.
   - • *T*: Name something that is a vegetable and not a fruit…. (Note: Also code 2a)
   - • *T*: Name something that can…but is not a…. (Note: Also code 2a)
   - • *T*: Angry is more than mad. (this demarcates how these words relate on a continuum)

4. **Requests/comments about purpose of a word** include the function/purpose of an object.

   - • *T*: Tell me its purpose….
   - • *T*: What is it used for?
   - • *T*: A bulldozer helps you to tear down and move things.
   - • *T*: A scale is used to figure out how heavy something is or how much it weighs.
   - • *T*: The letter “S” makes the /ssss/ sound.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Note(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1e.</td>
<td>Expands/extends child’s utterance</td>
<td>(1) This code <strong>includes</strong> teacher utterances that use 1+ word(s) from the child’s utterance in a longer form, or a more complete form, or a syntactically correct form, or that add an additional idea to the child’s utterance; (2) The teacher’s expansion/extension/recast <strong>must follow immediately after the child’s utterance</strong>; however, there are <strong>two exceptions allowed</strong>: (a) If the teacher immediately follows the child’s utterance with a simple negation utterance and then provides an expansion/extension in her next utterance this code is marked (e.g., C: Mad. T: No. T: Not mad, happy.), or (b) If the teacher adds a simple affirmation (e.g., Yep, Yes, Okay, Right, Yeah, Oh) that does not add syntactic or semantic meaning and then expands or extends the child’s utterance mark this code (e.g., C: Angry. T: Yes. T: He’s very angry.); (3) If a teacher adds only a more complex affirmation this code is marked because the affirmation adds meaning (e.g., C: Title page. T: Title page, that’s right.); (4) <strong>Mark this code if the teacher repeats a child’s utterance and adds a tag question</strong> (e.g., C: That’s yucky. T: That’s yucky, right?) because the teacher is expanding with a tag that seeks agreement; (5) <strong>If the teacher only changes the syntactic form of a child’s utterance mark this code</strong>, even when the teacher’s utterance is shorter (e.g., changed verb tense C: He opens the presents. T: Opening presents; this includes any changes to a “to be” verb C: I was frustrated. T: You were frustrated.); (6) If a teacher recasts a child’s “Yeah/Uh huh/Um-hum/Mhm” utterance to “Yes” this code is marked because the teacher is using the syntactically correct form; likewise, if a teacher recasts a child’s “Huh-uh/Hum-um/Mm mm” to “No” this code is marked; (7) If a child’s entire utterance is inaudible, the teacher’s response should not be coded; do <strong>not</strong> infer a code.</td>
</tr>
</tbody>
</table>

**Example(s):**

1. Teacher **expands or recasts** child’s utterance with correct grammar or a longer form.
1e. Expands/extends child’s utterance cont’d

- **C:** Chair broke.  →  **T:** The chair is broken.
- **C:** Mean lion.  →  **T:** Lions are mean.
- **C:** Mean lions  →  **T:** Mean lions everywhere.
- **C:** Her’s happy.  →  **T:** She’s happy.
- **C:** Yeah.  →  **T:** Yes.
- **C:** Minnow.  →  **T:** Minnows. (singular to plural)
- **C:** I saw it and it was black  →  **T:** You saw the snake and it was black?

2. Teacher extends child’s utterance by adding/clarifying an idea.

- **C:** Chocolate cookies.  →  **T:** You made chocolate cookies. (added idea that child made the cookies)
- **C:** He’s hurt.  →  **T:** He might be hurt and that could be why he’s using a wheelchair. (added idea/possible explanation)
- **C:** Dog.  →  **T:** That is a brown dog. (added color)
- **C:** Why?  →  **T:** Well, why do you think he is confused? (clarified idea by stating character is confused)
## (2) Abstract Thinking

The *Abstract Thinking* construct examines the teacher’s use of modeling and open-ended questioning to engage children in predicting, hypothesizing, remembering, reasoning, summarizing, and inferencing about aspects of the book’s content. All of these codes include an inferential level of demand.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Definition</th>
<th>Specific Coding Notes and Examples</th>
</tr>
</thead>
</table>
| 2a. Compare and Contrast [I] | Teacher models or asks children to compare and contrast aspects of illustrations/story events. | **Note(s):** (1) A distinguishing mark of this code is that it must explicitly address likeness or difference (e.g., 2a likeness = *T: This is an uppercase and this is an uppercase*; 2a difference = *T: His eyes are closed, but her eyes are open*); (2) Coders should not confuse a choice between two different ends of a continuum or opposites for 2a (e.g., uppercase or lowercase; open or closed) because 2a includes comparing/contrast ing likeness and difference (e.g., 1c description of x or x = *T: Is this uppercase or lowercase? 1c x or x = T: Are his eyes open or closed?*); In other words, compare and contrast is a higher level of demand than answering a choice between opposites – it requires highlighting the differences between extremes or the degree of sameness/difference; (3) A text-to-life connection that explicitly addresses likeness/difference between life and an aspect of the text can receive this code. **Example(s):** 1. Questions/Requests/Comments that require children to consider similarities and/or differences between pictures, characters, stories, life events, or functions/purposes of objects. • *T: What’s different about the tiger and the cheetah?* • *T: How are these garden tools similar?* • *T: How are these the same?* • *T: These frogs are the same color, but they are not the same type.* • *T: This one is like this one.*
2a. Compare and Contrast [I] cont’d

- T: This is a fruit, whereas this is a vegetable.
- T: This is an uppercase “T” but this is a lowercase “t.”
- T: This word is small, but this word is very long.
- T: I am not shy. (highlights difference between self and character; Also code 3b. Text-Life Connection)
- T: Do you do this with your friends too? (listen for “too” as a comparison/highlight similarity; Also code 3b. Text-Life Connection)
- T: This one is a stuffed animal, too.
- T: But we don’t have a cooking center like they do in the story. (Also code 3b. Text-Life Connection)
### 2b.
Judgments,
Evaluations, and
Inferences [I]

Teacher models or asks children to make judgments, evaluations, or inferences about the text, events, characters, or illustrations.

**Note(s):** (1) This code (as well as other inferential codes) occurs when non-perceptual qualities are discussed, such as talk about feelings/personality/motivations/point of view/attitude/thoughts, internal states (e.g., cognition, wishes, desires, preferences, moral judgment, hunger, pain), evaluations of plausibility/merit/value/difficulty/rank/appropriateness/advantage/utility/security/authority/etc., or physiological states that are not explicitly stated in text (e.g., sleep, disease); (2) This code includes teacher statements about character’s point of view or other non-perceptual qualities, even when these non-perceptual qualities are explicitly stated in the text (e.g., Text reads: “I’m more excited than I can say!” T: He’s excited; T: It says she’s impolite. So, she is rude.) because these feelings, evaluations, and the character’s point of view are always non-perceptual. In other words, even if the printed text explicitly states a non-perceptual quality as truth (e.g., Text reads: “That was the best soup ever.” or “He is hungry/in pain/in love/happy”), this does not make it an observable, verifiable fact (e.g., cannot observe “the best”—one evaluates/judges what is best) – it is still a non-perceptual quality; (3) The timing of a teacher’s utterance can influence this code. When the text explicitly states a physiological state or another fact that can be verified with observable data (e.g., sleep, disease, time of day/year, gender), then a teacher’s utterance(s) regarding these facts are not considered an inference if she has read that section of the text aloud; however, if she has not read the observable information aloud, then it is an inference to assume a physiological state from an illustration. But for simplicity’s sake, do not consider whether it is the first reading of the text; (4) In regards to printed text, if the teacher strictly highlights the printed text for a non-perceptual word (e.g., This is the word “silly.”) do not mark this code; however, if a teacher judges/evaluates a printed word (e.g., That word looks angry) this code is marked.
2b. Judgments, Evaluations, and Inferences [I] cont’d

<table>
<thead>
<tr>
<th>Example(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Questions/Requests/Comments that include judgments or evaluations about story ideas, non-perceptual qualities, events, illustrations, or the text as a whole.</td>
</tr>
<tr>
<td>• T: Do you think he’s cool?</td>
</tr>
<tr>
<td>• T: Do you think he’s embarrassed now?</td>
</tr>
<tr>
<td>• T: Is he really hungry?</td>
</tr>
<tr>
<td>• T: Find the scary part.</td>
</tr>
<tr>
<td>• T: What a beautiful landscape.</td>
</tr>
<tr>
<td>• T: He shouldn’t be afraid.</td>
</tr>
<tr>
<td>• T: I like this book.</td>
</tr>
<tr>
<td>• T: He’d better... + judgment/evaluation</td>
</tr>
<tr>
<td>• T: You ought to... + judgment</td>
</tr>
<tr>
<td>• T: Even the words on this page look sad.</td>
</tr>
<tr>
<td>• T: She (character) might be thinking, “Oh help! I’m scared.”</td>
</tr>
<tr>
<td>• T: This sort of thing can be difficult.</td>
</tr>
<tr>
<td>• T: That was the best soup they’d ever had.</td>
</tr>
<tr>
<td>• T: He is old/young.</td>
</tr>
<tr>
<td>• T: Ew! (as in “that’s gross”); (Note: Do not code “Uh oh” as evaluation as this is too vague.)</td>
</tr>
</tbody>
</table>

2. Questions/Requests/Comments that model or request inferences about a characters’ role/feelings, events, or things not perceptually present in text. |
<p>| • T: What could he say? |
| • T: Do you think that was a good idea? |</p>
<table>
<thead>
<tr>
<th>2b. Judgments, Evaluations, and Inferences [I] cont’d</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <em>T</em>: Show me the <strong>rude</strong> girl.</td>
</tr>
<tr>
<td>• <em>T</em>: It says that girl is <strong>happy</strong>.</td>
</tr>
<tr>
<td>• <em>T</em>: He looks <strong>jealous</strong>.</td>
</tr>
<tr>
<td>• <em>T</em>: It <strong>must</strong> be winter now.</td>
</tr>
<tr>
<td>• <em>T</em>: Arthur’s <strong>thinking</strong> he can hide it from his parents.</td>
</tr>
<tr>
<td>• <em>T</em>: That table is a <strong>mess</strong>!</td>
</tr>
<tr>
<td>• <em>T</em>: It is <strong>hard</strong> to fly a plane.</td>
</tr>
<tr>
<td>• <em>T</em>: He’s eating, but he’s not really <strong>hungry</strong>.</td>
</tr>
<tr>
<td>• <em>T</em>: <strong>I think</strong> the author wants to show us....</td>
</tr>
<tr>
<td>• <em>T</em>: <strong>I think</strong>... + judgment/evaluation/inference</td>
</tr>
<tr>
<td>• <em>T</em>: <strong>I bet</strong>... + judgment/evaluation/inference</td>
</tr>
<tr>
<td>• <em>T</em>: <strong>What did you think</strong> the title of the book was?</td>
</tr>
<tr>
<td>• <em>T</em>: I think that’s a girl. (For <em>The Way I Feel</em> only code 2b if explicit inference about gender of characters; do not code just for gendered pronouns)</td>
</tr>
<tr>
<td>• Statements of things a character might say or do (inference about their point of view).</td>
</tr>
<tr>
<td>2d. Prediction [I]</td>
</tr>
</tbody>
</table>

Note(s): (1) This code includes a **distinction regarding the form of the teacher’s utterance and whether is a request or comment**. Vague, stand-alone comments that do not contain a reference to specific, probable future story events/outcomes/upcoming characters are **not** coded (i.e., too vague = *T: Let’s see + what this book is about; T: Let’s see + what happens next; T: Let’s see where he/she/it goes; T: Let’s see who is next*) because it is unlikely that young children will understand prediction is implied by such imprecise comments; on the other hand, the question form of prediction does **not** need to include specific future events because teachers may ask an open prediction question (e.g., *T: What do you think will happen next?*) to evoke a more specific answer from students; (2) For a cloze/complete-the-sentence form of prediction, the subsequent event cannot be perceptually present on the page; (3) **Predicting can occur before reading** or during a picture walk if the teacher models or encourages predicting/hypothesizing about subsequent story events; (4) If a teacher **revisits a prediction by confirming or revising an earlier hypothesis mark this code** (e.g., *T: Allison was right – he did tell a lie.); however, vague confirmations (e.g., *T: You were right.*) are **not** coded; (5) When a string of utterances are tangentially related to prediction, **only mark this code for standalone utterances that include prediction**; For example, if a teacher begins a string of utterances with a prediction question (e.g., *T: What do you think this book will be about?*), but as she continues the conversation she asks more questions that do **not** include hypothesizing about subsequent events, then these later questions do no necessarily require prediction (e.g., *T: What do you think?*) and should **not** be marked because as a standalone utterance they do **not** include/require prediction; (6) Do **not** consider whether or **not** the children have heard the story before in assigning this code; rather, assign the code based on the forms presented below.
<table>
<thead>
<tr>
<th>Example(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Questions/Requests/Comments/Complete-the-Sentence about events subsequent to a scene or predict the outcome of an event/entire text.</td>
</tr>
<tr>
<td>- T: What <em>will</em> happen if it gets wet?</td>
</tr>
<tr>
<td>- T: Do you think it <em>could</em> be noisy on the plane?</td>
</tr>
<tr>
<td>- T: What’s the next noise <em>going to be</em>?</td>
</tr>
<tr>
<td>- T: What’s <em>going to</em> make a noise on this page?</td>
</tr>
<tr>
<td>- T: <em>What will</em> happen next?</td>
</tr>
<tr>
<td>- T: Do you think that <em>will</em> work?</td>
</tr>
<tr>
<td>- T: Was Jill’s <em>prediction</em> correct?</td>
</tr>
<tr>
<td>- T: Show me what you think <em>will</em> happen if...</td>
</tr>
<tr>
<td>- T: I think his mom <em>will</em> find out.</td>
</tr>
<tr>
<td>- T: I wonder what <em>will</em> happen...</td>
</tr>
<tr>
<td>- T: Let’s see if... <em>will</em>...</td>
</tr>
<tr>
<td>- T: I think he <em>will</em> do this again.</td>
</tr>
<tr>
<td>- T: That <em>will</em> become a butterfly.</td>
</tr>
<tr>
<td>- T: What do you think they’re <em>going to</em> find?</td>
</tr>
<tr>
<td>- T: If he can be very careful it <em>might</em>...</td>
</tr>
<tr>
<td>- T: Then <em>what will</em> happen...?</td>
</tr>
<tr>
<td>- T: <em>Then</em>, the seeds become __.</td>
</tr>
<tr>
<td>- T: Do you think this book is going to be about a duck or a bear? (Although a closed question, this is a prediction)</td>
</tr>
<tr>
<td>- T: <em>Is he going to</em> eat the trash? (Although a closed question, this is a prediction)</td>
</tr>
</tbody>
</table>
| 2c. Prediction [I] cont’d | • *T: Let’s see* + *what* animal *is on the next page.*  
• *T: Let’s see* + *where* he *will sit.*  
• *T: Let’s see* + *who* Arthur *will meet.*  
• *T: Okay, let’s see* + *what it says about the lion* (in this example, note the teacher’s explicit statement of what they will be looking for when reading).  
• *T: Let’s read about* + *why* she’s *frustrated* (in this example, note the teacher’s explicit statement of what they will be looking for when reading). |
<table>
<thead>
<tr>
<th>2d. Reasoning, Explanation, or Analysis [I]</th>
<th>Teacher models or asks children for <strong>reasoning, explanation, or analysis.</strong></th>
</tr>
</thead>
</table>

**Note(s):** (1) This code **includes various types of analytic thinking**, such as **problem solving**, determining **cause/effect, explaining obstacles** or means to a goal, differentiating and explaining **fact vs. fiction, formulating a solution, justifying an inference/prediction**, explaining **necessary conditions**, or explaining the **how and the why** of the story/illustrations/responses to text/text-life connections/print conventions; (2) An explanation can include explaining or justifying an inference or prediction. Therefore, it is possible to code a teacher utterance as 2d. Reasoning, as well as 2b. Judgment, Evaluation, and Inference or 2c. Prediction; (3) An explanation can require using prior knowledge to explain or analyze the text; (4) An explanation can include a teacher’s emotive response or other explained non-perceptual qualities evoked by the text (e.g., *T: “This soup looks so good with all those vegetables that it’s making me very hungry!”*); (5) An explanation can include the teacher’s reaction to the students’ story-related actions (e.g., *T: “You are making me shiver and quiver because you are growling in such a scary way”* or *T: “You’re making me shiver and quiver”* in response to children growling like the tiger in the book).

**Example(s):**

1. **Questions/Requests/Comments** that model or request **explanations** of story events, concepts, or explain an inference drawn or a judgment made.
   - *T: Why is everything missing?*
   - *T: What else could he do?*
   - *T: Why can’t they...?*
   - *T: How can you tell...?*
   - *T: Why wouldn’t he...?*
   - *T: Why will...?*
2d. Reasoning, Explanation, or Analysis [I] cont’d

- T: Why do you think that happened?
- T: When the engines turn they make a loud sound and it scared the boy.
- T: What happens when...?
- T: The water is coming out of the top of the whale because that is his blowhole.
- T: This happened because/since/so...
- T: When this happens... but when....
- T: This must be a make-believe story because....
- T: They could do... to solve their problem.
- T: This is shown in the picture because....
- T: If this happens... then this happens...
- T: Gerard found he couldn’t dance like the others, but he could dance in his own way.
- T: Why do you think the little brother took all their things?
- T: So, thrusters have something to do with speeding up the plane.
- T: When the gardener pulls the weeds her plants can get more light and grow better.
- T: When you put together letters they can make a word.
- T: We need to look up that word in the dictionary. (explains solution to unknown definition)
- T: The author’s job is to write the words of the story. (explains author’s role)

4. These formulations often indicate explanation or analysis:
   - *Because*...
   - *.../so that*...
   - *Since*...
   - *If*...
| 2d. Reasoning, Explanation, or Analysis [I] cont’d | • Answers to “why” questions  
• Explanation of “why it would/wouldn’t” – essential/nonessential elements  
• …have to… or …got to have… – Explain necessary conditions  
• Explanation of “what made/makes it happen” – causes of events/feelings  
• Explanation of “what you/they could do” – another’s perspective  
• Explanation of “how we can tell” – explain inference from observation |
(3) Elaborations

The Elaborations construct examines the extent to which the teacher elaborates on word meanings, expands on children’s own topics, or encourages children’s dramatic expansions of the text. This construct also assesses the extent to which the teacher elaborates on characters’ emotions and ways the text link to children’s own lives.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Definition</th>
<th>Specific Coding Notes &amp; Examples</th>
</tr>
</thead>
</table>
| 3a. Word Elaboration | Teacher asks for or provides a word elaboration through contextualization or dramatization. | Note(s): (1) This code differs from 1d Word Definition because 3a does not follow the more explicit definitions forms listed in 1d; instead, instances of 3a include contextualizing the focal word or elaborating on the words meaning without an explicit definition; (2) Dramatizing and imitating portions of a text can be used for vocabulary development when a particular/focal word’s meaning is highlighted, although pretend talk (see 3d) does not typically target vocabulary development. Example(s):
  1. Contextualization provides accurate, contextual information about a word or phrase, including, (a) the time, place, or circumstances in which something occurs or develops, or (b) utterances that sheds light on the word’s meaning.
     - T: Doctors use this word.
     - T: You can find these (trowels) at the hardware store.
     - T: Maybe he’s jealous because he didn’t get a toy he wanted.
     - T: Like we took a boat through the marsh and we saw lots of birds and alligators.
     - T: You might have felt jealous before when a brother or sister got something for Christmas that you wanted.
     - T: You can get this vegetable in the winter.
     - T: Brian was excited when he went to Chuck E Cheese’s. (Uses text-life connection to contextualize a word) |
| 3a. Word Elaboration | 2. Dramatization provides the meaning of a word through a teacher’s gestures and imitation, or a request for the children to act out a word’s meaning. The dramatization must be linked to a particular, focal word in the text or a teacher utterance.  
- *T*: Show me how you look if you feel drowsy.  
- *T*: Show me an angry and furious face.  
- *T*: Tremble like you’re afraid. |
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Note(s):</th>
<th>Example(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>3b. Text-Life Connection</td>
<td>Teacher models or encourages children to link text content directly to past, present, or future personal experiences of the teacher or children.</td>
<td>(1) If a teacher uses the pronouns <em>you</em> or <em>we</em> this does not necessarily denote a text-to-life connection; (2) This code includes a distinction for whether the child initiates the text-life connection or if the teacher initiates the connection. If the child initiates a text-life connection, the teacher must use a question to ask for more information, or offer a comment that extends the child's utterance by adding additional information (e.g., a fact, an example, another idea) in order to receive this code. Thus, if a child initiates a text-life connection and the teacher merely provides a comment that acknowledges their response (e.g., T: <em>Oh my goodness</em>) or repeats/rephrases the child's message, this does not meet the criteria for the code; (3) If a teacher initiates a text-life connection, she must directly reference a personal connection from her life, the lives of students, or to other books or cultural products (e.g., movies, TV) that are directly experienced by the teacher or children; (4) Another characteristic that informs this code is the difference between actual/personal connections and hypothetical statements; hypothetical statements do not receive this code. An actual/personal connection is required for this code, not whether the teacher uses “we/us/you/your,” which can obviously be used in either a hypothetical, (e.g., not a text-life connection = T: <em>You all have feelings</em>) or actual connection (3b text-life connection = T: <em>I am feeling xx</em>; T: <em>I have felt xx before</em>; When do you feel xx?); (5) If the teacher encourages children to dramatize (3a) this is not sufficient for a text-to-life connection unless it links to actual personal experiences; (6) This code co-occurs with other codes often; if a text-life connection includes a literal label/description of a noun/action embedded within the utterance AND the noun/action is perceptually present on the current page mark the appropriate literal code (e.g., T: <em>Do tomatoes grow at your house?</em> + tomato plant depicted in illustration = 1b + 3b).</td>
<td></td>
</tr>
</tbody>
</table>
1. **Text-to-Life** relates teacher or student(s)’ previous/current/future episodes, possessions, or preferences to story concepts, including inter-textual connections to other books or cultural products.

- *T:* It says Violet’s (character) favorite color is purple and Madison’s (student) favorite is purple too.
- *T:* That’s like what happened at our classroom science center.
- *T:* Your name starts with A too, Amy.
- *T:* We have an alphabet strip in our classroom too.
- *T:* You did some planting yesterday.
- *T:* We’ll see pumpkins when we go to the farm on our field trip. (Note it would not be a text-life connection if T referred to a hypothetical future event like this - *T:* We would see pumpkins if we went to the farm on a as this phrasing is hypothetical.)
- *T:* Who’s seen a dandelion before?
- *T:* Does anyone have a bike like this?
- *T:* Who likes soup? (Note: links to personal preferences)
- *T:* Who has brown eyes like this character? (Note: links to personal characteristics)
- *(C: I have a backpack.)* In response to C’s utterance, *T:* You do have a backpack like this character, but your backpack is a Sponge Bob backpack.
- *T:* This reminds me of *The Snowy Day* because it is winter in this book too.
- *T:* This reminds me of the other book we read about penguins.
- *T:* I have seen a boa constrictor like this on *Animal Planet.*
<table>
<thead>
<tr>
<th>3c.</th>
<th>Teacher encourages children to <strong>pretend or to represent an action/event/state/feeling/etc.</strong> depicted in the text.</th>
</tr>
</thead>
</table>

**Note(s):**
1. Regardless of the number of children who respond and/or participate, the code is still marked when the teacher encourages dramatization, imitation, or pretend play/talk.
2. For the coding of Imitation, if the teacher uses gestures to imitate portions of the text without explicitly encouraging the students to follow her lead, this is not coded here, but may be considered in the Dramatic Reading rating scale;
3. **The teacher can initiate dramatizing through directives or requests to dramatize/imitate or the teacher can comment on child-initiated dramatizing to receive this code;** but, if children spontaneously dramatize/imitate/pretend this alone is **not** sufficient for this code – the teacher must respond with an explicit encouragement of the behavior;
4. **For Pretend Talk, teachers often use the first person form when they are acting as a character and this may inform when to mark this code;**
5. This code often co-occurs with other codes (e.g., *T: Oh my goodness what big lions you are!* = 3c and 1c).

**Example(s):**

1. **Dramatize** occurs when the teacher’s comments or requests encourage children to represent emotions/actions of animals, characters, or events in text.
   - *T: Show me a ferocious and scary face.* (also code 2b judges scary and 3e emotion)
   - *T: Make the chimpanzee’s sound.* (also code 1c describe noun – possessive)
   - *T: Can you act out what happened in the beginning of the story?*
   - *T: You can really open your jaws as wide as the lion.*
   - *T: He’s so angry he just wants to do like this (teacher stomps on floor).*

2. **Pretend Talk** occurs when children are encouraged to pretend to talk or interact with characters in text or when teacher pretends to be a character in the text.
   - *T: Say hello to Mr. Hippo.*
| 3c. Dramatize/ Pretend/Imitate cont’d | • T: Get quiet so the crocodile doesn’t come and chomp our heads off.  
• T speaks in 1st person as if she is the dump truck character in *I Stink!* T: No, I have plenty of gas.  
• T speaks in 1st person as if she is the character in *In the Small, Small Pond.* T: I like to play at the pond.  

3. **Imitate** occurs when children are encouraged to imitate/repeat actions in text  
• Teacher imitates shivering. T: Let’s shiver like the boy in the snow.  
• T: Turn your neck like the giraffe is turning his neck.  
• T: Put your arms up like a letter Y. |


Teacher follows the topic of child’s spontaneous initiation with a contingent verbal response that continues the child’s topic or the teacher gives child an opportunity to repeat/clarify their spontaneous initiation, thus acknowledging the child’s contribution by giving the child the “floor” to speak.

Note(s): (1) A child must spontaneously initiate a verbal comment/question for this code to be considered. Child responses to teacher questions are generally not considered for this code. It is the spontaneity of the child’s input that drives this code because the child’s topic can provide a new topic or can still be logically or tangentially related to the previous topic; (2) This is only coded if the teacher’s response immediately follows the child’s utterance, or the teacher response immediately follow the teacher’s own brief acknowledgement or repetition of the child’s new topic initiation (e.g., C: *We went to the zoo and saw giraffes*. T: *You remembered!* T: *And do you also remember seeing the lions and bears at the zoo, too?*); (3) A series of multiple teacher utterances related to the C’s new topic do not all receive this code – only the initial, contingent response is coded. (4) If the teacher respectfully explains that the child’s topic can be continued later (e.g., during another time of school day), then mark this code; (5) The teacher must provide more than a vague 1-2 word verbal acknowledgement (e.g., *Uh huh, Yeah, Okay, Nice, Thank you, Oh my goodness*) to demonstrate that she is following the child’s lead; (6) The teacher must do more than repeat the child’s utterance; thus a recast/expansion/extension or question are sufficient if it followed a spontaneous child utterance.

Example(s):
1. Teacher uses comments/questions that focus on or continue a child’s topic of spontaneous initiation.
   - *Teacher responds verbally with recast, expansion, extension, or asks for more information about the child’s initiation.*
   - *Teacher respectfully responds to child’s topical lead, by explaining that they can talk about this at a later time.*
3e. Emotion Modeling

Teacher uses feeling words to discuss characters’ feelings, to highlight emotion words in the text, or to model her/his own emotive responses to text.

Note(s): (1) This code is applied to any emotion/feeling word used by the teacher; however, this code excludes other psychological and physiological states (e.g., pain, hunger, sleep) or internal states (e.g., references to perception, cognition, preferences, moral judgment, etc.). A list of key words that are always coded is provided below; (2) Some STAR texts (e.g., *The Way I Feel*) contain emotion vocabulary – only code extratextual talk containing emotion words; (3) This code can be applied to anthropomorphic characters or objects; thus, **if a teacher humanizes a nonhuman character or object by assigning it an emotion, this code is marked**; (4) Liking something/someone (*T: I like this book; T: He likes honey*) is not an example of emotion; (5) This code can NOT include teacher uses of comments/questions that include his/her emotions that are not related to the text/story (e.g., *T: It is sad when kick your neighbor. Or T: It makes Ms. Murphy happy when you listen so nicely.*).

Example(s):
1. Teacher uses comments/questions that include feeling words related to or contained in the text.
   - *T: Why do you think Henry is sad?*
   - *T: How does Mudge feel?*
   - *T: Look at that word “excited.”* (highlighting a printed emotion word is appropriate for this code)
   - *T: It looks like he’s embarrassed and that’s why he put the bag over his head.*
2. Teacher uses comments/questions that include her/his own emotive responses to text.
   - *Does anyone else feel sad when we get to this page?*
   - *T: That lion is scary!*
   - *T: I feel anxious for Arthur because he might not make the bus.*

**Key words** (or any derivative of the word):
3e. Emotion Modeling cont’d

- Feeling, emotion
- Discrete emotions: happy (sample synonyms = joyful, bliss, delight, jolly), fear, anger (sample synonyms = mad, upset, furious, enraged), sad, love, hatred, etc.
- Emotion blends: sorry, embarrassed, annoyed, frustrated, proud, shame, disappointed, disturbed, excited, anxious, shy, thankful, appreciation, envy, security, nervousness, stress, relaxed, silly, etc.
- General hedonic tone: feel bad, feel good, etc.
### (4) Print/Phonological Skills

The *Print/Phonological Skills* construct examines the extent to which the teacher includes verbal (questions, directives, comments) references to print. Additionally, phonological references to the sounds of language (i.e., rhyme, alliteration) are examined within this construct.

[Note: Print/Phonological skills codes may co-occur with comprehension-related codes (constructs 1-3). For example, a single utterance such as *T: Aren’t the letters in “happy” beautiful?* should be coded for both a print code (Words/Letters) and a comprehension code (Judgment/Evaluation/Inference).]

<table>
<thead>
<tr>
<th>Codes</th>
<th>Definition</th>
<th>Specific Coding Notes &amp; Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a. Book and Print Conventions</td>
<td>Teacher discusses <strong>how books are manipulated and/or how print is organized.</strong></td>
<td><strong>Note(s):</strong> (1) Key words and phrases for this code are shown in italicized, bold font below; <strong>utterances with key words for 4a always receive this code;</strong> (2) This code includes <strong>explicit references to</strong> the role of the <strong>title/name</strong> of the story, role of the <strong>author or illustrator, book parts, book manipulation, book orientation, print directionality, punctuation, genres</strong> (i.e., narrative, information, fiction, nonfiction, poetry, biography), <strong>how to read</strong> a book, <strong>metalinguistic concept of reading</strong> (the <em>why</em> of reading a book), and print in illustrations; (3) <strong>Page</strong> is <em>not</em> a stand-alone key word. It must be <strong>turn/open/flip + page</strong> for manipulation, book description/part + page (e.g., dedication page; first/last page; title page; bottom/top of page; next page), or <strong>read + page;</strong> (4) <strong>Exclude utterances that do not include explicit information on how to handle a book or how to read.</strong> For example, these utterances are <strong>not</strong> explicit: <em>T: Which direction do I go in?</em> (missing “read” + directional words) <em>T: The tomatoes are at the bottom.</em> (missing bottom + of the “page”) <em>T: Let’s read</em> (missing which part will read or how/why read); (5) If a teacher explains who the book was “written by,” this may be coded for author if it is an <strong>extratextual utterance</strong>; however, if the cover of the text already says “Written by xx,” the teacher is then considered to be reading the text (i.e., not extratextual talk) and this could <strong>not</strong> be coded as discussing book and print conventions; (6) Print or book conventions must be referenced for this</td>
</tr>
<tr>
<td>Code</td>
<td>Book and Print Conventions cont’d</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------</td>
<td></td>
</tr>
<tr>
<td>4a.</td>
<td>code; references to phonology are not included in 4a.</td>
<td></td>
</tr>
</tbody>
</table>

**Example(s):**

   - *T:* *I am going to start reading here at this line and continue reading until I come down to this next line.*
   - *T:* See that *exclamation mark*?
   - *T:* Let’s look at the *next page.*
   - *T:* The *author* writes the words and the illustrator draws the pictures.
   - *T:* Look at how the print goes from left to right.
   - *T:* This *book was written by* Giles Andreae and David Wojtowycz did the pictures.
   - *T:* This *story is called/named*...
   - *T:* The *end pages* show some of the animals that will be in this book.
   - *T:* This is the front of the book.
   - *T:* What is this part of the book called? (points to spine)
   - *T:* Let’s *open our book.*
   - **Key Words:** *title, author, illustrator, cover, spine, title page, dedication page, read from front to back, start reading here, read + book part, read + book/story, read from left to right, read from top to bottom, read + directionality, book + upside down/backwards*

2. Questions/requests/comments *explicitly* reference the metalinguistic concept of reading by using the key word “read” to discuss:
   - Things you *do* when you read
     - *T:* First you have to choose a book to *read.*
     - *T:* What is the first thing I do when I want to *read* a story?
<table>
<thead>
<tr>
<th>4a. Book and Print Conventions cont’d</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T:</strong> I have to <strong>read</strong> the words to understand the story.</td>
<td></td>
</tr>
<tr>
<td>• Discussion about the role and function of print and books for sharing information</td>
<td></td>
</tr>
<tr>
<td>• <strong>T:</strong> We <strong>read</strong> books to learn new and important information we can use.</td>
<td></td>
</tr>
<tr>
<td>• <strong>T:</strong> Tell me some of the things we do when we <strong>read</strong>.</td>
<td></td>
</tr>
<tr>
<td>• <strong>Key Words:</strong> “<strong>read</strong>” + function of print/books; “<strong>read</strong>” + how/why we read; “<strong>read</strong>” + things we do when we read</td>
<td></td>
</tr>
</tbody>
</table>
| 4b. Letter Sounds | Teacher discusses **letter sounds in text.** | **Note(s):** (1) This includes talk about single letter sounds (e.g., /m/, /l/) or talk about **digraphs** (i.e., letter pairs that make a single sound – *sh, ch, th, wh*) or letter **blends** (e.g., *sl, br, fl, st, etc.*); (2) If the teacher is speaking/reading and extends an initial letter sound (e.g., *zzzebra*), this is not coded because it is not explicit discussion of a letter sound; (3) Print must be referenced for this code; references to phonology are not included. Therefore, **if a teacher only says a sound without verbally referencing print or pointing to/tracking print, this is strictly phonological and does not receive this code** (e.g., *T: What is it? It’s a /rrrr/___? = 4d*). If the teacher had said, *T: It starts with a letter that goes /rrrrrr/*, then print has been referenced and this code is marked. If the teacher points to a printed **word** and says, *T: This is a /rrrr/___? C: Raccoon*, then print has been referenced and this code is marked. 

**Example(s):**

1. **Questions/requests/comments** highlights letters with their corresponding sound(s).
   - *T: Which letter on this page says /ttt/?*
   - *T: Show me the letter on this page that makes the /rrrr/ sound?*
   - *T: This is the letter M and it says /mmm/.*
   - *T: These letters say /sh/.*
| 4c. Letters or Words | Teacher discusses letters or words in text. | **Note(s):** (1) Key words and phrases for this code are shown in italicized, bold font below; **key words for 4c always receive this code**; (2) Print must be referenced for this code including verbal statements about letters or words or nonverbal pointing to/tracking print; references to phonology are not included in 4c; (3) **Do not mark this code when teacher uses the keyword “word” for vocabulary purposes** (e.g., *T: Who remembers what this word means?*) or for recite/repeat (e.g., *T: Can you say the word ‘jealous?’*) or for evaluations of words that do not simultaneously include pointing to/tracking print (e.g., *T: ‘Whirligig’ is a confusing word*); (4) The form “this says…” + a specific reference to one or two words, or one or two letters within the text does receive this code (e.g., *T: This says “Burp.”*); (5) If a teacher’s explicit, letter-related utterance only adds one or two extratextual word(s) to the printed text and one word is a letter you may consider this extratextual talk and mark this code (e.g., The printed words are “apple cores” – *T: A for apple cores.*). This is the one appropriate exception to the general coding procedures for not coding insertions of 1-2 words described above because we are interested in measuring the types of talk about letters that often occurs in print-salient texts. **Example(s):**

1. **Questions/requests/comments** that highlight words or letters.
   - *T: Let’s count how many words are in the title.*
   - *T: There’s an S just like your name.*
   - *T: Is that an uppercase T?*
   - *T: This says “the” and this says “cool.”*
   - *T: There are no words on this page, only pictures.*
   - *T: This is the word “tadpoles”.* |
4c. Letters or Words cont’d

- *T*: A, for “apple cores.”
- *T*: The author writes the words in the story.
- *T*: Remember that in between words are spaces.
- **Key words**: letter, letter names, alphabet, ABCs, uppercase, lowercase, capital, word, “this says…” + a specific reference to 1-2 words, or 1-2 letters within the text.
| 4d. Phonology/ Sounds of Language | Teacher highlights the sounds of language, including rhyme, alliteration, syllables, or phonemes. |

**Note(s):** (1) **Key words for code 4d always receive this code:** these key words are shown in italicized, bold font below; (2) **Only phonology or the sounds of language can be referenced for this code; references to print/any grapheme or book conventions are not included;** (3) Do not code references to animal sounds or onomatopoeia; (4) Do not code instances of the teacher pausing to allow students to fill in a rhyming word of the text (e.g., *T: Brenda Heath brushes her ___C: teeth!*), but you can make a note of this behavior in the positive comments section on the final page of your score sheet.

**Example(s):**

1. **Questions/requests/comments** require students to **listen** to the sounds of language without discussing print.

   - *T: Listen for the /rrr/ sound.* (Notice print was not referenced in this utterance, it is strictly auditory or phonological.)
   - *T: All of the things on this page start with /rrr/.* (reference to alliteration)
   - *T: This animal’s name starts with a /mmm/ sound.* (reference to alliteration)
   - *T: Listen to how long the word “dinosaur” is…it has three syllables.*
   - *T: Let’s clap the syllables.*
   - *T: Let’s count how many chunks in this word.* (reference to syllables)
   - *T: What rhymes with “wade?”*
   - *T: The word “sh-ir-t” has three sounds.* (3 phonemes)
   - *T: “Pack” and “stack” are rhyming words.* (Do not code 4c for “word” as this is a phonological reference to that keyword)
   - *T: /ddd/* (letter sound only with no reference to print)
   - **Key words:** rhyme, syllable, alliteration, phoneme
### (5) Session Climate

The Session Climate construct examines the extent to which the teacher demonstrates enjoyment of reading and respect towards the children during reading. This construct also examines the extent to which the teacher invites children to manipulate the book during book reading.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Definition</th>
<th>Specific Coding Notes and Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>5a. Models Respect</td>
<td>Teacher models respectful language or respectfully responds to a student’s signal.</td>
<td><strong>Note(s):</strong> (1) In regards to modeling respectful language, key words for code 5a are shown in bold, italicized font below. Any time a teacher uses a key word, mark this code; (2) When coding respectfully responding to a child’s signal, only mark the teacher’s first responding utterance that addresses the signal to avoid overcoding a series of teacher utterances that may/may not have stemmed directly from the child’s signal; (3) When responding to a child’s signal, the teacher does not have to correct/remedy the situation in full to receive this code because we are not coding the quality of the teacher’s response (e.g. C: I can’t see the letters. T: I know, the letters are small in this book. Notice it is sufficient if the teacher does not change something to help the child see the letters better; it is the acknowledgement that drives this code.); (4) If a teacher provides scaffolding for a student who needs help answering a question, this is not considered for this code because it reflects instructional support more than modeling respect; (5) If the teacher uses any disrespectful behaviors do not code the interval; (6) If a teacher requests that a student raise their hand, wait their turn, or use another behavior to appropriately share their message, this is not disrespect and the interval may still be coded if other aspects of this code are present; (7) Because even a single instance of sarcasm or disrespect may dramatically influence the quality of the book-reading context, the presence of disrespect (e.g., T rolls eyes, T brushes child away with hand, T uses sarcasm, T humiliates/disgraces/puts down a student, T cuts off a student without allowing them to complete their message) should be noted in the comments section. Example(s):</td>
</tr>
</tbody>
</table>
1. Questions/Requests/Comments that include/model respectful or polite language (i.e., these key words).

- **Key Words: Please…; Thank you; You’re welcome.**

2. Teacher demonstrates respectful behavior to students when they signal (verbally or nonverbally) that they want/need the teacher’s attention. Respectful responses are warm/sensitive and prompt, meaning the teacher does not allow the situation to escalate before responding and/or does not ignore the child’s signal.

- Teacher responds warmly and promptly when a student calls the teacher’s name.
  - C: Ms. DiBella! Ms. DiBella! T: Yes, Mark. What do you want to tell us?
  - C: Teacher, look! T: What do you see?

- Teacher responds warmly and promptly to a student who is upset/tired/hungry/crying/demonstrating physical need/etc.
  - C: Is it over? T: I know you’re getting tired. We will finish the story soon.
  - C: Child is crying. T: I can see you’re upset. What’s wrong?

- Teacher responds warmly and promptly to a student who says they need something (e.g., wants shoe tied, can’t see the book, pulls on T’s sleeve, etc.)
  - T: You’re putting your foot on me. That must mean you want your shoe tied.
  - C: I can’t see. T: Okay, I will turn the book around your way.

- Teacher responds respectfully when a child points out a teacher mistake/error/omission. Examples:
  - T: I was wrong. You (the child) are right.
  - C: That’s not a girl, it’s a boy. T: I’m sorry. It is a boy.
  - C: Ms. Smith, you forgot to tell the title! T: You’re right. The title is xxx.
  - C: That’s an apple, not a tomato. T: I see why you’d think that, but I can tell it is a tomato because it is growing on a vine. (Note: The code is marked even though
the teacher did not actually make a mistake because she responded respectfully)

- C: No. It says “tadpoles wriggle.”
| 5b. Positive Feedback | Teacher offers students positive feedback on their input. | Note(s): (1) Positive expressions of praise and acknowledgment should be coded, including brief 1- or 2-word comments (i.e., That’s right; Good; Good job; Nice; Very good; Excellent; Yes; Fantastic; Yay); however, vague acknowledgements do not receive this code (i.e., Uh huh, Mmm huh, Okay, Yeah, Yep, Alright); (2) A positive valence is essential to this code because positive feedback must include a positive/affirming/optimistic word or phrase (e.g., I like, Good thinking, Great work, Right, Correct, Nice, etc.); (3) Positive feedback can be offered for behavioral or instructional topics; (4) Sometimes teachers use the word “right” to check for understanding rather than as positive feedback. Only mark this code if the purpose is for positive feedback, and do not mark for check for understanding/seeking agreement (e.g., Do not code 5b for: T: Is that right? T: He’s really stinky, right?). Example(s): 1. Teacher comments indicate positive feedback/praise for student(s) verbal or nonverbal behaviors. • T: *I like* how you are looking at the details. • T: *I can tell* you are doing some **good thinking**. • T: *Good job* reading with me. • T: That was a **smart** way to solve the problem. • T: Your prediction was **correct**. • T: *I love* how you are paying attention while I read. • T: That’s **right**. • T: You’re **absolutely right**! • T: Fantastic! |
### 5c. Children touch book

<table>
<thead>
<tr>
<th>Teacher invites/encourages students to touch or manipulate book.</th>
</tr>
</thead>
</table>

**Note(s):** (1) If a child touches the book on his/her own without a teacher prompt, do **not** code; (2) The teacher must explicitly encourage touching the book, but **invitations to touch the book** can take three general forms: (a) the teacher invites children to touch the book by simply asking a question or making a request that could be answered by touching the book, and then positioning the book so the child can touch it, (b) the teacher asks a question or makes a request that includes a verbal directive/invitation to touch the book (e.g., *T: Point to one letter*), or (c) the teacher can use more direct encouragements such as holding the child’s hand/finger as they touch the book.

**Example(s):**

1. Questions/Requests/Comments that invite or encourage students to touch or manipulate parts of the book.

   - *T: Please point to the giraffe.*
   - *T: Show me where I start reading on this page.*
   - *T: Can you find the author’s name on the cover?*
   - *T: Please turn the page for me.*
   - *T: Show me how to hold the book so that I can read it.*
The following table defines the optional global rating scales that coders mark after viewing of the entire book-reading session.

### Global Rating Scales

These optional 5-point rating scales examine teacher behaviors that represent an overall style throughout the reading. Assign the codes 1 (low quality), 2 (moderate low), 3 (moderate quality), 4 (moderate high) or 5 (high quality) that best represents the description of the teacher’s reading delivery and behavior management approaches. These rating scales are described as “optional” because our pilot work indicated that it can be difficult for coders to reliably differentiate these global styles for research purposes; however, the scales may be useful in clinical or professional development situations, thus we left them within the manual.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Definition</th>
<th>Specific Coding Notes</th>
</tr>
</thead>
</table>
| Reading Delivery Rating Scale | The extent to which the teacher **modulates the volume and pitch of her voice** in an extreme fashion or **uses gestures to mirror the story** and create a dramatic storytelling experience **while reading** the printed text. | **Note(s):** (1) For this rating, only consider the extent to which these examples occurred during reading; do not consider dramatic voicing during extratextual talk; (2) Select the code 1 through 3 that best represents the description of the teacher’s reading delivery style and mark the final page of the score sheet; (3) If assigning the rating of 1 for miscues, the reading must be extremely disfluent and miscues generally occur often (not just one or two errors). Minor miscues or changes to function words (e.g., the, my, for) cannot be considered for this code; only miscues of important content words (e.g., nouns, verbs, modifiers, etc.) are considered; (4) An alternate continuum format for this rating scale is presented in the table below to emphasize the ways scores 1 to 5 are represented along a continuum.  
① **Low quality** reading delivery with overall monotone/dull voice or frequent miscues AND none or only 1 instance of effective dramatic reading behaviors observed.  
**Low Quality Reading Example(s):**  
1. Teacher typically uses a monotone voice during reading and generally does not use dramatic... |
| Reading Delivery Rating Scale cont’d | Reading techniques (e.g., changes voicing to represent characters or changes rate), OR 2. Teacher has so many miscues during reading that it severely weakens the story or makes important aspects of the story difficult to understand.  
- T reads the title of the book Mouse Mess  
  T: This book is called Moose Mess.  
② Moderate Low  
③ Moderate quality reading delivery with intermittent dramatic reading style.  
**Intermittent Dramatic Reading Example(s):**  
1. Observed a few instances (e.g., 2-3 instances) of any of these dramatic reading techniques during reading, but did not consistently employ dramatic reading techniques:  
   - Intermittent reading with different voicing to represent characters or emphasize key words/information, OR  
   - Intermittent changes in tone or rate for dramatic effect, OR  
   - Intermittent use of gestures and body movements to convey meaning of story.  
④ Moderate High  
⑤ High quality reading delivery with overall dramatic reading style AND several instances (e.g. 4+ instances) instances of one or more of these examples during read aloud.  
**Dramatic Reading Example(s):**  
1. Reads with different voices to represent characters or sounds in a narrative genre text, AND/OR  
   - T uses: Squeaky voice for mouse  
   - T uses: Deep voice for bear  
   - T: The wheels go [in a low tone] “Thud!”  
2. Modulates voice to emphasize key words or important information in a informational genre text, AND/OR |
3. **Prominent or extreme changes** in tone or rate of her voice for dramatic effect, AND/OR
   - *T whispers:* “Good night.”
   - *T shouts:* “SURPRISE!”
   - *T reads very quickly* as characters run.

4. **Uses gestures/body movements and facial expressions** to convey meaning of story
   - *T raises arms and pretends to soar, imitating birds.*
   - *T runs in place imitating characters.*
   - *T laughs with hands on belly imitating Santa.*
   - *T pretends to cry imitating character.*
<table>
<thead>
<tr>
<th>Low quality reading delivery</th>
<th>Moderate Low delivery</th>
<th>Moderate quality reading delivery</th>
<th>High quality reading delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several instances of these ineffective behaviors observed:</td>
<td>2 to 3 instances of any of these behaviors intermittently observed, but not consistently dramatic reading:</td>
<td>Several instances (4+) of any of these behaviors consistently observed:</td>
<td></td>
</tr>
<tr>
<td>• Consistently uses a dull, monotone tone of voice, or</td>
<td>• If narrative text, teacher modulates voice to represent story characters or sounds, and/or</td>
<td>• If narrative text, teacher modulates voice to represent story characters or sounds, and/or</td>
<td></td>
</tr>
<tr>
<td>• Several instances of miscues that make overall reading extremely disfluent, thereby impeding understanding, AND</td>
<td>• If informational text, teacher modulates voice to emphasize key words or important information, and/or</td>
<td>• If informational text, teacher modulates voice to emphasize key words or important information, and/or</td>
<td></td>
</tr>
<tr>
<td>None or only 1 instance of these effective behaviors observed:</td>
<td>• Changes the rate or pace reading for dramatic effect, and/or</td>
<td>Changes the rate or pace reading for dramatic effect, and/or</td>
<td></td>
</tr>
<tr>
<td>• If narrative text, teacher modulates voice to represent story characters or sounds, and/or</td>
<td>• Uses gestures and facial expressions to convey dramatic effect or meaning of story</td>
<td>Uses gestures and facial expressions to convey dramatic effect or meaning of story</td>
<td></td>
</tr>
<tr>
<td>• If informational text, teacher modulates voice to emphasize key words or important information, and/or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Changes the rate or pace reading for dramatic effect, and/or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Uses gestures and facial expressions to convey dramatic effect or meaning of story</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Behavior Management Rating Scale | Note(s): (1) Select the code 1 through 5 that best represents the description of the teacher’s behavior management style during this book-reading session; (2) Only consider the lead teacher for this code; do not consider the quality of teacher assistants or other adults’ behavior management approaches in this rating; (3) If no instances of behavior management or discipline observed during the entire reading session, mark a score of 5 for high quality; (4) A single instance of anger results in a score of 1 for low quality; (5) An alternate continuum format for this rating scale is presented in the table below to emphasize the ways scores 1 to 5 are represented along a continuum.  
① Low quality behavior management approaches typically used, OR overall reactive to student misbehavior instead of trying to prevent misbehavior, OR T uses frustrated/angry tone.  
**Low Quality Behavior Management Example(s):**  
1. **Reacts** to misbehavior with “no/don’t/stop” directives/commands, or any directives that seek obedience without explanation.  
   - T: No talking.  
   - T: Don’t touch her.  
   - T: How many times have I told you to stop that?  
   - T: We don’t sit on our knees.  
   - T: Stop playing.  
   - T: Sit down.  
   - T: Move your foot into your square/spot. (there is no explanation for why the child should move their foot although their foot was not harming/disturbing anyone else)  
2. Uses vague redirections to misbehavior that do not clearly communicate expectations/rules (i.e., do clearly not tell the child what to stop or how to change their behavior).  
   - T: Hey. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The extent to which the lead teacher uses effective approaches for encouraging positive student behavior or redirecting misbehavior during the book-reading session.</td>
<td>---</td>
</tr>
</tbody>
</table>
### Behavior Management Rating Scale cont’d

- **T:** *Excuse me!*
- **T:** *Stop.*
- **T:** *That’s enough.*

3. Stops misbehavior with **threats or bribes/tangible incentives** (this excludes behavior management systems, such as staying on “green” = positive behavior).

- **T** threatens: *You won’t get any juice at snack unless you sit down.*
- **T** bribes: *I am looking for boys and girls who are sitting nicely because they’ll get stickers.*

4. Teacher **ignores** misbehavior (overly lax), or allows it to escalate without redirecting, or becomes **angry/disrespectful**.

- **T:** Notices child is rolling around at back of carpet, but ignores this.
- **T:** Allows student to start wandering around the classroom and then other children stand up and want to leave story time too.
- **T** uses a frustrated tone: *I can’t believe how you’re acting!*

#### Moderate Low

**③ Moderate quality behavior management includes any combination** of less effective (①) and effective (③) behavior management approaches.

**Moderate Quality Behavior Management Example(s):**

See examples above and below that represent opposite ends of these continuums. If the teacher uses **any combination** of behavior management approaches from opposite ends of the continuum this represent moderate quality for this code.

- Reactive with “no/don’t/stop” ↔ Proactive statements or praise
- Vague redirections ↔ Redirect with clear expectations
- Redirections seek obedience without explanation/reasoning ↔ Redirections encourage self-regulation with reasoning/explanation
| Behavior Management Rating Scale cont’d | • Threats/punishment, bribes ↔ Target a positive behavior or offers positive choices  
• Ignores misbehavior/overly lax ↔ Responds to misbehavior before it escalates |

| 🥚 Moderate High |

| 🥚 High quality behavior management approaches consistently used OR overall prevents misbehavior through praise, reminders, or other proactive methods. |

**High Quality Behavior Management Example(s):**

1. Uses proactive statements to prevent misbehavior before it occurs.
   - *T:* During the story you should stay sitting on your nametag.
   - *T:* I can see you are getting tired; pay attention to the last few pages.
   - *T:* Dan, you should move this way so that Ana can see the book.

2. Uses praise or praising a peer to encourage positive behavior.
   - *T:* I like how Olivia is sitting with her bottom on the ground and her legs crossed.
   - *T:* Kristin is staying in her spot so well. I wonder who else can sit in their spot...

3. Redirects misbehavior by clearly communicating expectations.
   - *T:* Remember, we use quiet voices.
   - *T:* Our rule is use gentle hands, so you can use your words when you want your neighbor to move instead of hitting him.
   - *T:* I expect you all to listen and look at the book when I am reading.
   - *T:* Sit on your bottom.
   - *T:* Sit with your legs crossed.

4. Redirects misbehavior by providing explanation for “why” child should use a positive behavior.
| Behavior Management Rating Scale cont’d | • *T*: When you want Suzy to move over, do not push her because you can hurt her or make her feel sad.  
• *T*: I know you want to eat snack now, but this is story time.  
5. Redirects misbehavior by targeting a positive behavior encouraging a **positive choice for the child.**  
• *T*: Let’s listen to Johnny’s story. (positive behavior = listen)  
• *T*: Look at this picture! (positive behavior = look at text)  
• *T*: Let’s get real quiet so that the crocodile doesn’t eat us. (positive behavior + link to text)  
• *T*: Jim, you can keep your hands in your lap or you can fold your arms. (choice)  
• *T*: You can sit down by yourself or Ms. Wright (the TA) will help you sit down. (choice) |
<table>
<thead>
<tr>
<th>Low quality behavior management</th>
<th>Moderate Low behavior management</th>
<th>Moderate quality behavior management</th>
<th>Moderate High behavior management</th>
<th>High quality behavior management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>Always</strong> employs <strong>ineffective approaches to redirect misbehavior</strong>, such as <strong>vague directives</strong>, which do clearly not tell the child what to stop or how to change their behavior, or approaches that do not successfully stop misbehavior, OR</td>
<td>• When redirects misbehavior, <strong>sometimes uses effective approaches</strong>, but sometimes uses ineffective approaches, OR</td>
<td>• Consistently uses <strong>effective approaches to redirect</strong> misbehavior, including, but not limited to, eye-contact, touch, gesture, tone of voice, dropping student’s name, giving special jobs during reading, using praise, targeting a positive choice, or targeted requests about reading, OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• <strong>Always</strong> reacts with <strong>directives/commands that seek obedience without explanation</strong>, OR</td>
<td>• When <strong>uses directives/commands sometimes provides an explanation</strong>, but sometimes seek obedience without explanation, OR</td>
<td>• When <strong>uses directives/commands consistently provides an explanation</strong> that seeks obedience through reasoning, OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Commands <strong>usually phrased negatively</strong> with no/don’t/stop, OR</td>
<td>• Phrasing of directives includes a <strong>combination of positive or negative statements</strong>; alternatively, phrasing of some directives are <strong>vague directives</strong> that do clearly not tell child what to stop or how to change their behavior, OR</td>
<td>• Commands <strong>often phrased positively</strong> with statements of what the child can/should do (some negatively stated commands acceptable if used with explanation/reasoning), OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Teacher is <strong>overly-lax and ignores misbehaviors</strong> until they escalate, OR</td>
<td>• <strong>Sometimes responds to misbehavior before it escalates</strong>, but other times misbehavior escalates before teacher reacts, and/or teacher picks his/her battles and ignores some minor behaviors that are not harmful or distracting, OR</td>
<td>• <strong>Consistently responds to misbehavior before it escalates</strong>, and/or teacher picks his/her battles and ignores some behaviors that are not harmful or distracting, AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Teacher relies on forceful control through <strong>punishment or reward power to coerce students</strong> (e.g., punishment = threats of timeout, loss of privileges; rewards = tangible incentives, granting of privileges other than a special job during reading), OR</td>
<td>• <strong>Sometimes uses threats/punishment or tangible rewards/granting privileges (other than a special job during reading)</strong>, but also uses other effective approaches AND</td>
<td>• <strong>No instances of threats</strong> or loss of privileges; no instances of using tangible rewards or granting of privileges other than a special job during reading, AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Addresses misbehavior with a single instance or more of <strong>frustration/anger</strong> or other negative approaches including <strong>sarcasm or disrespect</strong>.</td>
<td>• No frustration/anger/sarcasm/disrespect observed.</td>
<td>• No frustration/anger or negative approaches observed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Comments Section

The following table lists examples of the types of behaviors coders should mark or write comments about in the Comments Section.

**Guidelines: Comments Section**

The Comments Section of the score sheet is designed to provide a space for open-ended comments on the book-reading session. If coders observe noteworthy, remarkable, or extreme behaviors that do not match a code these behaviors can be recorded in the Comments Section. Notes can be continued on the back page of the score sheet if more space is needed (please note on the front page when comments continue to the back).

This section will not be used for achieving reliability on the SABR.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Definition</th>
<th>Specific Coding Notes and Examples</th>
</tr>
</thead>
</table>
| Positive Notes/Comments | Teacher is observed using behaviors the coder considers positive or beneficial for students. OR Students are observed displaying noteworthy positive behaviors. | **Note(s)**: (1) Coders are encouraged to note the following positive behaviors; however, this section is open-ended and is not limited to these behaviors; (2) These notes are not considered for becoming a reliable SABR coder; these notes will be used to identify important trends across reading sessions that are not captured by the interval coding system. **Example(s):** 1. Teacher uses **unusual or excellent instructional techniques.**  
  - T discusses math concepts during reading (e.g., measurement, shapes, counting, numbers, time, money, addition, subtraction, dividing/sharing, etc.). *T: These hippos are shorter than the giraffes.*  
  - T uses a variety of learning modalities, such as kinesthetic learning through “skywriting.” *T: Let’s make a letter Z in the air like this. Straight across, slant down, and straight across. Good job.*  
  - Teacher uses a song to teach a story-related concept. *T: Let’s sing our song about what the author and illustrator’s jobs are.*  
  - Teacher encourages students to analyze visual aspects of the text/the artistic... |

71
composition of the text, which is not commonly addressed. *T: I think the illustrator chose to put zebra stripes on the end pages because their favorite animal is a zebra.*

- Teacher discusses the author’s craft (i.e., the care the author takes in constructing the text) or specific information about the author’s other words/interests/life. *T: We’ve been studying Cynthia Rylant and do you remember how she loves animals? I bet that is part of why she writes so many stories about this dog, Mudge. Look at how she tells you lots of details about how Mudge looks.*

- Teacher uses story extension activities. *T: We’re going to make our own vegetable soup like this book. Let’s name these vegetables and talk about how we are going to cut them.*

2. Teacher uses noteworthy or effective methods for providing social or emotional support during reading.

- T notices a student’s signal and responds warmly and promptly while identifying the student’s emotional state: *T: I can see you’re feeling sad right now because your neighbor is touching you.*

- T uses explanation to help students understand why a behavior is not a good choice. *T: When you sit on your knees then your friends behind you can’t see. So, please sit on your bottom to show your respect for everyone in our classroom community.*

- T provided opportunities for students to discuss/identify their personal characteristics (e.g., hair color, eye color, gender) or preferences (e.g., classroom activities they prefer, foods they prefer, etc.). *T: Do you like to eat zucchini squash? T: Kathy does look like the character in this book because they both have long brown hair.*

3. Teacher uses interesting, effective behavior management techniques.

- Teacher manages behavior by encouraging pretend play with the text. *T: We should get very quiet so that crocodile doesn’t come over and chomp our heads off!*
### Negative Notes/Comments

Teacher is observed using behaviors the coder considers negative or harmful for students. OR Students are observed displaying extreme negative behaviors.

### Note(s):
(1) Coders are encouraged to note the following negative behaviors; however, this section is open-ended and is not limited to these behaviors.

### Example(s):
1. Teacher relies on **extreme or less effective instructional techniques**.
   - Teacher only allows children to speak during call and response exercises: *T: Say mail carrier. C: Mail carrier. T: Good. Now say, he drives a mail truck. C: He drives...*
2. Teacher creates **negative or unsupportive social or emotional climate**, such as sarcasm or disrespect.
   - T rolls eyes at student.
   - T brushes child away with hand.
   - T uses sarcasm or humiliates/disgraces/puts down a student.
   - T cuts off a student without allowing them to complete their message.
3. Teacher uses **negative or less effective management strategies** to handle student misbehavior.
   - Teacher yells at students.
   - Teacher uses harsh language to manage student behavior. *T: I told you to shut up!*
   - Teacher displays a negative affect including irritability (as indicated by an annoyed tone of voice/rolling eyes/sigh loudly) or anger.
   - T is physically intrusive (e.g., gets in child’s face to discipline).
4. T is overly controlling of children’s movement or behavior.
   - T is rigid in processes students can use to talk during book reading, even if students’ talk is appropriately related to book reading.
   - T does not permit any student talk.
| Negative Notes/Comments cont’d | T is inflexible in allowing students to shift or move during book reading, even if it does not disrupt the book-reading session or other students.  
5. *Children* are observed displaying these extreme types of student misbehavior.  
  - Running or rolling around on the floor.  
  - Hitting other students.  
  - Playing with toys/objects during reading that are not story related.  
  - Biting other students, etc. |
1. The SABR focuses on teacher’s extratextual talk/behaviors during book reading.
   • Teacher’s short extratextual utterances (i.e., 1-2 word utterances) are typically coded; however, if a teacher is in the process of reading the texts and inserts words this is considered adapting the text and is not coded as extratextual talk. Only insertions of 3 words or more are considered extratextual talk.

2. Coders must have a copy of the text with them during coding to understand what is/is not perceptually present and to record page numbers.

3. Before starting, coders must provide book-reading session information at the top of the score sheet (e.g., teacher ID, coder ID, etc.).

4. Coding begins at the start of the video (regardless of whether there is camera setup or other behaviors that are not codable).
   • If text-related discussion does not begin at the moment the video recording starts coders should note the start time of the book-reading session on page 1 and use this to calculation duration if the start time is not the same as the start of the video.

5. Coding ends when the book-reading session ends (i.e., conversation is not related to the story and/or the book is no longer an object of attention/in view of the children).

6. Coders are only required to view the video one time, but coders are allowed to pause as often as needed and are allowed to view the video two times if necessary.

7. At the end of each 15-second interval, coders record any behaviors of interest and record the page numbers the teacher displayed/read aloud during the interval.
• The SABR codes are not mutually exclusive; you will assign more than one code to a variety of single teacher utterances.

8. If a behavior occurs near or across an interval boundary, code only the interval in which the behavior was completed.

• If a teacher abandons an utterance or an utterance is inaudible, typically it cannot be coded because coders cannot infer codes about where they think a teacher was going with part of an utterance.

• If an utterance is partially inaudible coders should only code if they can accurately deduce enough of the utterance to code accurately without inference.

9. Coders mark the global rating scales that best describes the teacher’s reading style and behavior management approach at the end of the reading session.

10. Coders record remarkable or extreme observations in the Notes/Comments section on the last page. Suggested notes are provided in the SABR manual.

11. Coders must refer to the SABR manual every time they code (even when they have become familiar with the instrument) to maintain reliability.

12. STAR coders do not need to score the SABR by hand because data will be entered into a database to calculate Total and Sum Scores.

13. Coders must provide the duration of the book-reading session (i.e., start of video recording to end of session as defined above).

14. Coders must demonstrate reliability to master codes before they begin coding and will be required to complete additional trainings to maintain reliability.

15. Remember, SABR codes are not exhaustive. The types of codes listed in the table below are some examples of utterances that receive no code:
16. When considering the *Instructional Support* codes, keep in mind how the literal an inferential levels of demand inform coding.

- Teacher’s talk places different levels of demand on students: (a) **Literal** talk is *close* to the material the child is perceiving; but (b) **Inferential** talk is *removed* from the material the child is perceiving.
  - Some codes deal only with talk at the literal level (1a, 1b, 1c, 3b)
  - Other codes deal only with the inferential level (2a, 2b, 2c, 2d, 1d)

- The **timing of talk** (i.e., whether talk occurs before information is given by reading a page aloud) can influence whether talk is literal or inferential:
  - For example, before reading a page, the statement “*It is winter*” is an inference (code 2b). But, after reading a page, the statement “*It is winter*” is a verified fact and describes an event/episode (code 1a.)
o When the text explicitly states a fact that can be verified with observable data (e.g.,
time of year), then a teacher’s utterance(s) regarding these facts are not considered an
inference because she has read that section of the text aloud; however, if she has not
read the observable information aloud, then it is an inference to assume a
state/episode from an illustration. (Do not consider whether it is the first reading of
the text.)

• As stated, whether a topic is perceptually available (i.e., literal) or non-perceptual (i.e.,
inferential) can influence coding.

o Inferential Codes/Topics: Some topics will always be non-perceptual regardless of
whether or not they are explicitly stated in the text or whether or not she’s read the
words aloud. These are generally based on belief/opinion/view:

  ▪ Feelings (e.g., sad, happy, thankful, love, scared, hunger, pain)
  ▪ Personal characteristics/personality (e.g., clever, smart)
  ▪ Appropriateness (e.g., outrageous, messy, that’s wrong)
  ▪ Merit/rank (e.g., the best/worst, terrible/shocking, amazing/magnificent)
  ▪ Character’s point of view (e.g., he thinks..., he wants..., he prefers, he’s
dreaming of...)

o Literal Codes/Topics: Other topics may become perceptually available when
the text is read aloud and they are explicitly stated in the text. These are
generally things that can be verified or backed up with evidence:

  ▪ Time may not be perceptually available until after the text is read aloud
    (e.g., time of day/year, season)
- **Gender** may become clear after reading character names or gender-specific pronouns in the text. *(In many cases gender is clear (e.g., character in dress we can assume it is a girl, but in others instances, gender is not always clear from the illustrations.)*

- **Physiological states** may become clear when the text is read aloud *(e.g., healthiness, disease, ab/normal body temperature, sleep, wakefulness, ab/normal heart rate)*

17. If coders encounter situations that are not addressed in the manual, consult another reliable SABR coder or one of the authors to resolve the discrepancy.
SABR Scoring Procedures

Procedures for Interval Scoring

Project STAR coders do not need to calculate scores by hand – scoring will be completed after raw data is entered in a database to avoid errors. When the coder has recorded all codable behaviors for the before, during, and after reading extratextual talk according to the definitions stated above, interval codes should be summed following these steps:

(a) Calculate the sums for the four Instructional Support constructs by adding together the rows relevant to each construct at the far right column of pages 1-4:

(1) Language Development Tot = 1a + 1b + 1c + 1d + 1e,

(2) Abstract Thinking Tot = 2a + 2b + 2c + 2d,

(3) Elaborations Tot = 3a + 3b + 3c + 3d + 3e, and

(4) Print/Phonological Skills Tot = 4a + 4b + 4c + 4d.

(b) Calculate the sums for the three Book-Reading Context constructs by adding together the rows relevant to each construct at the far right column of page of page 5:

(5) Session Climate Tot = 5a + 5b + 5c.
RELIABILITY TRAINING FOR THE SABR

1. After studying the SABR manual and the nine SABR video training modules, obtain 3 blank copies of the score sheet.

2. Code the three teacher book-reading sessions found on the DVD labeled Practice Set A. These practice sessions do not count towards your reliability. The practice DVD is labeled with the following teacher numbers. (FYI-The first four digits designate a particular teacher, and the last two digits designate a particular book being read.)

   **Practice Set A DVDs**

   202107, 201610, 204104

3. When you are finished coding the videos on the Practice Set A DVD, compare your practice codings with the master-coded practice sheets. Your Project Director has a copy of the master codes. The master-coded sheets have detailed explanations of why each construct was given a particular score that you can review for any disagreements.

   **Calculate your agreement with the Master Coder:**

   - The percentage number of agreements of observed behaviors per interval must be calculated. Divide the number of agreements by the total number of possible behaviors (21 possible per interval). Multiply by 100.
For example, if the coder had two disagreements in an Instructional Support interval this would mean that 19 agreements were achieved. This makes the reliability for the interval: \((19 ÷ 21) \times 100 = 90\%\).

Once reliability for each interval is calculated, an overall reliability score across all intervals for that video should be calculated. The coder is aiming for 85% or above reliability for each practice DVD (e.g., a mean of 85% across 15 intervals in a 7-minute, 30-second book-reading session)

<table>
<thead>
<tr>
<th># Disagreements</th>
<th>% Agreement for interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>95</td>
</tr>
<tr>
<td>2</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>86</td>
</tr>
<tr>
<td>4</td>
<td>81</td>
</tr>
<tr>
<td>5</td>
<td>76</td>
</tr>
<tr>
<td>6</td>
<td>71</td>
</tr>
<tr>
<td>7</td>
<td>66</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

4. If further practice is needed, a second set of practice videos is available. Contact your Project Director for details.

5. When you feel comfortable with your practice coding, obtain 5 copies of the SABR Coding Worksheet provided for you in the training materials. You will then code the five reliability videos. The reliability DVDs are included in the manual and are labeled Reliability DVD #1/Set A and Reliability DVD #2/Set B. The DVD is labeled with the following numbers:
Reliability Set A DVD #1
201909, 203305, 204208

Reliability Set A DVD #2
201712, 201806

It is recommended that you code #201806 first as this transcript contains explicit rationales for most master codes. It is also recommended that you code #204208 last as it is quite long and this teacher’s utterance boundaries are more difficult to parse than other teachers.

(Practice Set B includes: 205312, 206412, 206912, 205908, 206805
Reliability Set B includes: 207912, 208905, 202808, 204205, 204305)

8. After you have finished coding all five of the videos on the reliability DVDs, have a Master Coder compare your worksheet with the master-coded forms.

⭐ Criteria for becoming a reliable coder:

To become reliable in SABR coding, coders must score a set of FIVE master-coded (consensus-scored) DVDs and must have a mean reliability score of 85% across the DVDs. Additionally, no intervals can have more than 4 disagreements.

Use the agreement calculators below to calculate the percent agreement for each 15-second interval. Then, calculate the average agreement across all intervals for the given book-reading session.
9. If your score is less than 85% across the three transcripts, meet with a Master Coder who will then provide you with instruction and more videos to score until you meet the 85% criteria.

10. It is important to code on a regular basis to check your reliability to the system. A schedule will be provided as to when these meetings occur.
Appendix A

Sample SABR Score Sheet

It is recommended to use the pdf file on the shared drive containing a full-size score sheet.
| Score Form | Time | Comments Section-Factors Affecting Reading Efficiency
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GLOBAL RATING SCALES**

- **Reading Ability**
  - Comprehension strategies
  - Language development

- **Attention and Memory**
  - Sustained attention
  - Working memory

- **Visual and Auditory Perception**
  - Visual perception
  - Auditory perception

- **Processing Speed**
  - Rapid naming
  - Response inhibition

**Comments Section—Negatives**

- Sensory and behavioral factors
  - Sensory difficulties
  - Behavioral issues

- Environmental factors
  - Home environment
  - School environment

- Other factors
  - Medical conditions
  - Developmental delays
Appendix B

Tutorial for Identifying Utterance Boundaries

The SABR defines an utterance as a “complete thought.” It is essential that coders have a clear understanding of what constitutes an utterance. A brief tutorial on identifying utterances within a stream of speech follows.

Here is an example of one teacher turn that includes five consecutive utterances:

"Yep, that’s a word!"

“And now, it’s Johnny’s turn to find a word.”

"Johnny, look for the word ‘Rain.’"

“Rain starts with the letter R.”

"Johnny, see if you can find the word starting with an R.”

In this example, the teacher has produced a series of five consecutive utterances, with each utterance corresponding to a single complete thought.

Not all teacher turns are this simple to break into utterances because in spoken language utterances often run together without the clear boundaries we see for written language (e.g., periods, exclamation points, and question marks). Thus, coders must tune into pauses as well as intonational and syntactical information to determine when an utterance is complete. The following list describes how we identify an utterance from within a stream of speech:

1. The end of an utterance is indicated by an intonation change (rising or falling intonation contour) and/or pause. Here is an example of how a coder uses intonation and pauses to identify the boundaries between utterances. This is one long teacher turn:
“Can you find the seed in this picture and what will help you is to look for the brown thing flying through the air...the wind might be blowing the seed can you find it?”

Using pauses and intonation contours as the guide, the above example is divided as follows into four separate utterances (utterance boundaries are marked with //):

“Can you find the seed in this picture? (rising intonation) // And what will help you is to look for the brown thing flying through the air...(pause) // The wind might be blowing the seed...(intonation changes)// Can you find it?”

2. **Grammatical sentences** are typically coded as a single utterance. There are four types of grammatical sentences.

- Simple sentence “I am going to point to this letter.”
- Compound sentence “I am going to point to this letter, and I want you to point to the letter with me.”
- Complex sentence “I am going to point to this letter when you point to the letter.
- Compound complex sentence “I am going to point to this letter and I want you Johnny, who is so smart, to point to the letter with me.”

Each of these four types of sentences would be identified as a single utterance, with the following caveat that applies to compound sentences and compound complex sentences. Sometimes, when speakers produce these sentence types, they may produce a long pause within the boundaries of the sentence. If there is a long pause, the two (or more) clauses of the sentence can be identified as separate utterances.

Thus, if the teacher says, “I am going to point to this letter and I want you to point to
the letter with me,” and there is a long pause before the “and,” this would be two utterances.

Sometimes, teachers produce run-on sentences in which they string together many grammatical sentences. These are divided into a series of utterances by identifying where grammatical sentences end. Here is an example:

“Where do you think Arthur is going remember he said he was afraid of that house?”

When producing this stream of speech, the teacher never paused or used intonation at the boundary between the two grammatical sentences; however, we can place an utterance boundary within this run-on sentence as shown:

“Where do you think Arthur is going? // Remember he said he was afraid of that house.”

These additional guidelines can assist coders in identifying utterance boundaries:

- Although pauses signify the end of utterance with a complete thought, dependent clauses should not be separated from the rest of the utterance, even if a speaker pauses within the utterance.

- When speakers use a “run on” style with many conjunctions, segment independent clauses after one conjunction; there can never be more than two independent clauses in one utterance.

  - Note how this rule informs utterance boundaries when a teacher says an utterance such as this with no pauses: “We went to the zoo and we fed giraffes // and we had a picnic.”

- “Filler” words (e.g., um, eh, ah, er) do not indicate an utterance boundary.
3. **A group of words that does not comprise a complete sentence**, such as noun or prepositional phrases, **may be considered a complete utterance if** it is followed by a significant pause preceded by rising or falling intonation contours, as in this example:

In here…you think the owl will fit in the mitten too? Gosh, that is a lot of animals! Four animals…”

The teacher begins with a prepositional phrase (“In here”) that is one utterance. While it is not a complete sentence, it is followed by a pause preceded by a rising contour. Later in this teacher-turn, the teacher uses a noun phrase with a modifier (“Four animals”) that is also one utterance. While this is not a complete sentence, it is followed by a significant pause. This teacher-turn is divided into four utterances as follows:

“In here...// you think the owl will fit in the mitten too? // Gosh, that is a lot of animals! // Four animals…”

4. **Abandoned Utterance**

Coders should also know that **if a teacher is interrupted** in the midst of an utterance – either by a verbal interruption from a child or adult or some other cause (e.g., intercom announcement) – do not code this utterance. It is considered “abandoned.” For instance:

Teacher: “You’re right. The vegetable soup does …” [abandoned utterance: do not score]

Student: (while the teacher begins saying, “Vegetable soup does…” the child interrupts)

“Ms. Kirkley, I have a red scooter.”
*The abandoned utterance should not be coded. Identifying utterances is essential for reliable coding. The training PowerPoint will give you opportunities to practice identifying utterances using book-reading videos.
### Appendix C

**STAR Text Specific Notes**

This table includes notes specific to STAR texts are included to make coders aware of text features that may influence coding.

<table>
<thead>
<tr>
<th>Week of Study</th>
<th>Title, Genre</th>
<th>Notes by SABR Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><em>My First Day of School</em>, Narrative</td>
<td>• 4a: This book contains interesting print features/print in illustrations (speech bubbles).</td>
</tr>
<tr>
<td>2</td>
<td><em>There’s a Dragon at My School</em>, Narrative</td>
<td>• 6c: Children may be invited to touch this book often because it is a flip book.</td>
</tr>
<tr>
<td>3</td>
<td><em>I Like it When...</em>, Narrative</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td><em>The Dandelion Seed</em>, Narrative</td>
<td>• 1b: Noun label/locate may be coded often because the dandelion seed can sometimes be difficult to find in the illustrations.</td>
</tr>
<tr>
<td>5</td>
<td><em>Down by the Cool of the Pool</em>, Narrative</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td><em>“More, More, More,” said the Baby</em>, Narrative</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><em>Jamboree Day</em>, Narrative</td>
<td>• 4d: This is a rhyming book, so teachers may talk about words that sound alike/rhyme.</td>
</tr>
<tr>
<td>8</td>
<td><em>Rumble in the Jungle</em>, Narrative</td>
<td>• 4a: This book contains interesting print features/print in illustrations (visible sound).</td>
</tr>
<tr>
<td>9</td>
<td><em>David Gets in Trouble</em>, Narrative</td>
<td>• 4d: This is a rhyming book, so teachers may talk about words that sound alike/rhyme.</td>
</tr>
<tr>
<td>10</td>
<td><em>The Way I Feel</em>, Informational</td>
<td>• 2b: If the teacher says an utterance that is just a standalone feeling word (e.g., T: <em>Scared</em>), do not assume she is reading the header – code as you normally would.</td>
</tr>
<tr>
<td>11</td>
<td><em>Spot Bakes a Cake</em>, Narrative</td>
<td>• 4a: This book contains interesting print features (font styles match the emotions).</td>
</tr>
<tr>
<td>12</td>
<td><em>We’re Going on a Bear Hunt</em>, Narrative</td>
<td>• 4a: This book contains interesting print features/print in illustrations (environmental print).</td>
</tr>
<tr>
<td>13</td>
<td><em>Dear Mr. Blueberry</em>, Narrative</td>
<td>• 6c: Children may be invited to touch this book often because it is a flip book.</td>
</tr>
<tr>
<td>14</td>
<td><em>Growing Vegetable Soup</em>, Mixed</td>
<td>• <strong>Extratextual talk</strong>: Because each page contains few words, teachers may insert words around the text to make it more understandable. Remember this rule from p. 7 of the SABR manual: “If a teacher inserts 2 words or less of her/his own while reading a section of text as miscues or to adapt the text in a way that makes it more understandable for young children, do not consider this as extratextual talk.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 4a: This book contains interesting print features/print in illustrations (labels in</td>
</tr>
</tbody>
</table>
15  *Froggy Gets Dressed*, Narrative
   • **4a**: This book contains interesting print features/print in illustrations.

16  *I Stink!, Narrative*
   • **4a**: This book contains interesting print features/print in illustrations (environmental print, visible speech/sound, interesting font changes, etc.).
   • **4e**: When the teachers read the pages with the alphabet trash recipe, if they state the letter this is extratextual talk (e.g., T: *apple cores*) because the letter is not printed as a stand alone.

17  *Animal Action ABC*, Informational

18  *My Backpack*, Narrative
   • **4a**: This book contains interesting print features/print in illustrations (environmental print in illustrations; visible sounds).
   • **4d**: This is a rhyming book, so teachers may talk about words that sound alike/rhyme.

19  *Baghead*, Narrative

20  *Somebody and the Three Blairs*, Narrative

21  *To Market, To Market*, Narrative
   • **4d**: This is a rhyming book, so teachers may talk about words that sound alike/rhyme.

22  *Hey, Little Ant*, Narrative
   • **4a**: This book contains interesting print features/print in illustrations (visible sound, environmental print).

23  *Mouse Mess*, Narrative
   • **4a**: This book contains interesting print features/print in illustrations (visible sound, environmental print).

24  *In the Small, Small Pond, Mixed*
   • **4a**: This book contains interesting print features (font orientation changes).
   • **4d**: This is a rhyming book, so teachers may talk about words that sound alike/rhyme.

25  *The Grumpy Morning*, Narrative

26  *The Noisy Airplane Ride*, Mixed
   • **4a**: This book contains interesting print features/print in illustrations (visible sound, environmental print).
   • **4d**: This is a rhyming book, so teachers may talk about words that sound alike/rhyme.

27  *How to Speak Moo!*, Narrative

28  *Never Spit on Your Shoes*, Narrative
   • **4a**: This book contains interesting print features/print in illustrations (speech bubbles).

29  *The Recess Queen*, Narrative

30  *Miss Bindergarten Gets Ready for Kindergarten*, Narrative
   • **4a**: This book contains interesting print features/print in illustrations (environmental print).
   • **4d**: This is a rhyming book, so teachers may talk about words that sound alike/rhyme.

---

*Cohort 1 read aloud this book during the given week. This book was replaced in the second year of the study because it was no longer in print*

*Cohort 2 read aloud this book during the given week*
Appendix D

Examples of Interesting, Print Salient Features (Code 4a.)

Changes of Font:
- **Change of Formatting:** when the formatting has been altered from a normal/regular font to bold, italics, underline, or all capitalized letters.
- **Change of Font Size:** change of font size (i.e., font is made larger or smaller).
- **Change of Orientation:** when the orientation of the text is changed. For example, a change from standard, horizontal text to setting the text at an angle is a change of orientation. Other changes in orientation include diagonal text, curved text, or text in arc shapes.
- **Change of Font Color:** when the font is printed in a different color. For example, the font is changed from a standard black to red for a word/letter.

Print in Illustrations:
- **Labels:** label within illustrations, figures, or photographs. Labels often occur with diagrams in informational text, and one diagram or illustration may have several labels.
- **Environmental Print:** This is any time an object depicted in the illustration has a label, word, or letter on it. Environmental print often occurs on everyday objects, such as a box labeled "Toys" or a bus labeled "School Bus."
- **Visible Sound:** sound printed in illustrations, such as when a character or object has a sound written nearby. For example, if a snake has a /sss/ near his mouth, or a television remote control has "Click" beside it these are instances of visible sound.
- **Visible Speech:** speech in illustrations, such as when a character has words or speech nearby indicating they are speaking. This includes speech balloons/bubbles.