Promoting inference-making in a first grade classroom

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Abstract
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Promoting Inference-Making
in a First Grade Classroom

A Research Project
Submitted to the
Department of Curriculum and Instruction
In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education
UNIVERSITY OF NORTHERN IOWA

by
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June 1998
This Research Paper by: Susan E. Flater
Entitled: Promoting Inference-Making in a First Grade Classroom

has been approved as meeting the research project requirement for
the Degree of Master of Arts in Education.

7/6/78
7/6/78
7/6/78

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Abstract

School-age children throughout their life experiences make inferences. Teachers can offer instruction and modeling in inference-making and opportunities for children to make inferences. As a result, children can become accustomed to bringing their prior knowledge to reading experiences, thus extending their thinking-language abilities.
Many recent trends in the language arts can contribute to "developing a nation of readers," in particular, the focus on language as a process to create meaning. From involvement in the language processes, thinking-language abilities can be extended. Despite this view of reading, the results of the nationwide assessments conducted by the National Assessment of Educational Progress (NAEP), as mandated by the U.S. Congress, have reported that 75% of 4th graders and 70% of 8th graders cannot effectively "extend the ideas in text by making inferences, drawing conclusions, and making connections to their own experiences." (Williams, P., Reese, C., Campbell, J., Mazzeo, J., & Phillips, G., 1995, p. 4) By NAEP standards, scores such as these indicate that a majority of students are functioning below a proficient level of reading in the area of comprehension.

What Is Inference-Making?

Inference has been defined as meaning derived from evidence (Johnson & Johnson, 1988). Some view all reasoning as a form of inferring (Ripps in Winne, Graham, & Prock, 1993). All human beings infer from the time they are born. It is one way that they solve the mysteries in the world around them. Even babies make inferences. They note and examine similarities and differences and derive meaning from them. When a baby smiles back at someone who is smiling at them, they are inferring that the person who is
smiling is not someone to be afraid of or to cry about (Hansen & Pearson, 1983).

In reading, making an inference is using the text and the illustrations in combination with the reader's prior knowledge and experience to understand what the author meant when he/she wrote the passage. While engaged in the reading process, readers must pay attention to the clues in the text and illustrations and integrate them with what they already know (Johnson & Johnson, 1988). Readers of all ages need to approach the reading process in this way (Hansen, 1981).

Many different types of inferences are made by humans. In a recent study, Johnson, Johnson, Harms & Lettow (1997) categorized inferences made by readers in the following way:

1. Action: What is happening
2. Location: Where something is happening
3. Time: When something is happening
4. Characterization: What the character is like
5. Object: What something is
6. Category: What group something belongs to
7. Cause and Effect: Why something happened or what will happen
8. Problem/Solution: What is wrong or what will need to happen
9. Feeling/Attitude: How a character feels
10. Figurative Language: What association do these words have with the ultimate meaning

Since completing this study, these researchers have suggested that readers may also infer theme: the underlying meaning of the passage.

In nurturing children's inference-making abilities, their involvement in such higher level thinking-reading tasks needs to be examined. Hansen (1981) concludes from her research that children and adults have different inferring abilities. She also discusses previous studies that categorize these differences as either qualitative—children are not capable of drawing the same type of inferences as adults—or quantitative—children do not make as many inferences as adults. In Paris and Lindauer's study (1976), children were found to be capable of drawing inferences but lacked spontaneity in carrying out their tasks. Hansen (1981) suggests that children make fewer inferences than adults because they either lack the amount of prior knowledge that adults have or they lack the spontaneity to draw inferences. However, children are not incapable of drawing inferences.

Johnson and Johnson (1988) clarify the disagreement over whether readers make inferences while reading or while reflecting on what they have read. They believe that readers make inferences while reading and draw conclusions while reflecting on what they have read. For the purpose of this paper, the term "inference"
will refer to the ongoing reading process of combining textual and pictorial clues in a passage with the readers' prior knowledge and experience to gain meaning.

Making inferences is a continuous process. Readers have opportunities to make inferences several times in most passages. In a recent study conducted by Johnson et al., (1997), as many as 75 inferences were found in one quality picture book.

Why Are Children Having Difficulty Making Inferences?

According to the National Assessment of Educational Progress reports, students of all ages have difficulty making inferences while reading, at least to the extent that a standardized assessment such as the instrument used by NAEP is able to determine. As a first grade teacher, my own experience tells me that many students are not comprehending implicit meanings within texts. Why is this?

Young and poor readers may have difficulty inferring ideas while reading because they do not see the purpose of reading as creating meaning from the text. They seem to believe that word recognition or decoding is reading (Hansen & Hubbard, 1984; Wade, 1990).

Another reason offered for students' difficulties in inferring is that they do not have sufficient prior knowledge to comprehend the text. Everything that readers comprehend in a text is dependent on the prior knowledge that they bring to the text.
and the implicit questions they ask as they read (Smith, 1994). From the considerable study of the relationship between students' prior knowledge and comprehension, the conclusions support the development of background knowledge to improve comprehension (Tierney & Cunningham in Pearson, 1984; Wade, 1990).

Another roadblock to inferring is the over reliance on background information. In this situation, readers believe they comprehend a passage, but the meaning they have derived from the passage may not be what the author intended (Wade, 1990). In order to arrive at the authors' intended meaning, readers need to attend to relevant text clues and then combine them with what they already know (Johnson & Johnson, 1988). Also, the concepts represented by the vocabulary of the passage must be understood in order to make inferences (Johnson & Johnson, 1986; Trabasso, 1980).

Students can draw inferences, but they frequently are not asked to do so in the school setting (Paris & Lindauer, 1976). Students usually are taught to learn new information by remembering it rather than by relating it to something they already know (Hansen & Pearson, 1983). Hansen (1981) reports on a study done in 1972, by Guszak, in which it was found that teachers asked inferential, or interpretive, questions less than 20% of the time. Hansen & Hubbard (1984) conclude that perhaps students can not infer well on standardized tests because they
have not had enough practice inferring in their daily school lives. Also, they relate that teachers ask poor readers more literal comprehension questions and less inferential questions because the students have trouble answering inferential questions. It is my experience that teachers of young children often ask fewer inferential questions because they believe that young students will also have trouble answering inferential questions. Teachers mistakenly believe that young children only do literal thinking. Therefore, they may be hindering students' emerging thinking abilities because they do not give them an opportunity to engage in inference-making.

How Can Children's Inference-Making be Fostered?

Because many young readers have difficulty making inferences, the educator's role is to find ways in which children's comprehension abilities can be strengthened. A recent project undertaken by the National Reading Research Center indicates that highly effective teaching occurs in many primary classrooms. A critical factor in these classrooms was the integration of the instruction of explicit comprehension tasks with opportunities to read, write, and discuss texts (Wharton-McDonald, Rankin, Mistretta, Yokoi, & Ettenberger, 1997). In this study, the teachers reported engaging students in various types of reading experiences: shared reading, reading along with the teacher, silent reading, and rereading as well as
exposing them to various types of materials (outstanding children's literature). In selecting materials, the teachers were also mindful of the particular interests of the students. The teachers encouraged risk-taking strategies among their students while they read and provided them with opportunities to interact with others about their reading. Strategies for teaching comprehension—modeling, explanation, and mini-lessons—were also evident in the classrooms (Wharton-McDonald et al., 1997).

In her study of second graders' inference-making, Jane Hansen (1981) found that in one experimental group inference-making was improved when the children were given instruction in a prereading strategy that utilizes their previous experiences to aid them in predicting events in stories. A second experimental group in her study was provided with opportunities to answer questions requiring inference-making following their reading. Both of these groups performed better than the control group on comprehension questions and on standardized tests following the experiment. Another study (Winne et al., 1993) concluded that students who received explicit feedback about how to make inferences, such as encouragement, confirmation of the information they had drawn from the text, confirmation regarding their connection of textual information and their prior knowledge, and statements regarding the importance of the inference were able to correctly answer more inference-making
questions than students who received feedback that was more generalized.

Using a story map to promote first grade students' comprehension has also been found to be an effective strategy. First grade students were taught to look at the structure of a story by creating a story map, a graphic organizer that identifies the story elements, such as setting, characters, problem, and solution of the problem. These students were more adept at reporting the important ideas in a story; answering who, what, where, when, and why questions; and making connections with their prior experiences than students who had not received this instruction (Baumann & Bergeron, 1993). Guthrie (1996) found that strategy instruction, such as applying prior knowledge to text and generating inferences, is most effective when students have intrinsic purposes for learning rather than extrinsic motivation. When motivation occurs intrinsically, students regulate their own use of strategies, thus becoming more effective readers.

A four-step process for teaching inference-making is proposed by Johnson and Johnson (1988). They suggest that the teacher model inference-making by presenting a short passage and then showing students how textual clues are used to make inferences. The second step involves students analyzing a passage for clues that aid inference-making. Next, students are asked to apply what they have practiced by making inferences when shown a
passage one sentence at a time. Students have to confirm, reject, or modify their initial inference as more text is supplied. Lastly, students are asked to transfer the task of inference-making as they engage in other reading experiences.

A Project: How Can First Graders' Inference-Making Be Promoted?

Based on a review of professional literature, a program for engaging beginning readers in inference-making should include many aspects. First, beginning readers should be introduced to the concept of inference-making and the need for engaging in it. Teachers should model inference tasks and directly teach them to children through literature in read-aloud sessions and from other literature experiences, such as peers reading aloud with each other, reading big books together, and discussing stories listened to or read in a Listening/Reading Center. Secondly, strategies that enable students to see how inferences are made should be introduced and practiced. Developing a semantic map prior to reading has been found to be an effective strategy. Another strategy is noting clues found in the book (text and pictures), those found in one's head (knowledge and experience), and the inferences that result from these experiences (Johnson & Johnson, 1988). Practice that occurs daily is an essential part of the process. Since inference-making is a continuous process and is required so frequently in quality picture books, students can be presented with inference-making opportunities almost every
time they are read to or they read themselves (Johnson et al., 1997). Initially these opportunities should be presented and guided by the teacher. Ultimately, the goal should be for students to engage in transferring what they have experienced to their own reading. Frequently, teachers are concerned that children understand a text in a particular way and consequently, little attention is paid to the children's responses. Students need to be engaged in discussions about literature that allow them to enhance not only their understanding of text but their own life as well (Avery, 1993).

Teachers of beginning readers can provide much practice and application of inference-making. Such instructional practices presented on a regular basis should lead to proficient readers who score well on tests such as the National Assessment of Educational Progress (NAEP). Children need to learn to read in more ways than simply decoding and recalling facts. They need to experience literature by relating it to their personal experiences and then by extending its meaning through discussions in supportive reading communities.

For my first grade reading program, I have selected several themes across the curriculum that can be enhanced by presenting picture book experiences. These works contain opportunities for inference-making. I have made note of key inferences a reader would need to make in order to derive the author's intended
meaning from the text. The types of inference tasks were related
to the particular strengths of the works. For each theme, one of
the picture books was selected to develop into a teacher-directed
lesson on inference-making. The themes accompanied with the
annotated lists of picture books and their inference-making
potential along with the teacher-directed lessons are presented
in the next pages.

Themes, Related Picture Books, and Inference-Making Potential

Problem-Solving

York: Greenwillow.
Children determine what object an alphabet letter stands for. The
clues for these puzzles are illustrations of things as they were,
not as they are now.

Key Inference Possibility: **Object**—What object is being
described? (To use this book effectively, the right-hand page
must not be immediately shown to the children.)

Cambridge: Candlewick.
A granddaughter plans a way to make her grandmother’s work
environment more enjoyable. The lives of her grandmother and many
other people are changed by what she does.

Key Inference Possibility: **Characterization**—What do you know
about the characters? **Problem/Solution**—What should be done to
solve this problem?

Alarcon, K. B. (1997). *Louella Mae, She's Run Away*. R. Litzinger,
(Il.), New York: Holt.
A family is looking for Louella Mae on their farm. The ending is
a surprise.

Key Inference Possibility: **Location**—Where is the family hunting
for Louella Mae?
A young boy staying overnight for the first time must decide whether or not to take his teddy bear with him.

**Key Inference Possibility:** *Cause and Effect*—What will happen if Ira takes his teddy bear with him or if he leaves his teddy bear home?

Upon presenting the king with a roll that the king dislikes, the baker is given a challenge of creating a new roll with certain characteristics. The baker’s efforts result in the creation of the pretzel.

**Key Inference Possibility:** *Object*—What is the roll the baker creates?

**African American Culture**

A young African boy living in a village attempts to find a solution to the problem of baboons stealing the village bananas.

**Key Inference Possibility:** *Problem/Solution*—How will the boy keep the baboons from eating the bananas?

A young black girl is told by her classmates that she cannot play the part she wants to in the school play. What will Grace do?

**Key Inference Possibility:** *Characterization*—What will Grace do when she is faced with other people’s viewpoints of her wishes?

One of the first black girls to go to an all-white school faces the danger of people’s hatred with courage.

**Key Inference Possibility:** *Action*—What will happen to Ruby? *Characterization*—How will Ruby handle herself?

The author tells about his visit to his grandmother’s home each summer.
Key Inference Possibility: Time—Is this story happening now or in the past? How do you know?

Friendship

A young girl wants the new boy to stop bullying her. He yells demeaning remarks at her. The girl finds a way to stop him from bullying her.

Key Inference Possibility: Feeling/Attitude—How is Jaime feeling (at various points in the story)?

Two friends take turns staying overnight at each other’s house. Their families and lifestyles are different, but the two boys accept each other and ultimately learn to value their own lifestyles as well as each other’s.

Key Inference Possibility: Feeling/Attitude—How is Jerome feeling (at various points in the story)?

Three friends, tired of their life on a farm, set out to find adventure in the world. Their adventures lead them back to the farm.

Key Inference Possibility: Cause and Effect—What will happen to the friends and why?

A young boy is wary of his elderly neighbor, Miss Maggie. The two become friends when Nat comes to Miss Maggie’s aid.

Key Inference Possibility: Characterization—Tell about the main characters. Feeling/Attitude—How do they feel about one another?

Fall

A family of mice prepare for winter, all except Frederick. He appears to do nothing but says he is gathering supplies. Will his supplies help the family survive the winter?
Key Inference Possibility: Figurative Language--What meaning do Frederick’s words have in the story? An example is, "Now I send you the rays of the sun. Do you feel how their gold glow . . . ."

A grandfather tells his grandchildren about an accident that occurred when he was young. He smashed his sister’s pumpkin and replaced it without her knowing.

Key Inference Possibility: Figurative Language--What did Mama really mean when she said "Look at that. Would you look at that. Must have been all that rain. Right boys?"

The little old lady who is not afraid of anything goes for a walk. She sees and hears things that frighten her though she maintains she is not afraid of anything.

Key Inference Possibility: Object--What do the objects the little old lady sees and hears become?

A young girl describes her family’s apple picking experience.

Key Inference Possibility: Action--What happens at apple picking time?

*Memories*

A story about the memories of young girls who finally get to go into the room where their great aunt keeps things.

Key Inference Possibilities: Object--What will the girls find in the room? Cause and Effect--What will happen when the girls finally get in the room?

A boy and his grandfather create a memory box for a special but sad reason.
Key Inference Possibilities: **Cause and Effect**--What does Grandpa mean by "no matter what happens?" Why is the memory box so important?

A young boy helps an elderly woman find her memory after first learning from others what a "memory" is.

Key Inference Possibility: **Figurative Language**--What do the words the people use to describe a memory really have to do with what a memory is? For example, they say a memory is "something warm, something from long ago, something that makes you cry, something that makes you laugh," and "something as precious as gold."

**Imagination**

A young boy finds a red crayon that he believes is magic. His mother is thrilled that he has chosen to draw quietly but ends up reminding him, "not in the house."

Key Inference Possibility: **Category**--Besides being red, how were the objects Newton drew related? It will be essential that the children draw the inference that these objects and actions are imaginary.

Schaefer, C. L. (1996). *The Squiggle*. P. Morgan, (Il.), New York: Crown. A little girl lagging behind her class as they walk to the park finds a squiggle and uses her imagination to liven up the walk for herself, her teacher, and her classmates.

Key Inference Possibility: **Setting**--Where is this story happening? This point is important and can be inferred as children make predictions about what the squiggle might become.

A mysterious lump is found by several animals who do something to it. No one, the reader included, knows what it is until the end of the book.

Key Inference Possibility: **Object**--What is the lump?
Grandparents

A grandfather shares his memories with his grandchildren by performing his vaudeville act for them.

Key Inference Possibility: **Object**—What is a vaudeville stage?

A girl with her grandmother work every Wednesday evening on a surprise for her father's birthday. The entire family is surprised at Dad's gift. The reader will be too.

Key Inference Possibility: **Action**—What are the young girl and her grandmother doing?

A girl shares a story her grandfather has told her with her friend. The illustrations tell another story.

Key Inference Possibility: **Time**—When does this story take place?

A young child imagines the things that she can do with her grandfather when she is old.

Key Inference Possibility: **Category**—Are the actions in the story things that will occur when the child is old like her grandfather or are they things that she will do now as a child? Explain.

Planting Seeds

A lazy bear and a clever hare become partners in growing vegetables. The hare uses his cleverness to get the better end of the deal each time. In the end, the bear gains something too.

Key Inference Possibility: **Cause and Effect**—Did the bear or hare change the way they think and act? How? Why do you think that?

The people of the neighborhood have cleared an area for gardening. Marisol, a young girl, wants to plant like her neighbors. She finally finds a spot though it is an unlikely place. Her plant brings happiness to the whole neighborhood.

Key Inference Possibility: Cause and Effect--What causes Marisol to laugh and dance?

Concepcion’s grandmother always told her to keep a handful of seeds for planting. This advice provides a means of survival for Concepcion when forced to live on her own.

Key Inference Possibility: Problem/Solution--What will Concepcion do when faced with a variety of problems (e.g., Grandmother’s death, Concepcion’s arrival at the barrio, the barrio children’s suggestion that she steal, and her garden is trampled).

Neither Grampa or the young boy, Beanie, can plant corn because of their age. Since they cannot share the work, they share a story.

Key Inference Possibility: Category--What group of people do the actions in the story?

Fear

Young boys who spend a night in the barn are careful about expressing their fears. When they lose their flashlight, their fears come to a climax as a creature appears who brings comfort.

Key Inference Possibility: Cause and Effect--Do the children need to fear the creature coming toward them? Why or why not? Will the children continue to conceal their fears? Why do you think that?

Three young mice want to venture to the top of the stairs. The wise old mouse tries to change their mind but eventually allows them to go. They begin their trip quite bravely but become more fearful as they approach the top.
Key Inference Possibility: **Object**—What is at the top of the stairs?

A tiger travels through the jungle. As he realizes that the jungle animals see him as a beast, he returns to them to show them how he is like them.

Key Inference Possibility: **Feeling/Attitude**—How does the tiger feel about the other animals’ reaction to him?
**Characterization**—Tell about the tiger.

A young boy approaches a house of a woman whom the children fear in order to avoid being called a "scairdy cat." His actions save the woman’s life and change his attitude about her.

Key Inference Possibility: **Characterization**—Do the children need to fear Mrs. Oliver? Why or why not?

### Teacher-Directed Lessons to Promote Inference-Making

For the purpose of these lessons, most of the stories will be read aloud to the students for enjoyment. The stories will then be read aloud a second time, stopping within the text to ask questions focusing on potential inferences. Besides being asked to make inferences, students will also be asked to identify the clues that led them to their inference responses.

**Theme: Problem Solving**


To encourage children’s inference-making as they are involved in listening to this particular book, questions need to be asked during the first reading. Once the story is read, the children will know who Louella Mae is and where the characters
have looked for her. Young children will have difficulty putting
this knowledge aside in order to focus on inference-making.
Therefore, it will be necessary to involve the students in the
inference-making during the initial reading and then reread the
book for enjoyment.

The basic inference question will be the same throughout
the story. The goal of this lesson will be for the students to
use their prior knowledge, picture clues and the structure of the
story to infer where the family will look for Louella Mae. It
will also be important to have the children infer who Louella Mae
is.

1. Cover of the book - The characters are looking for Louella
   Mae. Who do you think Louella Mae might be? (Characterization;
   Object) Why do you think that?

2. Page 6 - Where do you think the characters will look next?
   (Location) Are there any clues in the picture or words that
   are helping you make your inference?

3. Now that you know where they looked for Louella, what were
   some of the clues we could have used?

4. Pages 8, 10, 13, 15-16, 18, 22, 27 - Repeat the same line of
   questioning.

5. End of the book - Do you still think Louella Mae is who you
   thought she was at the beginning of the story? If you have
   changed your mind, who do you think Louella is now?
   (Characterization; Object) What made you change your mind?

Theme: African American Culture

York: Scholastic.
1. Page 2 - How do you think Ruby feels about moving? (Feeling) What do you think her family's life will be like after they move? (Action)

2. Page 6 - What will happen to Ruby when she goes to an elementary school with all Caucasian, or white, children? (Cause and Effect)

3. Page 9 - What will happen to Ruby as she enters school? (Cause and Effect) How does Ruby handle being the only black child at this school? (Characterization)

4. Page 12 - What was Ruby thinking as she went to school each day? (Feeling/Attitude)

5. Page 13 - What kind of a girl would you say Ruby is? (Characterization) What kind of people would you say the parents of the children who attended this school are? (Characterization)

6. Page 14 - What is happening with Ruby and the adults who are standing in front of the school? (Action)

7. End of book - Could this story happen today? Why or why not? (Time; Cause and Effect)

Theme: Friendship


1. Page 1 - Why does Jerome like Robert? (Characterization)

2. Top of page 2 - Why would Jerome want Robert on his kickball team? (Characterization)

3. Page 3 - What are Jerome’s parents like? (Characterization)

4. Page 5 - Why can’t Jerome run hot water? (Problem/Solution)

5. Page 15 - Why didn’t Jerome answer Robert right away? (Feeling/Attitude)

6. Page 19 - How did Jerome feel after talking with his father? (Feeling/Attitude)

7. Page 20 - Why was Jerome so quiet? (Feeling/Attitude)
8. Page 27 - What did Robert think about sleeping in his pajamas? (Feeling/Attitude)

9. End of book - What had Jerome learned about himself and his family? (Characterization)

Theme: Fall


1. Page 1 - How do you pick apples? (Action)

2. Page 3, end of first sentence - Why does everyone have to help pick apples? (Cause and Effect)

3. Page 7, end of second sentence - What is the purpose of the purple ticket? (Object)

4. Page 10, end of second sentence - Why are the fingers cut out of the gloves? (Cause and Effect)

5. Page 12, end of first sentence - What happens when someone yells "Full?" (Cause and Effect)

6. Page 12, end of second paragraph - What does the half moon on the ticket mean? (Object)

7. Page 13, end of page - What is going to happen now? (Action)

8. Page 15, end of fifth sentence - What are Mama and Papa doing? (Action)

9. Page 19, end of page - How is the little girl feeling now? (Feeling)

10. Page 23, end of first sentence - Which child yelled out "Full?" (Characterization) How does this little girl feel? (Feeling)

11. Page 24, end of page - What will Anna do with the ticket with the half moon on it? (Action)

12. Page 29, end of page - How does Anna feel about picking apples? (Feeling) What kind of a person do you think Anna is? (Characterization)
Theme: Memories


1. Page 2 - How does Wilfrid feel about the old people who live next door to him? (Feeling)

2. Page 7, after first sentence - Why are Wilfrid’s parents talking about Miss Nancy? (Cause and Effect); after the second sentence - Why is Miss Nancy a "poor old thing?” (Cause and Effect)

3. Page 7, after sixth sentence - What is a memory? (Object)

4. Page 8, end of page - What do the words, "something warm," have to do with a memory? (Figurative Language)

5. Page 9 - What do the words, "something from long ago," have to do with the meaning of a memory? (Figurative Language)

6. Page 12 - What do the words, "something that makes you laugh," have to do with the meaning of a memory? (Figurative Language)

7. Page 13 - What do the words, "as precious as gold," have to do with the meaning of "memory?" (Figurative Language)

8. Page 21 - What kind of a person do you think Wilfrid is? (Characterization)

Theme: Imagination


The question in this lesson will always be the same: "What do you think the lump is?" The focus of this lesson will be the identification of clues in the pictures as well as the text that allows the inference to be refined. During the first reading of this book, the reading will end: "Then, to everyone’s surprise the grumpalump began to rise." The purpose for this procedure is
to keep the identity of the object unknown. Once the object is identified, the children will be less likely to focus on making inferences and simply state that they know what the lump is. It will be crucial to reread this story after the inference lesson for pure enjoyment.

1. Page 2 - What do you think the lump is? (Object) Is there anything in the picture that gives you a clue as to what the lump is?

2. Page 4 - What do you think the lump is? (Object) Have your ideas changed because of what the cat is doing?

3. Page 6 - What do you think the lump is? (Object) Are there any more clues in the picture to help you decide what the lump is?

4. Page 10 - What do you think the lump is? (Object) Are there any new clues? What are they?

5. Page 16 - What do you think the lump is? (Object) What clues do the actions of the gnu give you?

6. Page 18 - What do you think the lump is? (Object) What clues are given on this page?

7. Page 20 - What do you think the lump is? Have you changed your mind about the lump since the beginning of the story? What clues helped you change your mind?

Theme: Grandparents


The inference-making questions will need to be asked as the book is read for the first time.

1. Page 5, end of the first paragraph - What surprise is being planned for Dad's birthday? (Object or Action)

2. Page 5, end of the page - Who is speaking on this page? (Characterization)
3. Page 6, end of the page - Where does the family live? (Location)

4. Page 8, end of second paragraph - What is in Grandma's bag? (Object)

5. Page 11, third paragraph - Why is Grandma pretending she doesn't remember the father's birthday? (Characterization)

6. Page 12, end of the page - Why is the girl thinking about the surprise while she and Grandma are reading? (Characterization)

7. Page 15, end of the page - What does the girl mean when she says that Grandma is tricky? (Characterization)

8. Page 17, end of first paragraph - What might be making the bag so heavy? (Object)

9. Page 20, end of second paragraph - Why are the girl and her Grandma hiding the book bag behind the couch? (Cause and Effect)

10. Page 23, end of the page - What do you think the surprise is? (Object or Action)

11. Page 24, end of second paragraph - Why is everyone astonished when Grandma begins to read? (Cause and Effect)

12. Page 24, end of the page - Why is Grandma beaming? (Feeling)

13. End of book - How do you think the characters feel and why? (Feeling; Cause and Effect)

Theme: Planting Seeds


1. Page 2 - Why does Concepcion live with her grandmother? (Cause and Effect)

2. Page 5 - What will Concepcion do? (Problem/Solution)

3. Page 10, end of first paragraph - What is a barrio? (Object)

4. Page 13, middle of page - What do you know about the children Concepcion has met? (Characterization; Problem)
5. Page 13, end of page - What kind of a person was Concepcion? Why wouldn't she collect garbage or take things from the merchants? (Characterization)

6. Page 20, end of first paragraph - What have the children been doing? Why are the police hitting them? (Action; Cause and Effect)

7. Page 22, after the fifth sentence - What will Concepcion do now? (Problem/Solution)

8. Page 25, after the fifth sentence - What will Concepcion do now? (Problem/Solution)

9. End of book - How is Concepcion feeling now? (Feeling/Attitude)

Theme: Fear


To encourage inference-making, the questions need to be asked during the initial reading of this book.

1. Page 2, end of first sentence - What is meant by "here-again, gone-again eye?" (Figurative Language)

2. Page 2, end of the page - What do you think the boys will do as a result of Willie's comments? (Action; Cause and Effect)

3. Page 3, end of the page - Will Amos do as he is told? Why do you think that? What will happen if he does? What will happen if he doesn't? (Action; Cause and Effect)

4. Page 6 - How are the boys feeling? What makes you think that? (Feeling/Attitude)

5. Page 9 - Why does Willie say "Wanna go back?" (Cause and Effect)

6. Page 14 - What does "Ghosts and monsters lurked on every side" mean? (Figurative Language)
7. Page 20 - Did Mike really mean it when he said, "That's okay with me." What makes you believe that? Why do you think he said it? (Feeling/Attitude; Characterization)

8. Page 21, end of the first sentence - What made the "scurrying noises," the "chittering," and "skittering?" (Object)

9. Page 22, end of the page - What makes "a shivery, whiffling snort?" (Object)

10. Page 23 and 24 - What words would you use to describe the boys' feelings at this point in the story? What clues lead you to believe the boys feel this way? (Feeling/Attitude)

11. Page 25 - What is the "shadowy shape?" How do you know? (Object)

12. Page 28 - Do you believe the boys when they say they weren't scared? Why or why not? (Feeling/Attitude)

Conclusion

Inference-making is a task that is critical to the process of reading. Without making inferences, one cannot read or relate to the world in general. Teachers need to offer opportunities for students to make inferences as they read. These experiences can be offered in a variety of ways: modeling, providing direct instruction, and promoting engagement in inference-making through literature discussions. These discussions need to include the identification of clues that lead to making inferences.

Students of all ages can and must make inferences. First graders who are exposed to the task of inference-making and encouraged to engage in it soon begin to make inferences on their own and even notice when characters/motifs in books are making inferences. A prime example of this occurred during the reading
of *Seven Blind Mice* by Ed Young when students in my classroom stated, "Hey, the mice are making inferences about the elephant. They are using clues from what they have felt before and what they feel now to try to figure out what it is they are touching."

Children do not resist inference-making. In fact they enjoy engaging in it. Since I have put a greater emphasis on inference-making in my classroom, my first grade students anticipate making inferences. When I begin introducing a book that I plan to read aloud to my students, at least one student will ask, "Do we get to make inferences?"
Bibliography


