Explicit Instruction for Implicit Meaning:
Strategies for Teaching Inferential Reading Comprehension

The *No Child Left Behind* Act of 2001 promotes use of scientifically based research to provide high-quality reading instruction to help all students become successful readers. Comprehension is a key component of this literacy initiative; facility in literal, inferential, critical, and creative comprehension skills is critical to reading success and academic achievement in all content areas. This packet focuses on research-based strategies teachers may employ to improve students' inferential comprehension skills. Topics include the meaning of the term *inferential comprehension*, specific subskills necessary for making inferences, suggestions for teaching students to make inferences, and ideas for providing a variety of opportunities for students to practice the skill of inferential comprehension.

Introduction

Inferential comprehension is often described simply as the ability to *read between the lines*. It requires a reader to blend the literal content of a selection with prior knowledge, intuition, and imagination for conjecture or to make hypotheses. Barrett's Taxonomy of Reading Comprehension (1974) identifies the following eight subtasks that enable students to make inferences with facility.

- Inferring supporting details – guessing about additional facts the author could have included in the selection that would have made it more informative, interesting, or appealing
- Inferring the main idea – providing the main idea, general significance, theme, or moral that is not explicitly stated in the selection
- Inferring sequence – guessing what action or incident might have taken place between two explicitly stated actions or incidents or making hypotheses about what could happen next
- Inferring comparisons – inferring likenesses and differences in characters, times, or places
- Inferring cause-and-effect relationships – hypothesizing about the motives of characters and their interactions with others and with time and place
- Inferring character traits – hypothesizing about the nature of characters on the basis of explicit clues presented in the selection
- Predicting outcomes – guessing the outcome of a selection after reading an initial portion of it
- Inferring about figurative language – inferring literal meanings from the author's figurative use of language.

Stated differently, Keene and Zimmerman (1997) observed that when proficient readers infer, they:

- Draw conclusions from text

- Make reasonable predictions as they read, test and revise those predictions as they read further
- Create dynamic interpretations of text that are adapted as they continue to read
- Use the combination of background knowledge and explicitly stated information from the text to answer questions they have as they read
- Make connections between conclusions they draw and other beliefs or knowledge
- Make critical or analytical judgments about what they read

Proficient readers are better able to remember and apply what they have read, create new background knowledge for themselves, discriminate and critically analyze text and authors, and engage in conversation and/or other analytical responses to what they read.

Conversely, struggling readers have difficulty with some or all of these comprehension skills. Fortunately, the results of many studies associated with comprehension strategies (e.g., Lenz & Hughes, 1990; Scanlon, Deshler, & Shumaker, 1996; Shumaker, Deshler, Alley, Warner, & Denton, 1982) indicate that students with high-incidence disabilities can learn to mediate their comprehension of reading material through intensive, systematic, and explicit instruction in learning strategies.

Research conducted in the 1970s concluded that classroom teachers were spending very little time on the actual process of teaching reading comprehension. For example, Durkin (1978-1979) found that although teachers gave many workbook assignments and asked many questions about what students had read, these exercises usually assessed students' understanding rather than teaching them how to comprehend. In response to Durkin's findings, much subsequent research during the 1980s was devoted to discovering how to teach comprehension strategies directly. One widely researched model, *explicit instruction*, involves four phases:

- Teacher explanation and modeling of a strategy
- Guided practice during which teachers gradually give students more responsibility for task completion
- Independent practice accompanied by feedback
- Application of the strategy in real reading situations (Fielding & Pearson, 1994).

Indeed, as Pearson and Duke (2002) point out, "Comprehension improves when teachers provide explicit instruction in the use of comprehension strategies. Comprehension improves when teachers implement activities that support the understanding of the text that students will read in their classes"
(p. 247). The material that follows provides suggestions for introducing to students the concept of making inferences and showcases strategies for explicit instruction of inferential comprehension skills.

Correlation of Strategies to Barrett's Taxonomy of Reading Comprehension

Strategy	Introductory Teaching Activities	Inferring Supporting Details	Inferring Main Idea	Inferring Sequence	Inferring Comparisons	Inferring Cause/Effect Relationships	Inferring Character Traits	Predicting Outcomes	Inferring Figurative Language
What Is It?	■								
Cucumber Cues	■								
Backwards Words	■								
Think-Aloud	■							■	
Who's Who?	■								
QAR	■								
Local Fun and Games								■	
Cloze Procedure	■								
DRTA		■	■	■	■	■	■	■	■
Reciprocal Teaching			■					■	
Picture This!			■						
Simple Sentences			■						
Cartoon Commentary			■						
Sequencing Text				■					
Sequencing with Music				■					
Sequencing Directions				■					
Detective		■							
Justifying Answers		■							
Acting Out									■
Figure It Out!									■
Figurative Language Ads									■
Figurative Language Artwork									■
Graphic Organizers		■	■		■	■			
Open Mind							■		
Personality Traits							■		

What is It? (Adapted from Reading Workshop, n. d.)

1. Introduce an object with which students may be unfamiliar, for example, an apple corer. Ask them to infer the object's purpose.

2. After several guesses, introduce a second object with which the first object is used; for example in this case, an apple. Continue to ask students to make inferences about the purpose of the first object.

3. Show students how the first object is used with the second object – in other words, core the apple.

4. Ask students who correctly guessed the purpose of the first object (the corer) to explain how the introduction of the second object (the apple) helped them infer its purpose. Explain that using information they already know can help students grasp the meaning of information they do not know.

   Other suggested object pairs follow.

   - Show a nutcracker. Ask students to make an inference – for what is it used? After several guesses, introduce an unshelled nut.

   - Show an olive pitter. Ask students to make an inference – for what is it used? After several guesses, introduce a bowl of olives.

Cucumber Cues

1. Provide students with sentences in which one word has been replaced by the word *cucumber*. (The teacher may read each sentence to nonreaders.)

2. Ask students to write or say the sentences, changing *cucumber* to a word that makes better sense. Examples follow.

   A. I like to eat peanut cucumber.

   B. Clean your cucumber with a toothbrush.

   C. A dog has four cucumbers.

3. As students share their responses, ask them to identify words that gave them clues to the word they substituted. Ask students to relate the clue word to their background experiences and explain how this background information helped them find an appropriate substitute word.

Backwards Words

1. Provide students with sentences in which one word is spelled backwards.

2. Ask students to read or listen to each sentence, find the word that is spelled backwards, and write or say it correctly. Examples follow.

   A. You are my lap.
   B. The cat was a man.
   D. Look at the pam.
   E. Dad put sag in the car.

C. The meat is in a nap. F. Dogs are good step.

3. As students share their responses, have them identify words that gave them clues to the word that was spelled backwards. Ask students to relate the clue word to their background experiences and explain how this background information helped them find the backwards word.

Think-Aloud (Adapted from Readance, Bean, & Baldwin, 1989)

The teacher reads aloud to students and verbalizes the thinking he or she is doing in order to make inferences that help the teacher comprehend the text. Specifically:

1. Locate the evidence (stated facts) in the text from which one can reason.

2. Think out loud, showing students how to put together prior knowledge and the facts from the text to answer the question.

3. Model the inferencing procedure until the students can begin to take over the necessary steps, finally reasoning successfully on their own.

By modeling this skill, normally invisible thought processes are made clear to students.

For example, the teacher reads the following text:

> "Grizzly bears are found in western Canada and in Alaska, living in forests on mountain sides. They have shaggy fur, humped shoulders, sharp teeth and long, sharp claws… Grizzlies usually live alone. Each bear has its own area of land, called a *home range*. It leaves scents on the bark of trees all the way around its home range to let other bears know where it lives." [Wood, J. (1989). My first book of animals (p. 34). Boston, MA: Little, Brown.]

A portion of the teacher's think-aloud might be as follows:

> "Humped shoulders? Hmmm. What do they mean by that? Oh, maybe when they're down on all fours; yeah, their backs are kind of like a hump then, okay, I get it!"

Who's Who? (Adapted from Redance, Bean, & Baldwin, 1989)

Share the following scenario with students.

1. The manager, the accountant, the teller, and the auditor at our local bank are Mr. Smith, Mr. Brown, Mr. Jones, and Mr. Foster, not necessarily in that order.

   - Mr. Brown is taller than the auditor or the teller.
   - The manager lunches alone
   - Mr. Jones plays bridge with Mr. Smith.
   - The tallest of the four plays basketball.
   - Mr. Foster lunches with the auditor and teller.

- Mr. Smith is older than the auditor.
- Mr. Brown plays no sports.

2. Then ask, “Which job does each man perform?”

3. Provide a chart such as the one below and use it to demonstrate the process by which the question may be answered.

First put circles in the squares to eliminate choices. Then put an X when you find a match.

	Manager	Accountant	Teller	Auditor
Mr. Smith				
Mr. Brown				
Mr. Jones				
Mr. Foster				

QAR (Question–Answer Relationships) (Adapted from Raphael & Pearson, 1985)

1. Use a small passage to construct questions of three types:

   - *Right There* – questions that can be answered by simply locating the words in one sentence (literal comprehension)

   - *Think and Search* – questions that can be found in the passage but not in one sentence (inferential comprehension)

   - *On My Own* – questions that must be answered in the reader’s head (critical/creative comprehension)

2. Have the students read the brief passage.

3. Pose questions of the three types.

4. Have students answer each question and identify the evidence in the passage (unless it is an *On My Own* question) and explain their reasoning.

This teaching activity can involve manipulative materials by giving students cutouts of a human head and cutouts of a book. For each question, students lay out one or both cutouts to indicate the type of question being asked.

Right There – book
Think and Search – book and head
On My Own – head

Local Fun and Games (Adapted from ITP Web Solutions, 1999)

1. Search local newspapers to find ads for entertainment in the surrounding area.

2. On a map of the area, ask students to print the names of the entertainment places they identified in the newspaper ads in the correct location.

3. Ask students to identify the patterns that link centers of entertainment with the population.

4. Ask students to predict where entertainment centers may be developed in the near future.

Cloze Procedure (Adapted from Dewitz, Carr, & Patberg, 1989)

When preparing cloze experiences, follow these two criteria for selecting words to delete:

- Delete words that are critical to understanding the text and, therefore, cause readers to focus on important concepts;

- Delete words whose position forces readers to search previous and ensuing text to infer answers that require them to call upon their background knowledge.

Begin in the following manner:

1. Create a simple cloze statement by deleting one word from an informational sentence.

2. Ask students to generate a list of words that would make sense in the cloze blank.

   Example: The truck skidded out of control, crashed through the railing, and fell over the _____.
   (cliff, bridge, road)
   Emphasize that readers rely primarily on previous knowledge to fill in the blanks when the author provides no obvious clues in the text.

3. Invite readers to examine additional cloze examples in which clues to the possible missing word(s) are included in subsequent text and, in order for the sentence to make sense, a reader would need to read on and gather additional information to infer the missing word.

   Example: The truck skidded out of control, crashed through the railing, and fell over the _____.
   Since the boat was under the bridge, it missed being hit by the truck.

As students become proficient at completing single cloze sentences and short passages, increase the length of the passages using the following procedure:

1. Delete appropriate words from a written passage.

2. Direct students to work through the passage in the following manner:

   A. **Read** through the entire passage to get an understanding of what it is about.

   B. **Think** through what is actually happening in each sentence in which a word is missing.

   C. **Look back** at previous sentences, picturing the action and locating words that help in understanding the author's intent for the sentence in question.

   D. As the passage becomes more complete, **reread** it and **change** previous answers, where appropriate.

3. When students have completed the activity, have them share their answers and give reasons for their choices.

Directed Reading and Thinking Activity (DRTA) (Adapted from Stauffer, 1969)

DRTA is used to teach procedures for inferring information and justifying responses, as well as developing metacognition and monitoring comprehension. Students draw on their prior knowledge and text information to hypothesize what the text is about. Students monitor their thinking by providing a rationale for their predictions. As students read the text, they either verify or change their predictions. In this way, inferential comprehension and metacognition are practiced throughout the reading process. Steps in the DRTA process follow.

Before:

1. Predict – develop purposes for reading.

   Possible Questions:
   What do you think the story might be about?
   What do you think might happen next?
   Why do you think so? (relating prior knowledge to the problem or situation)

During:

2. Read – reason while reading (metacognition).
   The teacher sets amount to be read before assessment.

3. Confirm – verify predictions.

   Possible Questions:
   Were you right?
   Has something been added to your information that rules out your prediction?
   Why won't that work?

After:

4. Reevaluate – reexamine purposes for reading.

Possible Questions:

Is your idea still possible?
Do you wish to change your prediction?
What do you think will happen next?

Note: Repeat steps 2-4, stopping at predetermined points, until the story is finished.

5. Extend – refine.
   Extend concepts.
   Vary rates.
   Gather outside references.
   Redirect students' thinking to a particular portion of the story.
   Add additional skill instruction, if needed.

Reciprocal Teaching (Adapted from Palincsar & Brown, 1986)

(This technique should be taught by having the teacher model each step until students can carry out the four functions.)

Direct students to work together, using a short, interesting passage to complete the four steps listed below.

1. Students read a passage and ask each other questions about what they just read.

2. Students summarize in one or two sentences what the passage was about (main idea).

3. Students clarify what they did not understand, such as a vocabulary word, a phrase, or a statement, by discussing the material with their fellow group members.

4. Students try to predict what will come next.

Picture This! (Adapted from Reading Workshop, n. d.)

1. Place piles of picture cards on tables.

2. Organize students in partners.

3. Ask each partner pair to draw a card and discuss what is implied or inferred by the picture.
   Examples of picture descriptions follow.

   A. A student yawns several times.
   B. Two students pass notes to one another.
   C. One student takes a pen from a classmate's desk.
   D. A group of students has not completed homework.
   E. A student returns from recess crying.

Simple Sentences (Adapted from Reading Workshop, n. d.)

Give sentences to students to practice making inferences. Examples of sentences follow.

A. Sue blew out the candles and opened her presents.

B. John went running into the street without looking.
C. We bought tickets and some popcorn.
D. When I woke up, there were branches and leaves all over the yard.
E. Yesterday we cleaned out or desks and took everything home.

Cartoon Commentary (Adapted from ITP Web Solutions, n. d.)

1. Provide editorial cartoons from recent copies of the local paper for students to examine. Encourage them to notice how the cartoonist wants to influence their thinking, as well as make them chuckle.

2. Ask students to think of a problem in their school about which they should be concerned.

3. Instruct students to create their own editorial cartoons to show what they think about this school problem.

Sequencing Text (Adapted from In the Classroom, 2001)

1. Select paragraphs or excerpts from books that describe a sequence of events or activities.

2. Place one of the sentences in the paragraph out of order, and ask the students to find the sentence that is scrambled and makes the reading confused.

3. Direct students to correct the position of the sentence so that the sequence makes sense.

   Variations:

   - Students each hold a sentence strip and rearrange themselves in order.

   - Students create sentence sequences based on something they know how to do (e.g., make a model, wash a car) and ask peers to arrange them in chronological order.

Sequencing with Music (Adapted from In the Classroom, 2001)

1. After lessons on reading musical notation, give students sheet music on which notes of a familiar song have been rearranged. Tell students that the notes on the page have been mixed up.

2. Have students rearrange the notes in the sequence that produces the song that is familiar to them.

Sequencing Directions (Adapted from In the Classroom, 2001)

1. Select a routine school activity that is familiar to students, such as checking out materials in the library or using audiovisual equipment.

2. Scramble one or several of the steps to accomplish the activity.

3. Write the scrambled events or audiotape them (out of order).

4. Ask students to read or listen to the events and identify what is out of order.

5. Instruct students to reorder the written sequence or tape record a corrected version of the activity.

Detective (Adapted from ITP Web Solutions, n. d.)

1. Select a large city in the geographic region where you are located. Distribute copies of the city's daily newspaper to the class.

2. Ask students to pretend that they have never been to this city and that all they know about it is what they can learn from this one copy of the newspaper.

3. Instruct students to scan the newspaper to find evidence that proves the city is large.

4. Encourage students to compare their lists of evidence.

Justifying Answers

1. Pose a question that is not answered explicitly in a passage that students will read.

2. Ask students to read the passage to answer the question.

3. Direct students to write down their answers.

4. Instruct students to go back to the passage to find words and ideas that support their answers.

5. Have students discuss how the words and ideas they selected led to their answers.

Acting Out (Adapted from The Topic: Figurative Language, n. d.)

Figurative Language

rhetorical use	simile	metaphor	irony	proverb	poetry
riddle	idiom	cliché	slang	alliteration	mood
personification	overstatement	paradox	apostrophe	image	symbolism
hyperbole	understatement	anaphora	anastrophe	isocolon	parable
oxymoron	onomatopoeia	analogy	personification	extended metaphor	allegory
imagery	idiom	verbal picture	figure of speech	symbol	language
understatement	overstatement	irony	allusion	extended simile	

1. Ask small groups of students to select three phrases or sentences, each an example of a different type of figurative language (see chart above) such as, "You can't teach an old dog new tricks."

2. Have each group act out its three phrases, using a video camera to record them.

3. Provide an opportunity for each group to share its videos with other groups.

Figure It Out!

Instruct students to draw a "silly" picture showing what a given idiom seems to mean. Then write a sentence explaining what the idiom really means. Examples follow.

A. We thought it was going to sprinkle, but it rained cats and dogs.
B. Jose' had such a bad cold that he coughed his head off.
C. When Mary said my brother was stupid, I made her eat her words.

Figurative Language Ads (Adapted from The Topic: Figurative Language, n. d.)

1. Instruct students to create an ad for a new product that incorporates a form of figurative speech they have been studying (in the advertising text).

2. Provide an opportunity for students to share their ads with classmates.

Figurative Language Artwork (Adapted from The Topic: Figurative Language, n. d.)

1. Have students select a figurative speech phrase such as, "That person is 'as smart as a whip'" and create a drawing that illustrates it. Provide a place for students to display their artwork along with the phrases that accompany it.

   Variation: Have students find cartoons that depict figurative language.

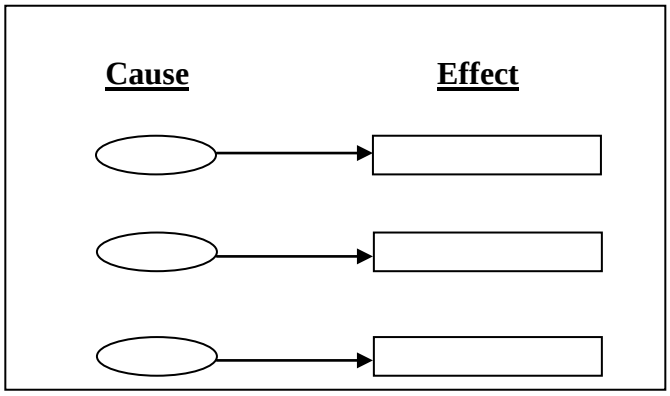
Graphic Organizers (National Institute of Child Health and Human Development, 2000).

1. Select a passage with unstated relationships (without clues, such as time words).

2. Have students read the passage.

3. Instruct students in the process of arranging details in a graphic form using the appropriate organizational pattern.

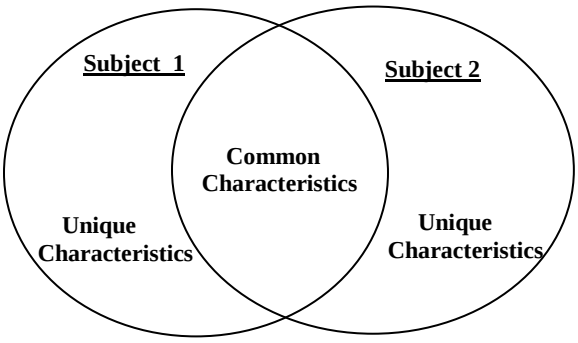
Cause/Effect



Compare/Contrast

Subject 1	Subject 2

Venn Diagram



Open Mind (Adapted from Munroe, 2001)

1. Prior to the lesson, create a handout that depicts the silhouette of a student's head. Label the handout "Open Mind." Create an overhead transparency of the same silhouette.

2. Have students think of a book character with which the entire class is familiar. Ask students to identify what that character might have been thinking and/or feeling during one event from the story. Invite students to come to the overhead to draw symbols in the "open mind" to represent their responses.

3. Read a new story aloud to the students.

4. Ask students to identify the story's main characters.

5. Instruct students to select one of these characters and write his or her name on their copies of the "Open Mind" handout as it is distributed to each of them.

6. Have students complete the "Open Mind" handout using symbols and words to depict the character's motives and character traits. Ask them to make notes below their silhouettes to explain and support their responses.

Personality Traits (Adapted from Munroe, 2001)

1. Prior to the lesson draw on large chart paper a table that is labeled for names of characters in the far left column and personality traits across the top row.

2. Have students name favorite characters from stories they have read, and state at least one trait that describes each character. List these traits on the chalkboard or overhead projector. Then ask students to classify each as either a physical descriptor or a personality descriptor.

3. Tell students that they will listen to a story and identify the personality traits of characters in the story. Encourage students to take notes as they listen if that will help them to remember details of the characters.

4. Read the story out loud.

5. Ask students to identify several characters in the story, including the main character. List these characters' names on the left-hand column of the chart.

6. Tell students to give personality descriptions of various characters in the story. List these descriptions in the top row.

7. Have students identify and discuss which of these traits each character has, and mark the row and column for that character and trait with an X.

Conclusion

If students are to comprehend text, they must effectively use strategies that enable them to make inferences. Pearson and Johnson (1978) expressed this view succinctly in the following passage.

> Comprehension is building bridges between the new and the known…. Comprehension is active not passive; that is, the reader cannot help but interpret and alter what he reads in accordance with prior knowledge about the topic under discussion. Comprehending is not simply a matter of recording and reporting verbatim what has been read. Comprehension involves a great deal of inference making. (p. 24)

A teacher's thoughtful consideration of strategies to teach explicitly inferencing skills is critical to the academic achievement of students who struggle to comprehend.

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Additional Resources

The following resources on inferential comprehension are available for loan through the T/TAC W&M library. Visit our website at http://education.wm.edu/centers/ttac/index.php for a complete listing of all materials. Select the *Library* link on the home page and enter *reading comprehension* as the subject of the search.

Title	**Author**	**Call letters**
Helping Struggling Readers	Fondrk, S. & Frasca, C.	CRD159
Reading Comprehension: Strategies for Independent Learners	Blachowicz, C., & Ogle, D.	CRD149
Reading Strategies that Work	Fitzpatrick, J.	CRD161
Solving Reading Problems	Stockdale, C., & Possin, C.	CRD167

This *Considerations Packet* was prepared by Dale Pennell, July 2002.