VOLUME 1 METACOGNITION

# METACOGNITION NEWS

## Metacognition

For many years, teaching reading comprehension was based on a concept of reading as the application of a set of isolated skills such as identifying words, finding main ideas, identifying cause and effect relationships, comparing and contrasting, and sequencing. Instruction did little to help students learn how or when to use the skills, nor was is ever established that this particular set of skills enabled comprehension.

Research indicates that we build comprehension through the teaching of comprehension strategies and environments that support an understanding of text. It is important for educators and parents to teach children active strategies and skills to help them become active, purposeful readers. Teaching reading comprehension is an active process of constructing meaning, not skill application. The act of constructing meaning is:

### Interactive

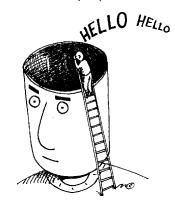
It involves not just the reader, but the text and the context in which reading takes place.

### Strategic

Readers have purposes for their reading and use a variety of strategies as they construct meaning.

### Adaptable

Readers change the strategies they use as they read different kinds of text or as they read for different purposes.



Simply put, metacognition means to think about your own thinking.

### Metacognitive Strategies

#### VISUALIZING

Involves the ability of readers to make images of a text as a way to understand processes during reading.

#### MAKING CONNECTIONS

Children make personal connections with the text using their schema.

#### ASKING QUESTIONS

Involves readers asking themselves questions throughout the reading of text.

#### MAKING INFERENCES

Authors provide clues readers can use to "read between the lines".

#### DETERMINING IMPORTANCE

Knowing why you're reading and making decisions about what information are most critical to understanding the overall meaning of the piece.

### SYNTHESIZING

Process of ordering, recalling, retelling, and recreating into a coherent whole the information with which our minds are bombarded everyday.

#### What Do Good Readers Do?

- Before reading, good readers tend to set goals for their reading.
- During reading, good readers read words accurately and quickly, while dealing with meanings of words.
- Good readers are selective as they read.
- Good readers use their background knowledge (schema) to create mental images, ask questions, and make inferences.
- Good readers monitor their comprehension as they read.

#### How Do Poor Readers Differ From Good Readers?

- Poor readers do not have sufficient awareness to develop, select, and apply strategies that can enhance their comprehension.
- Poor readers rarely prepare before reading.
- During reading, poor readers may have difficulty decoding, reading too slowly, and lack fluency.
- Poor readers often lack sufficient background knowledge and have trouble making connections with text

## Schema (Prior Knowledge)



OK, so how many of you parents are hearing new vocabulary out of your child's mouth this month? Words like "schema" & "metacognition"? Are you impressed? Well, you should be. Your child is doing some hard thinking at school and learning more and more that "reading is thinking." But, what does this all mean, you ask? Your child is receiving very specific comprehension strategy instruction in the classroom. In this format, your child watches and listens

to the teacher reads a lot of books while the teachers shares out loud and models what he or she is thinking while he/she reads. Then the teacher asks the children to help in the strategy, and the teacher and children practice using it together. After about 5 to 6 weeks of the teacher releasing more responsibility of the strategy use to the children, each child becomes more independent at using the strategy and begins to use it on his/her own.

This year, your child will become proficient in six comprehension strategies throughout the year using a variety of texts and genres of books. The first strategy that our class will be practicing is called, "Making Connections." This means students connect their background knowledge to the text they are reading.

### The Purpose of this Strategy

Readers comprehend better when they actively think about and apply their knowledge of the book's topic, their own experiences, and the world around them Stephanie Harvey and Anne Goudvis in their book, Strategies That Work (2000), state that, "When children understand how to connect the text they read to their lives, they begin to make connections between what they read and the larger world. This nudges them into thinking about bigger, more expansive issues beyond their universe of home, school, and neighborhood."

### HOW TO HELP YOUR CHILD AT HOME

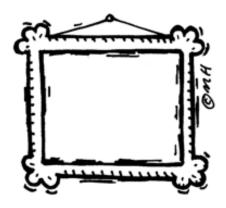
To help your child make connections while they are reading, ask him/her the following questions:

- ✓ What does the book remind you of?
- ✓ What do you know about the book's topic?
- ✓ Does this book remind you of another book?

### BOOKS TO READ WITH YOUR CHILD

- Koala Lou by Mem Fox
- My Great-Aunt Arizona by Gloria Houston
- The Snowy Day by Jack Ezra Keats
- The Two of Them by Aliki
- Roxaboxen by Alice McLerran
- Fireflies by Julie Brinkloe

## Visualizing (Mental Images)



The comprehension strategy of "Visualizing" is also known as "Making Mental Images" or "Creating Mind Movies". Visualizing is the creation of images in the mind as the student reads, processes and recalls what has been read. Visualizing a picture or scene with the words and phrases allows the reader to organize the ideas, to see the relationship among the ideas, and to make meaningful connections with them. Using visualization and discussing the pictures to check for understanding and discrepancies help a reader increase comprehension.

After your child begins to grasp the concept of visualization, be sure to reinforce it frequently. Make visualization a part of reading at home. Those who have more difficulty with the concept will learn from your expressions and imagination.

Integrate this exercise into daily read-alouds and silent reading. Incorporate not only physical images, but also ideas about feelings the characters might experience. (That will exercise critical thinking skills, especially their skill at making inferences.) Use the combination of drawings and mental image-making that works best for your child. As you progress, you can move from descriptive texts into expository texts.

By using visualization, you open the door for life-long reading. Most of all, you help develop in students the habit of actively thinking about what they read... which leads to greater retention and understanding

### Visualizing Helps Children:

- ✓ Bring personal prior knowledge to the forefront
- ✓ Check their mental images against text for discrepancies and detail to gain a more complete understanding
- ✓ Match language to the images and therefore improve their processing of ideas
- ✓ Connect in meaningful ways to what is read

### HOW TO HELP YOUR CHILD AT HOME

To help your child visualize while they are reading:

- ✓ Ask your child what they are "picturing" in their head when they are reading.
- √ Have them draw pictures and write words while you are reading to them.
- √ Have them make what they "see" with Play-Doh while you are reading to them.

### BOOKS TO READ WITH YOUR CHILD

- Owl Moon by Jane Yolen
- · The Gruffalo by Julia Donaldson
- · Bedhead by Margie Palatini
- Close Your Eyes by Kate Banks
- Dogs Don't Wear Sneakers by Laura Numeroff
- Pictures From Our Vacation by Lynne Rae Perkins
- Pete the Cat by Eric Litwin
- The Zoo at Night by Martha Robinson
- Tar Room by Faith Ringgold

### Making Connections



Many children need assistance with

comprehension to help them become successful, independent readers. Strategic reading allows children to monitor their own thinking and make connections between texts and their own experiences. Kids who make connections while reading are better able to understand the text they are reading. It is important for them to draw on their prior knowledge (schema) and experiences to connect with the text.

Explain to your child that you are going to practice the comprehension strategy of making connections to find ways that they can personally relate to a text. Ask them to think about the following questions:

### Text-to-Self

- What does this story remind you of?
- Can you relate to the characters in the story?
- Does anything in this story remind you of anything in your own life?

### Text-to-Text

- What does this remind you of in another book you have read?
- How is this text similar to other things you have read?
- How is this text different from other things you have read?

### Text-to-World

- What does this remind you of in the real world?
- How are events in this story similar to things that happen in the real world?
- How are events in this story different from things that happen in the real world?

## Three Types of Connections

Children make personal connections with the text by using their schema. There are three main types of connections we can make during reading:

### Text-to-Self

Refers to connections made between the text and the reader's personal experience.

#### Text-to-Text

Refers to connections made between a text being read to a text that was previously read.

### Text-to-World

Refers to connections made between a text being read and something that occurs in the world.

### HOW TO HELP YOUR CHILD AT HOME

- ✓ Select an empty bulletin board and turn it into an inspiration board. Each time you find something compelling; a photo, a page of a magazine, a piece of fabric...tack it to the board. Before long, your child will start seeing connections between the images that will expand your work.
- $\checkmark$  Selecting five books that they've never read

and would likely never select. That's the key; pick up a book they never noticed before. Have your child take some time to look through them. (They don't have to read every page of each book). But get a sense of what the book is about...Look for connections to school or life.

VOLUME 5 ASKING QUESTIONS

# METACOGNITION NEWS

## **Asking Questions**

- ✓ Questions help a reader clarify ideas and deepen understanding.
- √ If you ask questions as you read, you are awake, you
  are thinking.
- ✓ Diving in with questions-even those that are unanswerable-enriches the reading experience.
- ✓ In their quest to make sense of their world, they bombard those around them- young children are master questioners. Why are there clouds? Do fish sleep? Why is the sky blue? Frequently, parents have no idea how to answer these endless questions. In desperation they might change the subject or come up with a feeble dodge to get off the hook. In fact, those questions show a child's brilliance. As a parent, you want to encourage them to ask the real questions, those questions that really puzzle them, even if you can't answer them.
- ✓ Wonder keeps the imagination alive and curiosity welltuned.
- ✓ Asking questions is how you make sense of the world.
- ✓ Questions lead you to new ideas, new perspectives, and additional questions.
- ✓ Some questions don't have easy answers. But all questions inspire thinking, generate discussion, or lead you to other sources.
- ✓ Share your questions with your child, showing him/her that even you have questions when you read.

### Questioning With Your Child:

Encourage your child to ask questions as s/he reads is part of a larger task: inspiring wonder. There are so many things to wonder about: I wonder what a black hole is I wonder why people risk their lives to climb Mt. Everest. I wonder how life began. Before you start reading a book with your child, play the "I Wonder" game



### HELPING YOUR CHILD AT HOME



There's no doubt about it: Kids love to generate their own questions!
Questioning makes reading fun. But to know how to question, your child needs to hear your questions first. This is not about asking your child to answer your questions. Instead, it's about modeling what it means to be curious by sharing

the questions you have while you read. Don't rush the answers right away. Pose several questions and then let your child take a turn asking questions that come to his/her mind. You're showing your child how to be an active player in the world of reading.

VOLUME 6 MAKING INFERENCES

# METACOGNITION NEWS

## Making Inferences

The skill of inferring is a skill we do all day long, similar to "reading" people or "reading" a situation. If it has been snowing outside and some cars have snow on them and some cars do not, we infer that those without snow have been parked in the garage. Inferring is not only about reading expressions, tones and body language, it is about "reading" text, often said as, "reading between the lines" where the answers are not explicitly stated.

### INFERRING VS. PREDICTING

Predicting is related to inferring, but we predict events, actions or outcomes that can be checked or confirmed as correct or incorrect by reading on or reading to the end of the story. I've heard it said that predicting is like thinking ahead but inferring is about looking back and reflecting about what has already been read. Predicting is like this, you are reading along, you stop and ask, "What will happen next?"

Inferring is like this, you are reading along, you stop and ask, "I wonder what the author meant?" Inferences are more open-ended and often uncheckable, meaning that the reader is unable to truly know if an inference is correct. When students read, think and make an inference about text they have just read, they must use their schema, and prior knowledge and cross-check it with clues and evidence from the text. When students use the strategy of inferring, they are making meaning of the text. They are adding pieces that are not explicitly there, often sharing personal opinions and forming interpretations. As children begin to make inferences out loud, they must be recognized for doing so and be told all day long, "You just made an inference!" When asking a student simple recall questions, some children feel like they are answering wrong if they don't use words that are exactly in the text, when they are actually using inferring.

### Inferring

If you infer that something has happened, you do not see, hear, feel, smell, or taste the actual event. But from what you know, it makes sense to think that it has happened. You make inferences everyday. Most of the time you do so without thinking about it. Suppose you are sitting in your car stopped at a red signal light. You hear screeching tires, then a loud crash and breaking glass. You see nothing, but you infer that there has been a car accident. We all know the sounds of screeching tires and a crash. We know that these sounds almost always mean a car accident. But there could be some other reason, and therefore another explanation, for the sounds. Perhaps it was not an accident involving two moving vehicles. Maybe an angry driver rammed a parked car. Or maybe someone played the sound of a car crash from a recording. Making inferences means choosing the most likely explanation from the facts at hand

### WHEN YOU INFER, YOU MIGHT SAY...

- ✓ I think that...because...
- ✓ Maybe it means...because...
- ✓ My clues from the text are...
- ✓ my schema is...so I infer that...
- ✓ It could mean...because...

### BOOKS TO READ TO YOUR CHILD

- √ Something Beautiful
- ✓ Big Al
- √ The Royal Bee
- √ Tight Times
- √ Becduse of Winn Dixie

## Determining Importance

- Determining importance is a strategy that readers use to distinguish between what information in a text is most important versus what information is interesting but not necessary for understanding. This practical reading strategy enables students to distinguish between the most and least important information presented in textbooks and nonfiction reading.
- Although teachers find this strategy difficult for many students to accurately execute, it is essential to comprehending complicated nonfiction text. As teachers we need to explicitly and systematically teach our students how to extract the most important information they read.
- When students are given the opportunity to combine facts and ideas together in order to solve a given problem, higher-order thinking and reasoning skills are utilized.
- Children learn to read, and then they read to learn. The features of nonfiction help students understand the important information in the text, magazine, newspaper, textbook, etc.

### Nonfiction Feature I PHOTOGRAPHS & CAPTIONS

Nothing helps a child more than the pictures and illustrations used in the text. A real photograph and a caption describing it helps put the content of the information in real world context.

### Nonfiction Feature 3 PRONUNCIATION GUIDES

This feature helps students with unfamiliar vocabulary in the text. It helps the child understand difficult content words, and spells out the word phonetically inside a set of parentheses.

### Nonfiction Feature 2

### TABLE OF CONTENTS

You can start reading from anywhere in the book and that section will make sense even if you haven't read the book from the beginning, look at the Table of Contents to preview each section.

### Nonfiction Feature 4 CUT-AWAYS & CLOSE-UPS

The clipart used in the upper right side of this newsletter shows an example of a close-up feature. It shows more detail or the inside view of the important aspect of the information.

### Nonfiction Feature 5

GLOSSARY

The glossary is like a special little dictionary containing important vocabulary words from the book, and usually found at the end of the book, with easy to understand definitions.

### Nonfiction Feature 7

SIDEBARS

Sidebars are bullet points of information off to the left or right of the main text area. Sidebars are short with little nuggets of facts and important details.

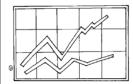
### Nonfiction Feature 9

HEADINGS/SUBHEADINGS

When an author wants to signal that important information is to follow, a heading or subheading is in a bigger, bolder font that the rest of the information as to say: PAY ATTENTION AHEAD.

### Nonfiction Feature II

CHARTS AND GRAPHS



By including charts and graphs to represent data visually, readers

analyze information by comparing it with other important information in an easy to read format...Often found in newspapers.

### Nonfiction Feature 6

INDEX

The index is also found at the end of the book. It lists concept words in alphabetical order, and gives the page numbers where the information can be found.

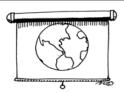
### Nonfiction Feature 8

LABELS

Labels are word tags next to important pictures connected with arrows as used above. Labels often identify the smaller parts of a bigger whole as when labeling the different parts of an insect.

### Nonfiction Feature 10

MAPS



Maps are used in nonfiction to show

location of events and place in time:
examples are ship routes, birthplaces,
hurricane paths, street and building
locations, amusement park sections,
etc

### Nonfiction Feature 12

COMPARISONS

When a nonfiction author wants a reader to understand relationship of size or put information in proportion, an author will use a comparison: A blue whale is as long as three school buses.

V OLUME 8 SYNTHESIZING

## METACOGNITION NEWS

## Synthesizing

As you read, your brain synthesizes information from the words to comprehend the sentences, information from the sentences to comprehend the paragraphs, information from paragraphs to synthesize sections, and so on, as you move through the text. The text tells you some things, you drew conclusions that pulled together information you had read and what you knew from your own life experiences. As you read, you constantly accumulate information, and you keep this information in mind by subsuming smaller facts into larger generalizations. You summarize, conclude, infer, and generalize, and then your read some more, incorporate the new information, and draw even bigger conclusions.

### Summarizing vs. Synthesizing

When readers summarize, they identify key elements and condense important information into their own words during and after reading to solidify meaning. Why is summarizing difficult for

students? For starters, it requires children to apply the skill of determining importance in text and then express the important ideas in their own words. Many times, as students learn to summarize, their first attempts are a collection of details, rather than the main ideas of the passage.



Synthesizing takes the process of summarizing one step further. Instead of just restating the important points from text, synthesizing involves combining ideas and allowing an evolving understanding of text. Synthesizing is creating original insights, perspectives, and understandings by reflecting on text(s) and merging elements from text and existing schema.

### Readers...

- Maintain a cognitive synthesis as they read. They monitor the overall meaning, important concepts, and themes in the text as they read and are aware of ways text elements fit together to create that overall meaning and theme. They use knowledge of these elements to make decisions about the overall meaning of a passage, chapter or book.
- Retell or synthesize what they have read. They attend to the most important information and to the clarity or synthesis itself. Readers synthesize in order to better understand what they have read.
- Capitalize on opportunities to share, recommend and criticize books they have read.
- May respond to text in a variety of ways; independently or in groups of other readers. These include written, oral, dramatic, and artistic responses and interpretations of text.
- Synthesis is likely to extend the literal meaning of a text to the inferential level.

### BOOKS TO READ TO YOUR CHILD

- Passage to Freedom by Ken Mochizuki
- Wild Horse Winter by Tetsuya Honda
- Read Leaf Yellow Leaf by Louis Ehlert
- The Alphabet Tree by Leo Leoni
- Charlie Anderson by Barbara Abercrombie
- Fables by Arnold Lobel

- Oliver Button is a Sissy by Tomie dePaola
- . Smoky Night by Eve Bunting
- Tea with Milk by Allen Say
- The Table Where Rich People Sit by Byrd Baylor