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Reading comprehension: what strategies make a difference?

Abstract

A literature review was conducted on comprehension strategies. The comprehension strategies that are being reviewed were chosen based on past research of reading comprehension. This literature review will explore six comprehension strategies that have been found to improve students' comprehension abilities.

READING COMPREHENSION: WHAT STRATEGIES MAKE A DIFFERENCE?

A Graduate Review

Submitted to the

Division of Elementary Education

In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts in Education

UNIVERSITY OF NORTHERN IOWA

by

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July 2007

This Review by: Jill Helgerson

Titled: Comprehension Strategies: What Strategies Make a Difference?

has been approved as meeting the research requirements for the

Degree of Master of Arts in Education.

Light 16 2007
Date Approved

August 16,2007 Date Approved

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Abstract

A literature review was conducted on comprehension strategies. The comprehension strategies that are being reviewed were chosen based on past research of reading comprehension. This literature review will explore six comprehension strategies that have been found to improve student's comprehension abilities.

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Introduction

Educators have never been under more pressure to perform and meet standards and raise scores on standardized assessments than in today's society. With all these high expectations, educators may not place as much emphasis on reading comprehension as need be. They may feel overwhelmed with just teaching students to read, let alone teaching them comprehension strategies.

After reading and learning about comprehension, this research has found that comprehension is the most important part of reading. We read to understand and to learn new and exciting things. That is what comprehension is. Fielding and Pearson (1994) described the shift in our thinking about comprehension by saying, "once thought of as the natural result of decoding plus oral language, comprehension is now viewed as a much more complex process involving knowledge, experience, thinking, and teaching" (p. 63).

The purpose of this literature review is to describe the following six comprehension strategies that have been empirically tested and found to greatly increase student's comprehension: strategies that will be reviewed are: (1) schema, (2) visualizing, (3) monitoring, (4) questioning, (5) inferring, and (6) summarizing. According to Block and Pressley (2002), "comprehension strategies are no more than tools that readers employ in the service of constructing meaning from text" (p.23).

This literature review will examine those six comprehension strategies and answer the question: What strategies make a difference? Fortunately, to answer this question, advances in comprehension research have provided us with strategies to teach and model effective methods for helping students internalize key comprehension strategies.

Methodology

The use of the Rod Library's resources was very beneficial as I was able to locate many professional journals with articles related to comprehension and comprehension strategies. I found the use of ERIC and ProQuest to be useful for retrieving related articles. Also, I found many professional books related to comprehension strategies.

In addition, I have collected articles and research from professional development meetings that were held in the Cedar Falls School District. The Cedar Falls School District literacy coordinator for information on comprehension and comprehension strategies was a valuable source of guidance. I have been collecting information for the past year, which was very beneficial but also very overwhelming at the same time. After reading the many research articles and notes I had collected, I narrowed them down and placed them into seven categories. The first group was on comprehension in general. The six other groups were for each comprehension strategy: (a) schema, (b) visualizing, (c) monitoring, (d) questioning, (e) inferring, and (f) summarizing.

Literature Review

Comprehension

The purpose of reading comprehension is to get meaning from written text (Clark & Graves, 2005). Armbruster, Lehr, and Osborn (2001) stated, "comprehension is the reason for reading" (p.48). If readers can read the words, but do not understand what they are reading, they are not really reading (Armbruster et al., 2001). Reading comprehension is a complex process during which good readers flexibly apply a variety of appropriate comprehension strategies to whatever text they are reading (Pressley, 2000). Clark and Graves (2005) stated that, "without comprehension, reading is a frustrating, pointless exercise in word calling" (p. 575). It is not an

exaggeration to say that how well students develop the ability to comprehend what they read has profound effect on their entire lives (Dole, Duffy, Roehler, & Pearson, 1991). Dole et al. (1991) stated that, "The major goal of reading comprehension instruction, therefore, is to help students develop the knowledge, skills, and experiences they must have if they are to become competent and enthusiastic readers" (p. 244).

Over many years, research in the area of reading comprehension has led to a higher and deeper understanding about the complex process of constructing meaning from text (Pressley & El-Dinary, 1997). Comprehension is a mental process that depends on prior knowledge, experience, and information in the text (Johnson, 2001). It involves not only the reader and the text, but also the social context(Fielding & Pearson, , 1994). According to Ruddell (2002), "Comprehension reflects who people are, how they relate to the world and others in it, their accumulated store of factual and intuitive knowledge, the social environment in which they are reading, and even how they feel on a given day" (p. 105). Comprehension instruction must therefore take into consideration the ways children learn, the types of interaction in which they participate, and the texts they read (McMahon & Raphael, 1997). These key factors are supported by an extensive review of research on comprehension conducted by Fielding and Pearson (1994). Fielding and Pearson (1994) stated that, "comprehension can be taught and that instruction in comprehension strategies is especially effective for poor comprehenders" (p. 64).

Studies cited in the National Reading Panel report (2000) provide evidence that explicit comprehension instruction improves students' understanding of texts they read in school. Some studies of comprehension strategy instruction have examined ways to teach specific strategies, such as questioning, interferences, and summarizing (Goudvis & Harvey, 2007). Goudvis and Harvey (2007) stated that, "When researchers explicitly taught kids these comprehension

fostering strategies, kids not only learned to apply the strategies they were taught, but the instruction had positive effects on students' general comprehension as well" (p.23).

Rather than a single strategy focus, comprehension strategy instruction teaches students a repertoire of strategies that they apply according to the demand of the reading tasks and texts they are reading (Goudvis & Harvey, 2007). Pressley (2002) found that students who were taught a group of strategies performed better than those receiving more traditional instruction when asked to think aloud about the text. These findings seem to hold true for younger students and for students learning information in content areas such as science (Dole et al., 1991).

Armbruster et al. (2001) reported that, "Research over 30 years has shown that instruction in comprehension can help students understand what they read, remember what they read, and communicate with others about what they read" (p. 48). More recent studies have described the effectiveness of comprehension strategies (Pressley, 2000). The scientific research on text comprehension instruction reveals important information about what students should be taught about text comprehension and how it should be taught (Armbruster et al., 2001). The following six strategies have a firm scientific basis for improving text comprehension.

Schema

Readers construct meaning by using their background knowledge and experiences to integrate with the new information they read and gain from the text (LeNoir, 1993). Schema, background knowledge, and prior knowledge are all terms that are used interchangeably (Cooper, 1997) to describe the information and experiences students bring to reading. Armbruster et al. (2001) stated, "Good readers draw on prior knowledge and experience to help them understand what they are reading" (p.55).

For over thirty years, researchers have continually found that prior knowledge and experiences have an enormous impact on comprehension (Lipson, 1982). Oczkus (2004) stated, "When readers know something about a topic or are able to relate their experience to the reading, they can better understand the reading material" (p.32). Researchers have also found that there is a strong connection between prior knowledge and vocabulary development (Snow, Burns, & Griffin, 1998). Researchers agree that the most effective way for students to acquire massive amounts of vocabulary is to independent read a wide variety of material (Oczkus, 2004).

Direct instruction on schema can significantly improve students' comprehension of relevant reading material (Dochy & Alexander, 1995). Dole et al., (1991) extended these findings, showing that teaching students important background ideas for an expository or narrative text led to significantly greater performance on comprehension questions than did no prereading background knowledge instruction. By building students' schema teachers might also help to counteract the detrimental effects that incoherent or poorly organized texts have on comprehension (Goudvis & Harvey, 2007).

Mandeville (1994) stated, "When readers consciously assign their own importance and interest to newly read information, they are likely to comprehend and remember that information better" (p. 679). Opportunities for including this affective dimension are readily available by extending the highly successful lesson format called Know, Wonder, Learn (KWL) (Olgel, 1986). KWL is an instructional strategy based on a 3 column chart where students brain storm what they know about a topic in the Know column, formulate questions they like the answers for or about the topic in the Wonder column, and after reading, readers use the Learn column to answer their own questions and to list new information they have learned (Mandeville, 1994).

Visualizing

Visualizing refers to a reader's ability to create pictures in his/her head based on text read or words heard (Routman, 2000; Pressley, 2000). It is one of many skills that makes reading comprehension possible (Adler, 2001). The image that is stored in the reader's memory serves as a representation of the reader's interpretation of the text (National Reading Panel, 2000).

Armbruster et al. (2001) argued that, readers (especially younger readers) who use their ability to visualize during reading understand and remember what they read better than readers who do not.

Visualizing strengthens reading comprehension skills as students gain a more clear understanding of the text they are reading by consciously using the words to create mental images (Armbruster et al., 2001). Armbruster et al. (2001) stated, "Good readers often form mental pictures, or images, as they read" (p. 56). As students gain more deliberate practice with this skill, the act of visualizing text becomes automatic (Miller, 2002). Students who visualize as they read not only have a richer reading experience but can recall what they have read for longer periods of time (Harvey & Goudvis 2000).

Visualizing text as it is being read or heard also creates personal links between the readers or listeners and the text (Miller, 2002). Readers who can imagine the characters they read about, for instance, may become more involved with what they are reading (Biemans & Simons, 1996). Biemans and Simons (1996) stated, "This makes for a more meaningful reading experience and promotes continued reading" (p. 268).

Furthermore, Miller (2002) stated that, "Reader's create images to form unique interpretations, clarify thinking, draw conclusions, and enhance understanding" (p.81). Miller (2002) explains what proficient readers do while creating mental images:

1. Create mental images during and after reading

- 2. Understand how creating images enhances comprehension
- Use images to draw conclusions, create unique interpretations of the text, recall details Significant to the text, and recall a text after it had been read
- 4. Use images to immerse themselves in rich detail as they read
- 5. Adapt their images as they continue to read a second method which is the continue to

Goudvis and Harvey (2007) stated that wordless picture books is one of the most helpful ways of teaching visualization. Visualizing with wordless books helps readers build meaning as they go and visualizing with text does the same thing (Goudvis & Harvey, 2007). Goudvis and Harvey (2007) explained that visualizing boils down to the reader's effort to taking words of the text and combing them with his or her background knowledge to create pictures in his or her mind.

Monitoring

Comprehension monitoring is a critical metacognitive strategy that involves thinking about one's own reading (Oczkus, 2004). Research (e.g., Paris, Wasik, & Turner, 1991) clearly indicates that comprehension monitoring is an important strategy that separates the good reader from the poor reader. Good readers know how they are doing as they read and they first notice problems or confusions, and then apply strategies to enhance understanding (Oczkus, 2004). Oczkus (2004) stated that, "Monitoring involves reflecting on one's reading and asking questions like, Do I understand the author's intent here? Am I following what is happening? How am I doing as a reader? What can I do to fix this misunderstanding? Does this part fit with earlier information? How can I remember this information (p.140)? Armbruster et al. (2001) stated, "Students who are good at monitoring their comprehension know when they understand what they read and when they do not" (p. 49).

The National Reading Panel (2000) suggested that when we teach students to monitor their comprehension we teach them to be aware of what they do understand, to identify what they do not understand, and to use necessary fix-up strategies to resolve problems in comprehension. Key monitoring strategies include constant checking for understanding, identifying the portion of text that doesn't make sense, determine what is so hard or confusing about it, and finding ways to look back through the text or to read ahead to solve the break in meaning (Pressley, 2000).

Confusions that need clarifying may involve unfamiliar words, difficult concepts, or confusing events in the story line or the reading may require background knowledge that doesn't match the student's experiences (Clark & Graves, 2005). Students benefit from practice in identifying the difficult portions of text or places where their comprehension is impaired (Oczkus, 2004). Readers may try a variety of useful fix-up strategies, such as rereading, which serves as an extremely useful strategy for repairing meaning (National Reading Panel, 2000).

Students who have grasped the concept of monitoring comprehension students will reflect that practice in the following ways which were described by Goudvis and Harvery (2007):

- Students follow their inner conversation and leave tracks of their thinking. The
 educator looks for evidence of the reader's thinking, including their reactions,
 questions, connections, and inferences.
- Students notice when they stray from the inner conversations and repair
 comprehension, use fix-up strategies. Educators look for evidence that the reader
 understands why meaning breaks down and how to go about repairing understanding.

3. Students stop, think, and react to information as they read. We look for evidence that the reader is stopping frequently, thinking about the information, and jotting down thought and reactions.

Comprehension monitoring is a strategy that involves metacognition, or thinking about one's thinking, during the reading process (National Reading Panel, 2000). Students who monitor their own comprehension, know when they understand the text and when they do not and also know what to do to fix problems when they encounter problems with comprehension monitoring, therefore, it is critical for understanding text and research supports teaching students to use various strategies for comprehension monitoring (Oczkus, 2004) **Ouestioning**

Questions are the key to understanding since they clarify confusion, stimulate research, and move us forward and take us deeper into reading (Harvey & Goudvis, 2007). Research shows that teacher questioning strongly supports and advances students' learning from reading (Armbruster et al., 2001). Students can be taught to ask good questions as they read with the goal of improving their comprehension (Fielding & Pearson, 1994).

Alvermann ,Swafford, and Montero (2004) stated, "Teachers typically questioned students about content after they read an assigned chapter or passage and students responded and a brief discussion sometimes followed" (p.38). Well intentioned teachers ask questions that assess rather than address students' comprehension (Alvermann et al., 2004). Teaching students to ask their own questions improves their active processing of text and their comprehension (Armbruster et al., 2001). The type, timing, and purpose of questions matter a great deal in determining whether or not students create meaning from the words on a page (Miller, 2002).

In education courses, most teachers learn about taxonomies of thinking; open and closed

questions; and literal, inferential, and critical or applied questions (McKenzie, 1997). In addition, McKenzie (1997) makes even finer distinctions and identifies 18 varieties, including what he calls essential questions, probing questions, clarification questions, and hypothetical questions. Another category, however, which he terms "strategic questions," may not be as familiar to teachers. Qualitatively different from the other question types, strategic questions, according to McKenzie (1997):

Focus on ways to make meaning. ... They help us while passing through unfamiliar territory by prompting us to think deliberately: What do I do next? How can I best approach this next step, this next challenge, this next frustration? What thinking tool is most apt to help me here? (p. 4)

Thus, strategic questions foster awareness or metacognition (Mackenzie, 1997). Although they can be asked about any topic or process, strategic questions are especially useful in fostering reading comprehension. Applied in the context of content reading, they focus more on how to comprehend challenging material than on what has been comprehended--although one generally leads to the other (Duke, 2004). In fact, McLaughlin and Allen (2002) suggested that "the focus of instruction should not be on the print, but on how readers interact with the print" (p. 2), which is where good instruction comes in.

Miller's (2002) indicated that readers ask questions for one or more of the following reasons:

- 1. to clarify meaning
- 2. to speculate about text yet to be read
- 3. to determine an authors style, intent, content, or format
- 4. to focus attention on specific components of the text

5. to locate a specific answer in the text or consider rhetorical questions inspired in the

Inferring

Inferring is the heart of meaning construction for learners of all ages (Anderson and Pearson 1984). Research suggests that inferring is necessary to comprehend well, and that students can be taught to improve their comprehension with inferences (Hansen, 1981). When readers infer, they use their prior knowledge and textual clues to draw conclusions and form unique interpretations of text (Miller, 2002). Good readers combine their own prior knowledge with clues, answers to the reader's questions, and the theme of the selection (Miller, 2002). Miller (2002) also believes that when students infer they use connections, questioning, predictions, and even visualizing to assist them as they incorporate their own knowledge along with text evidence to infer deeper meanings about the text. Oczkus (2004)stated, "By thinking aloud and modeling for students the process of making inferences as they come up in the reading, you strengthen their ability to eventually infer on their own" (p. 84).

Inferring is often confused with predicting (Oczkus, 2004). Predictions are a form of inferring, and require the use of one's background knowledge combined with text clues to draw some logical conclusion (Keene & Zimmerman, 1997). In predicting, as the reader reads on he or she will either confirm or dismiss the prediction with information from the text (Oczkus, 2004). When a reader infers there isn't always a definite answer and an inference is often more open ended (Miller, 2002). Oczkus (2004) stated, "By pointing out the difference between their predictions and inferences, students become aware of their use of inferring as they read" (p. 84).

Miller (2002), suggested that to increase inferring ability, readers need to do the following:

- Readers determine meaning of unknown words by using their schema, paying attention to textual and picture clues, rereading and engaging in conversation with others.
- 2. Readers make predictions about text and confirm or contradict their predictions as they read on.
- a.3. Readers use their prior knowledge and textual clues to draw conclusions and form unique interpretations of text.
 - 4. Readers know to infer when the answers to their questions are not in the text.
 - 5. Readers create interpretations to enrich and deepen their experience in a text.

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Summarizing

Summarizing what one reads is another way to improving overall comprehension of text. When readers summarize information during reading, they pull out the most important information and put it in their own words to remember it (Goudvis & Harvey, 2007). "Summarizing is a complex strategy that involves the orchestration of a variety of skills including determining the key ideas from details, logically ordering those ideas and paraphrasing" stated Oczkus (2002) (p.168). Oczkus (2002) went on to say that summarizing involves remembering what one has read, selecting only the most important points to share, and ordering those in a logical manner.

During reading, good readers naturally form a big picture of reading material that may include an evolving theme, moral, or point of views (Harvery & Goudivis, 2007). Good readers use their knowledge of text organization and structure to assist them in summarizing (Lipson, 1996). Graphic organizers, such as story maps for narrative tests and Venn diagrams and charts for expository test, improve comprehension (Pressley, 2000 Miller (2002) explained that good

readers read, they monitor the overall meaning, themes, and new thinking evolves. Frequent practice in summarizing provides students with constant modeling and success with summarizing (Oczkus, 2002).

Retelling is an important part of summarizing that is essentially a longer version of a summary that may include more sequence and details from the reading (Oczkus, 2002). Oczkus (2002) stated, "For many students, especially younger children, retelling is easier for them" (p.168). When readers are able to understand information on the page and can organize their thinking around it, they are ready to summarize Goudvis and Harvey (2007) suggested the following to enhance students' summarizing ability:

- 1. Students can summarize by picking out the most important information, keeping it brief, and saying it in their own words.
- 2. Students are learning new information, adding to their background knowledge, and changing their thinking.
- 3. Students pick out the most important information and merge their thinking with it to come up with responses that are both personal and factual.
- 4. Students use authentic questions, inferences, and interpretations to synthesize information and reach it to others through a variety of projects and products.

Comprehension Instruction

Research from the 1980s indicated that in traditional reading classrooms, time for comprehension instruction was as rare as time for actual text reading (Fielding & Pearson, 1994).

After extensive observations of classrooms, Durkin (1978-1979) concluded that teachers were spending very little time on actual comprehension instruction. Although they have many

workbook assignments and asked many questions about text content, Durkin (1978-1979) judged that these exercises mostly tested students' understanding instead of teaching them how to comprehend.

In response to Durkin's findings, much research in the 1980s was devoted to discovering how to teach comprehension strategies directly (Fielding & Pearson, 1994). Fielding and Pearson(1994) stated, "In the typical study of this type, readers were directly taught how to perform a strategy that skilled readers used during reading" (p. 64). Then, their abilities both in strategy use and text comprehension were compared either to their own performance before instruction or to the performance of similar readers who were not taught the strategy directly (Fielding & Pearson, 1994). Explicit instruction or gradual release of responsibility model, involves four phases: teachers modeling, guided practice, independent practice, and application (Miller, 2002).

In one of the biggest success stories of the time period, research showed repeatedly that comprehension can in fact be taught (Fielding & Pearson, 1994). Many strategies have been taught successfully such as:

- 1. Using background knowledge to make inferences (Hansen, 1981)
- 2. Visualizing what is being read (Pressley & El-Dinary, 1997)
- 3. Monitoring reading, so reading make sense (Dollaghan, 1987)
- 4. Answering higher order questions (McKenzie, 1997)
- 5. Summarizing the text (Mandeville, 1994)

Fielding and Pearson (1994) stated, "One of the most exciting results of this body of research was that comprehension strategy instruction is epically effective for students who began

the study as poor comprehenders-probably because they are less likely to invent effective strategies on their own" (p. 65).

Research also shows that explicit teaching techniques are particularly effective for comprehension strategy instruction. Of the many possible strategies, the following often produce improved memory and comprehension of text in children:

- 1. For schema: Making Connections (see Appendix A)
 - For visualizing: Mental Images (see Appendix B) & Adapting Mental Images (see Appendix C)
 - 3. For monitoring: Monitoring Bookmark (see Appendix D)
 - 4. For questioning: Question Web (see Appendix E)
 - 5. For inferring: Picture Book Detective (see Appendix F)
 - 6. For summarizing: B-M-E (see Appendix G)

Gradual release of responsibility. Since 1984 when Pearson and Gallagher wrote about the gradual release of responsibility model, their model has served as a framework for many literacy instructional programs and approaches to developing comprehension lessons (Serafini, 2006). Serafini (2006) stated, "The gradual release of responsibility model is based on the transfer of responsibility for a particular learning task from the teacher to the students" (p. 3).

The focus of this model is the level of responsibility the teacher must maintain to ensure a successful learning outcome or the amount of responsibility the teacher released to the student (Serafini, 2006). It assumes that responsibility initially resides with the teacher and is given over to the students. "By focusing on the amount of responsibility released by a teacher this becomes a model for teaching, not learning" (p. 4), stated Serafini (2006).

The gradual release of responsibility model for reading instruction uses these four stages that guide children toward independence (Miller, 2002):

- 1. Teacher modeling and explanation of a strategy
- 2. Guided practice, where teachers gradually give students more responsibility for task completion
- 3. Independent practice accompanied by feedback
- 4. Application of the strategy in real reading situations

Teacher modeling includes explaining the strategy, thinking aloud about the mental processes used to construct meaning, and demonstrating when and why it is most effective (Miller, 2002). Miller (2002) stated, "Thinking aloud about what's going on inside our heads as we read allows us to make the invisible visible and the implicit explicit" (p.10).

Guided practice, or scaffolding, consists of gradually giving students more responsibility for using each strategy in a variety of authentic situations (Miller, 2002). Miller (2002) believes this happens when students are invited to practice a strategy during whole class discussions, asked to apply it in collaboration with their peers in pairs and small groups, and supported by feedback.

In the independent practice stage, or the letting go stage, students begin to apply the strategy in their own reading (Miller, 2002). Miller (2002) stated, "Teacher feedback through conferences is essential; teachers need to let children know when they've used a strategy correctly, encourage them to share their thinking with the teacher and their peers, challenge them to think out loud about how using the strategy helped them as a reader, and correct misconceptions when they occur" (p.11).

The last stage of the gradual release of responsibility model is the application stage. This stage is evident when students apply their learning independently to different types of text or in other curricular areas (Miller, 2002). Miller (2002) stated, "By this stage, students are more flexible in their thinking: they begin to make connections between this strategy and others; they can articulate how using a strategy helps construct meaning; and they can use strategies flexibly and adaptively when they read" (p.11).

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With all of the research and studying conducted over this year on reading comprehension and reading comprehension strategies, I believe that all teachers need to be teaching their students comprehension strategies. Comprehension strategies have been researched and found to make a positive impact on student's comprehension abilities. Along with all the pressure placed on teachers to raise test scores, teaching comprehension strategies has never been more important.

According to the research, good readers are more aware of why they are reading a text, gain an overview of the text before reading, make predictions about the upcoming text, associate ideas in text to what they already know, note whether their predictions and expectations about text content are being met, revise their prior knowledge when compelling new ideas conflicting with prior knowledge are encountered, and figure out the meanings of unfamiliar vocabulary based on context clues. Readers also reread to remember important points, interpret the text, evaluate its quality, review important points as they conclude reading, and think about how ideas encountered in the text might be used in the future. Young and less skilled readers, in contrast, exhibit a lack of such activity.

Because of the many educators researching reading, researchers have developed approaches to motivate active reading by teaching readers to use comprehension strategies.

Reading to students and modeling the strategies are great ways to motivate and teach the comprehension strategies (see Appendix N for children's literature for each comprehension strategy).

Based on my review of the literature, I believe that teaching elementary, middle school, and high school students to use comprehension strategies would increase their comprehension of text. Teachers should model and explain comprehension strategies, have their students practice using such strategies with teacher support, and let students know they are expected to continue using the strategies when reading on their own. A tool to teach these strategies, so students can refer back to them is to use comprehension strategy posters (see Appendix H-M). Such teaching should occur every school day, for as long as required to get all readers using the strategies.

I do believe that if our ultimate goal is to develop independent, motivated comprehenders who choose to read, then today's teachers need to be teaching students comprehension strategies. It is through these strategies that students can experience successful comprehension, learning, independence, and interest that will motivate future reading.

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Appendix A

Name:

Date:

Making Connections		
When I read this part about:	It reminded me of:	

Appendix B

Name:

Date:			
Mental images from:			
My Image	My Image after having a conversation with		
:			

Adapting Mental Images During Reading

My Image now		And now
	18, 19	
And now		And now.
	e tra	

Appendix D

Monitoring Bookmark

What to do when you don't know a word:

- Look at the picture
- Reread
- Get your mouth ready
- Look for word chunks
- Skip and read on

Appendix E

Title of Book: I wonder....

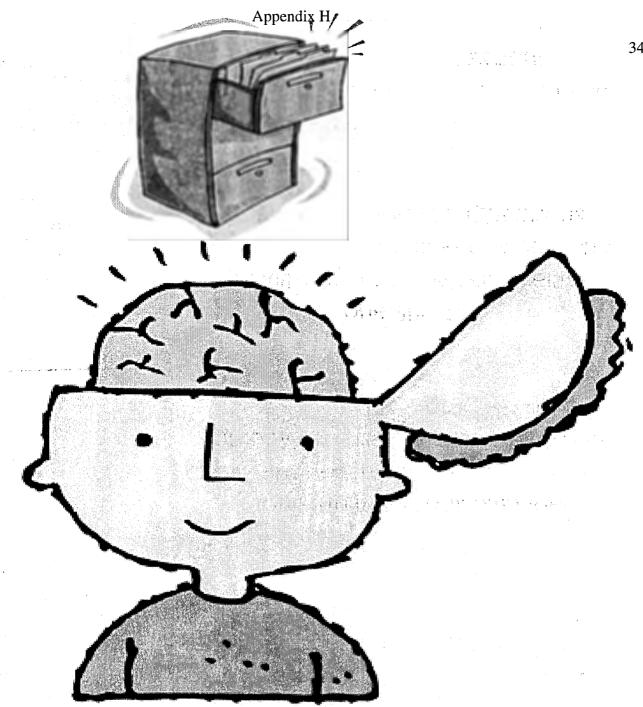
Appendix F

Picture Book Detective

Page	Describe the picture	Clues from the picture Our experiences	Inference
	Describe the picture	Clues from the picture	Inference
Page		Our experiences	
Page	Describe the picture	Clues from the picture Our experiences	Inference

B-M-E

Beginning	Middle	End



Schema

Thinking about what we already know.



Visualizing

Picture what you are reading in your head.

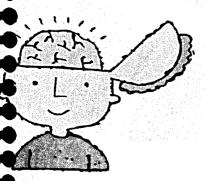


Right There Questions Go back in the reading and find the answer in the book.

Think and Search Questions You have to think about how the information from the book relates to one another.



Author and You Questions You have to use ideas and information that are not in the book. You have to come up with your own ideas.



On My Own Questions You have to use your schema on the topic to answer the question correctly.

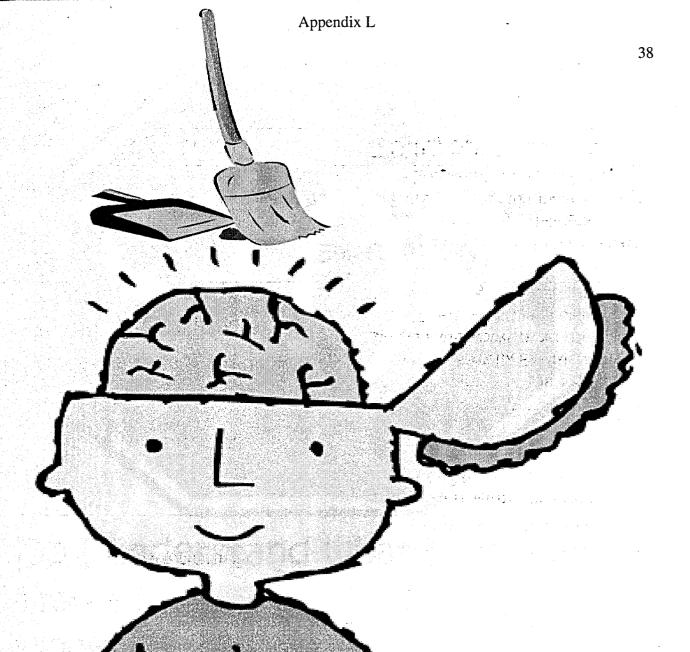
Duestioning

Ask yourself questions before, during and after reading.



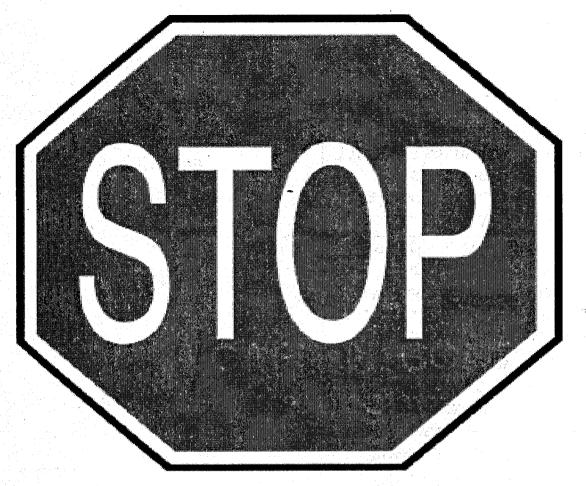
Inferring

Combine schema and information from the book.



SUmmarizing

Summarize while you read and sweep away what is not important.



Do I understand what I am reading?

- * reread
- * look at illustrations
- * use a graphic organizer
- * ask for help

Monitoring

Make sure what your reading make sense.

Appendix N

Strategy	Children's Literature
\$chema	Fireflies by Julie Brinkloe I Know a Lady by Charlotte Zolotow Koala Lou by Mem Fox The Snowy Day by Ezra Jack Keats The Two of Them by Aliki
Visualizing	Close Your Eyes by Jean Marzollo Greyling by Jane Yolen The Napping House by Audrey Wood Quite Please By Eve Merriam Say Something by Mary Stoltz
Monitoring	Brown Bear Brown Bear by Eric Carle Day of Ahmed's Secret by Hyde Magic School Bus by Cole Polar Bear Polar Bear by Martin Sweetest Fig by Van Alsburg
Questioning	All I see by Cynthia Rylant Fly Away Home by Eve Bunting Grandfather Twilight by Barb Berger The Lotus Seed by Sherry Garland Why is the Sky Blue by Sally Grindley
Inferring	Fireflies by Julie Brinkloe Fly Away Home by Eve Bunting If You Listen by Charlotte Zolotow Something Beautiful by Sharon Wyeth Winter Fox by Catherine Stock
Summarizing	Fables by Arnold Lobel Fredrick's Fables by Leo Loinni The Ras Coat by Lauren Mills See the Ocean by Estelle Condra Tea with Milk by Allen Say