

Kentucky Department of Education

Comprehension

Instructional Menu



Comprehension

Guiding Questions for Comprehension:

1. What is comprehension?
2. What does scientific based reading research say about comprehension?
3. How do we assess and monitor comprehension?
4. What types of comprehension lessons and instructional strategies increase student achievement?
5. What are some effective practice activities for improving comprehension?

1. What is comprehension?

- a. Reading Comprehension has come to be viewed as the “essence of reading” (Durkin, 1993), essential not only to academic learning but to life long learning. (*NRP 2000*)
- b. Comprehension is a complex process. There exist as many interpretations of comprehension as there are of reading. Reading comprehension is intentional thinking during which meaning is constructed through interactions between text and reader. Reading comprehension is the construction of meaning of a written text through the reciprocal interchange of ideas between the reader and the message in a particular text. (*NRP 2000*)
- c. Comprehension is the active process of constructing meaning from text. It involves accessing prior knowledge, understanding vocabulary and concepts, making inferences, and linking key ideas. It cannot be learned through rote instruction. It requires a series of strategies that influence understanding of the text. (*Research-Based Methods for Reading Instruction Grades K-3, pg. 98*)
- d. Comprehension is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. It consists of three elements: the reader, the text, and the activity or purpose for reading. (*RAND Reading Study Group, pg. 11*)
- e. Comprehension includes:
 - applying one’s experiences to the text
 - setting goals for reading
 - using strategies to construct meaning during and after reading
 - adapting strategies to individual readers’ texts and goals
 - recognizing the author’s purpose
 - distinguishing between facts and opinions
 - drawing logical conclusion(*Research-Based Methods for Reading Instruction Grades K-3, pg. 99*)

2. What does scientific based reading research say about comprehension?

- a. As the NRP began its analysis of the extensive research data on reading comprehension, three predominant themes emerged: (1) reading comprehension is a cognitive process that integrates complex skills and cannot be understood without examining the critical role of vocabulary learning and instruction and its development; (2) active interactive strategic processes are critically necessary to the development of reading comprehension; (3) the preparation of teachers to best equip them to facilitate these complex processes is critical and intimately tied to the development of reading comprehension. These three themes serve as the foundation for understanding how best to help teachers develop students' comprehension abilities. (*NRP 4-11*)
- b. Teachers should emphasize text comprehension from the beginning, rather than waiting until students have mastered "the basics" of reading. Instruction at all grade levels can benefit from showing students how reading is a process of making sense out of text, or construct meaning. Beginning readers, as well as more advanced readers, must understand that the ultimate goal of reading is comprehension. (*Put Reading First, pg. 55*)
- c. Comprehension instruction should be instruction of: decoding skills, sight word development, use of semantic context clues, vocabulary meanings, and use of comprehension strategies. (*Handbook of Reading Research, pgs. 545- 561*)
- d. There is firm scientific basis for comprehension instruction of key strategies. (*NRP-4-6*) Readers normally acquire strategies for active comprehension informally. Comprehension strategies are specific procedures that guide students to become aware of how well they are comprehending as they attempt to read and write. Explicit or formal instruction of these strategies is believed to lead to improvement in text understanding and information use. (*NRP 4-5*) Explicit teaching techniques are particularly effective for comprehension strategy instruction. (*Put Reading First, pg. 53*)
- e. Text comprehension can be improved by instruction that helps readers use specific comprehension strategies. Comprehension strategies are conscious plans-sets of steps that good readers use to make sense of text. Comprehension strategy instruction helps students become purposeful, active readers who are in control of their own reading comprehension. In addition to identifying these strategies, research provides guidelines on how to teach them. It is effective to use explicit instruction: direct explanation, modeling, guided practice, and application when teaching comprehension strategies. (*Put Reading First, pg.49*)
- f. Dr. Janet Almasi also discusses explicit instruction of comprehension strategies based on research. (*Teaching Strategic Processes in Reading, pgs. 108-109*)
 1. Previewing Text-Picture walks, rich discussion
 2. Activating Prior Knowledge-semantic webs & maps, vocabulary language prediction activities, the K of a KWL chart

3. Setting Purposes-DRT activities, W of a KWL chart, keeping a journal/log
4. Predicting- DRT activities, journal/log, vocabulary language prediction and story map activities
5. Identifying Text Structure- story maps, expository graphic organizers
6. Imagery/Visualization-Sketch & share activities
7. Comprehension Monitoring-Stop & Go or Click & Clunk activities

3. How do we assess and monitor comprehension?

- a. Comprehension is one of the most challenging components of reading to assess and monitor. Teachers should consider the following when choosing tests:
 - The purpose (screening, monitoring, assessing, or diagnostic)
 - The specific information needed about the students' comprehension
 - The number being tested and whether it can be done whole or small group or individually
 - The qualifications/experience required to administer the test

- b. Progress Monitoring is also essential to comprehension assessment. It enables teachers to keep track of student learning and identify those who need extra help. To monitor progress efficiently, teachers should:
 - Assess all students at the beginning of the year in the critical areas for their grade level
 - Determine which ones need extra support
 - Develop a plan for teaching them
 - Monitor on a regular basis to assess progress.

- c. Below are some types of comprehension tests. Standardized assessments can make judgments, but do not completely assess comprehension (*Research-Based Methods of Reading Instruction, pgs. 102-104*)
 - Teacher-generated – best assessment of growth
 - Standardized
 - Cloze Activities
 - Questioning (formal & informal)
 - Sentence and passage
 - Gates-MacGinitie Reading Tests (MacGinitie et. al.,2000) K-3, group, word meanings and comprehension passages, 55-75 minutes
 - Gray Oral Reading Test 4 (Wiederholt & Bryant, 2001) 1-3, individual, 14 with multiple choice, 15-45 minutes
 - Gray Silent Reading Test (Wiederholt & Bryant, 2000) 2-3, individual, small group or whole class, 13 passages with 5 questions, 15-30 minutes
 - Qualitative Reading Inventory (Leslie & Caldwell, 2001) K-3, individual, comprehension, oral reading, silent reading, listening, 30-40 minutes word, sentence/passage comprehension, vocabulary, 20 minutes
 - Standardized Reading Inventory 2 (Newcomer, 1999) 1-3, individual, passage comprehension and vocabulary in context, 30-90 minutes

+NRP suggests using more than a single measure...The best approach is to ensure the assessment closely matches the instructional context.

4. What types of comprehension lessons and strategies increase student achievement?

- a. Research has identified instruction that improves text comprehension. Two hundred three studies on text comprehension led to 16 different kinds of procedures of instruction. Of these, eight offered a scientific basis for concluding they improve comprehension. The eight kinds of instruction that appear to be effective and most promising for class instruction are: (*NRP 4-6, NRP Small Book, pg. 15, & Put Reading First, pgs. 49-52*)
1. **Comprehension Monitoring**- a critical part of metacognition, in which the reader learns how to be aware of his/her understanding during reading and learns procedures or uses “fix-up” strategies to deal with problems in understanding as they arise. The goal is to develop awareness by readers of the cognitive process involved during reading.
 2. **Graphic and Semantic Organizers**- (semantic maps, expository maps, story maps, and graphic metaphors are included) that allow the reader to represent graphically/visually the meanings and relationships of the ideas that underlie the words in the text. They help readers focus on concepts and how they are related to other concepts. They provide students with tools they can use to examine and visually represent relationships and help students write well-organized summaries.
 3. **Story Structure**-from which the reader learns to ask and answer who, what, where, when, and why questions about the plot and, in some cases, maps out the timeline, characters, and events in stories to understand how plots are organized into episodes. Knowing the structure of a story facilitates comprehension and memory for students.
 4. **Question Answering**- in which the reader answers questions posed by the teacher and is given feedback on the correctness. Questions give students a purpose for reading, focus attention on what they’re to learn, encourage students to monitor, and help students to review content and relate what they’ve learned to what they already know. Students learn to discriminate questions that can be answered based on text vs. those based on prior knowledge.
 5. **Question Generation**- in which the reader asks himself/herself what, when, processing of text and comprehension. The goal is to teach students to become independent, active, self questioners. It should also increase students’ awareness of whether they are comprehending text and is part of the reciprocal teaching strategy.
 6. **Summarization**-in which the readers attempts to identify and write the main or most important ideas that integrate the other ideas or meanings of the text into a coherent whole. The aim is to teach the reader to identify the main idea and to help students to eliminate unnecessary information and to remember what they read.
- b. Other comprehension strategies that have some scientific support are making use of prior knowledge and using mental imagery. Prior knowledge affects comprehension by creating expectations about the content, thus directing

attention to relevant parts, enabling the reader to infer and elaborate what is being read, to fill in missing or incomplete information in the text, and to use existing mental structures to construct memory representations that facilitate later use, recall, and reconstruction of text. Teachers ask students to compare lives to text prior to, and during reading, to make predictions, to practice answering questions, and to monitor adequacy of answers. Mental imagery requires an interpretation of what is read so the reader can construct an image that serves as a memory representation of the text interpretation. Teachers ask the students to construct images to represent content. (*Put Reading First, pg. 56, NRP 4-76 & 4-84*)

- c. Cooperative Learning- Is a scientifically based research instructional strategy in which the readers work together to learn strategies in the context of reading. Another instructional strategy with research support is the use of multiple strategy teaching where the reader uses several procedures in interaction with the teacher over the text. It is effective when procedures are used flexibly and appropriately by the reader or teacher in naturalistic contexts.
- d. Three Types of Comprehension Lessons- One of the most important actions primary teachers can take to build students' comprehension skills is teaching three different types of comprehension lessons to develop literal, inferential, and metacognitive comprehension skills. (*Understanding & Implementing Reading First, pg. 85*)
 - 1. teacher directed lessons (expanded explanations, strategies, think-alouds)
 - 2. one-on-one lessons (individualized mini-interventions)
 - 3. students choice lessons on the skills they want to learn more about
- e. Strategies to Teach **Before Reading**:
 - 1. Teach students to set a purpose for reading.
 - 2. Provide questions and connections to motivate students.
 - 3. Pre-teach key vocabulary and concepts.
 - 4. Link students' background knowledge and experiences.
 - 5. Relate the text to students' lives.
 - 6. Teach students text features and how to use them.

Strategies to Teach **During and After Reading**:

- 1. Teach students how to monitor understanding through demonstration and think-alouds.
- 2. Provide students with questions to consider while reading.
- 3. Help students draw inferences from text.
- 4. Have students summarize main ideas of a paragraph.
- 5. Ask students to confirm, disconfirm, or extend predictions and generated questions. (*Research-Based Methods for Reading Instruction Grades K-3, pg. 105*)

5. What are some effective practice activities for improving reading comprehension?

Comprehension Instructional Menu Strategies and Practice Activities

This resource is intended to provide a compilation of SBRR instructional strategies and activities found in a variety of professional development materials/sessions experienced throughout the tenure of Reading First. The list is not a mandated, nor all inclusive, list but includes options for use during small group instruction time of Tier I and for instruction during Tier II. The activities listed in the menu align with a variety of strategies and can be used interchangeably.

Comprehension Strategy/Description	Effective Comprehension Practice Activities	Activity Description
<p>Comprehension Monitoring The teacher demonstrates awareness of difficulties in understanding words, phrases, clauses, or sentences. Students are taught to think about what is causing them difficulty in understanding. They use think-aloud procedures, reread, slow down, look back in text to try to solve problems, restate or paraphrase text, and look forward in text to solve a problem. It can be taught as a part of a larger program of reading strategies in interaction with the teacher in natural reading or content areas.</p> <p>Context Clues are also an important part of comprehension monitoring.</p>	<p>Reading for Understanding (Monitoring Comprehension)</p> <p>Say Something</p> <p>TIS Inferencing</p>	<p>Readers become aware of when they understand what they are reading through comprehension monitoring. The teacher provides instruction of fix-up strategies for readers in various settings. This involves teaching readers to become aware of when they do understand and to identify where they do not understand. (Reading First Summer Institute 2004 Binder, pgs. R14-8, R14-9)</p> <p>At certain predetermined stopping points in text, students stop and say something or retell what they have just read to their partner using one of the following as prompt:</p> <ul style="list-style-type: none"> - Make a prediction - Clarify something misunderstood - Make a comment <p style="text-align: right;">-Ask a question -Make a connection</p> <p>Students fold a paper into 4 squares. On the first square, a “Q” and the question is written. On the second square, a “T” and what the text says is written. On the third square, an “I” and what the students</p>

<p>Students can use this strategy during reading when they encounter an unfamiliar word in text. When a student “stumbles” on an unfamiliar word, he/she needs to know how to use all word identification “tools” in their mental toolbox to decode the word. Students look to see if he/she recognizes any part of the word, then say the beginning sound of the part of the word known in the place of the word in the sentence then read the rest of the sentence. Most of the time students who use this strategy figure out the word on their own. If the student does not say the right word, then ask him/her to think what would make sense there. Remind the student to use all clues. (Remember there is nothing wrong with sounding out words. However, this can’t be the only thing they use.)</p> <p>Predicting is also included in comprehension monitoring. It occurs before reading to help focus your thinking. Predictions are guesses or hypotheses about what you think will happen in the text. Look at the title, pictures,</p>	<p>Story Time</p>	<p>know about that topic is written. An “S” is written on the fourth square, and the students write “So I Can Infer” and then write the inference made.</p> <p>Students listen to a story introduction by the teacher. They respond to questions by relating their learning and experiences to the information provided to make predictions about the story.</p>
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<p>Making Connections</p> <p>Activating Prior Knowledge Teachers encourage children to compare their lives with situations in the text, either prior to or during the reading. Teachers ask students to make predictions about content based on their prior knowledge, often in response to pre-reading questions in the text. Teachers have students practice answering inferential questions by drawing on text information and prior knowledge. Teachers ask students to search the text and to use what they know to answer inferential questions about the text. Teachers ask students to monitor adequacy of answers to questions.</p> <p>Previewing/Surveying Text Previewing involves looking at the title, pictures, table of contents, headings, chapter titles, and subheadings. Students also read the back cover, introductory statements, or any other textual feature to gain an idea of what the text will be</p>	<p>Connection Stickies</p> <p>Exclusion Brainstorming</p> <p>KWL Chart</p> <p>Text Scan</p> <p>Preview Web</p>	<p>Students use Post It flags labeled T- S, T-T, and T-W and flag text to self, text to text, and text to world connections they are able to make during reading.</p> <p>A pre reading activity that teachers use to activate students’ prior knowledge and expand their understanding about a content topic before reading. Teachers present students with a list of words to read, and the students identify words on the list that relate to the topic as well as those that do not. As they talk about the words, they try to decide which words are related to the topic. Students refine their knowledge of the topic, are introduced to some key vocabulary words, and develop a purpose for reading. After reading, students review the list of words and decide whether they chose the words correctly. (Tompkins, pgs. 42-43)</p> <p>Students self question prior knowledge (K), set purposes for reading by determining what they want to know (W), and identify new concepts/material learned (L)</p> <p>Students scan the text before reading and pay attention to pictures, headings, tables, vocabulary, and other information.</p> <p>Students use the web (a graphic organizer with a text topic in the center and outer circles for information about the topic). Students write the topic in the center circle and brainstorm. Everything they know about the topic is written in the outer circles.</p>
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<p>about.</p> <p><i>Teachers can use making connections to teach skills such as generalization, text features, and classifying & categorizing.</i></p>	<p>SQ3R-</p>	<p>Students use five steps: survey, question, read, recite, and review-to read and remember information in content area reading assignments. Survey-students preview an assignment noting particular things. This activates prior knowledge and helps organize what will be read. Question-students turn each heading into a question before reading. This gives a purpose for reading. (Read)-students read selection separately. (Recite)-students answer the questions they formulated orally or in writing after each section. (Review)-students review the entire assignment that was read, ask the questions, and try to recall answers without referring to their notes.</p>
<p>Question Answering Teachers ask students questions during or after reading passages of text. Teachers ask students to look back to find answers to questions that they cannot answer after one reading. Teachers ask students to analyze questions with respect to whether the question is tapping literal information covered in the text, information that can be inferred by combining information in the text, or information in the reader’s prior knowledge base.</p> <p><i>Teachers can use questioning to teach skills such as skim & scan, fact & opinion, and author’s purpose.</i></p>	<p>Everybody Read To</p> <p>Narrative Comprehension Cards</p> <p>Expository Comprehension Cards</p>	<p>Students are given a question and “everybody reads to” the answer. Once the answer is found, students engage in a discussion, and another question is given, and “everybody reads to” the next answer. The process continues until the text is completely read.</p> <p>Students use color coded (green-used before reading, yellow-during reading, and red-after reading) comprehension cards that contain comprehension questions such as “What does the title tell me about the story?”, “What is the problem in the story that must be resolved?”, and “Who were the characters in the story?” to answer questions about text passages or stories read. (Reading First Summer Institute Binder 2004, pgs. 14-37, 14-42)</p> <p>Students use color coded (green-used before reading, yellow-during reading, and red-after reading) comprehension cards that contain comprehension questions such as “What does the title tell me?” , “What do I already know about the topic?”, and “What new words did I learn?” to answer about text passages. (Reading First Summer Institute Binder 2004, pgs. 14-43 to 14-47)</p>

	<p>Question Answer Relationships (QAR)</p>	<p>Students are taught the four basic types of questions and how to answer those types of questions: Right There, Put It Together, Author and Me, and On My Own. The students then practice with text by identifying the type of question given, and by generating each type of question from text. (Reading First Summer Institute Binder 1, Comprehension Section, pgs. 14-64 , R14-15, R14-16)</p>
<p>Question Generation Teachers ask children to generate questions during the reading of a passage. The questions should integrate information across different parts of the passage. Teachers ask children to evaluate their questions about whether they covered important material, were integrative, or whether they could be answered based on what was in the text. Teachers provide feedback on the quality of the questions asked or assist students in answering the questions generated.</p> <p><i>Teachers can use questioning to teach skills such as skim & scan, fact & opinion, and author’s purpose.</i></p>	<p>Reciprocal Teaching</p> <p>I Wonder</p>	<p>Students read a passage or text and then use four simple strategies that are helpful for reading comprehension (summarizing, questioning, clarifying, and predicting). These are used as a questioning routine when reading passages. (Summer 2004 Summer Institute Binder, pgs. 14-53, 14-57)</p> <p>Students generate questions (individually or in groups) before, during, and after they read. They write or ask “ I wonder…….” Questions based on the topic(s).</p>
<p>Story Structure Teachers teach students to ask and answer five questions: Who is the</p>	<p>Story Retell</p>	<p>Children discuss a story with its setting and characters, recount the problem, sequence events, and state the solution or outcome after reading or discussing a story. (Reading First Summer Institute</p>

<p>main character? Where and when did the story occur? What did the main characters do? How did the story end? How did the main character feel? Students learn to identify the main characters of the story, where and when the story took place, what the main characters did, how the story ended, and how the main characters felt. Students learn to construct a story map recording the setting, problem, goal, action and outcome over time. Some mapping procedures require recording the setting, problem, goal, action, and outcome information.</p> <p>Text Structure Identifying text structure gives an idea of how the text is organized so you can anticipate what types of information will be forthcoming. Identifying text structure while you read helps focus your attention and enhances comprehension and recall of text. Look at the title, pictures, headings, chapter titles, or any other clues in the text to gain an idea of how it is organized. Skim through</p>	<p>Sequencing Books</p> <p>Data Charts</p> <p>T Chart</p>	<p>2004 Binder, Comprehension Section, pgs. R14-1 R14-2)</p> <p>Students cut apart and paste information in order to recreate text in small book form.</p> <p>Data charts are grids that students make and use as a tool for organizing information about a topic. During reading, students record data they find on “data chart”. (Tompkins pgs. 34-36)</p> <p>Students respond to text according to the headings on the two columns in a two-column chart (Ex. “What the text says” is written on the left side of the chart, and “What I think about it” is written on the right side of the chart.</p>
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<p>the text. Look for cue words. Decide on the type of text.</p> <p>Fiction (Narrative) Beginning – characters, setting, problem Middle – major events End – solution to problem</p> <p>Non-Fiction (Expository) Organizational Patterns: Sequencing, cause and effect, comparison and contrast</p> <p><i>Teachers can use structure to teach the skills of compare & contrast, cause & effect, and sequencing.</i></p>	<p>Learning Logs</p>	<p>Students write in learning logs as part of across-the-curriculum units. Learning logs are notebooks in which students record information they are learning, write questions and reflections about their learning, and make charts, diagrams, and clusters. (Tompkins, pgs. 60-62).</p>
<p>Summarizing It is an important strategy for integration and generalization of information. Readers are taught to summarize mainly to delete redundant information, to identify or generate main ideas, and to recognize significant from insignificant details.</p> <p><i>Teachers can use summarizing to teach: story elements, main idea & details, and sequencing.</i></p>	<p>The 5 W's</p> <p>Get the Gist</p> <p>Story Map</p>	<p>Students summarize the text by identifying the Who, What, Where, When and the Why.</p> <p>Students summarize the text read and determine the main idea or “gist” by asking three questions: Who or what is the paragraph about? What is the most important thing about the who or what? What is the main idea in 10 words or less? (Sample Summer Institute 1 Binder, pgs. 14-51, 14-52)</p> <p>A graphic organizer used to determine key events or elements in text. Students complete in several formats. (Sample in Summer Institute 1 Binder, Comprehension Section, pgs. 14-35)</p>

<p>Visualization/Imagery Developing pictures in your mind is important to comprehension. It is important to pause during reading to discuss pictures, diagrams, setting, character traits, etc. Teachers ask readers to construct an image that represents the content. The use of imagery is an easy strategy to teach. Teachers could be trained to use it appropriately with sentences during the reading of text in natural reading or content areas. This method would actively engage the reader and enhance comprehension. It could also be used during oral reading and listening because imagery is easier when listening than when reading.</p> <p><i>Teachers can use visualizing to teach skills such as compare & contrast, story elements, and cause & effect.</i></p>	<p>Quickwrites and Quickdraws</p> <p>Sketch to Stretch – “I See”</p> <p>Story Cube</p> <p>Venn Diagram</p> <p>What/Why Graphic Organizer</p>	<p>Students use quickwriting to respond to literature and for other types of impromptu writing. Students develop ideas, reflect on what they know about a topic, ramble on paper, and make connections among ideas. Quickdraws are a variation in which students draw instead of write. (Tompkins, pgs. 78 – 80).</p> <p>Students work in small groups to draw pictures or diagrams to represent what the story means to them, not pictures of their favorite character or episode. Students use lines, shapes, colors, symbols, and words to express their interpretations and feelings.</p> <p>Students fold a sheet into 4 squares or cover a small box with white paper and visualize/illustrate characters, setting, problem, and solution.</p> <p>A graphic organizer that is used to compare and contrast information from one or various texts. (Two intersecting circles) Students write/draw difference in the circle parts that don’t overlap and write/draw the similarities in the overlapping section.</p> <p>Often used with cause and effect elements in text. Students locate a possible cause and effect from a text. Then they answer yes or no to determine if they are related.</p>
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Comprehension Professional Resources:

Almasi, J. (2003). *Teaching Strategic Processes in Reading*. New York: Guilford Press.

Hoyt, L. et. al. (2005). *Spotlight on Comprehension*. New Hampshire: Heinemann.

International Reading Association. (2004). *Evidence-Based Reading Instruction, Putting the National Reading Panel into Practice*. Delaware: International Reading Association.

International Reading Association. (2006). *Understanding and Implementing Reading First Initiatives*. Delaware: International Reading Association.

National Institute for Literacy. (2003). *Put Reading First*. Maryland: National Institute For Literacy.

National Reading Panel. (2000). *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*. Maryland: National Institute for Literacy.

National Research Council. (2002). *Preventing Reading Difficulties in Young Children*. Washington, DC: Academy Press.

Pressley, M. (2000). *Handbook of Reading Research*. Mahwah, NJ: Erlbaum.

Tompkins, Gail E. (1998). *50 Literacy Strategies: Step by Step*. New Jersey: Prentice-Hall, Inc.

Vaughn, S. & Thompson, S. L. (2004). *Research-Based Methods for Reading Instruction Grades K-3*. Virginia: Association for Supervision and Curriculum Development.