

Reading Comprehension: Bridging the Gap Between
Research and Practice

An Honors Thesis (HONRS 499)

by

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A handwritten signature in black ink, appearing to read "Tom S. Schroeder", written over a horizontal line.

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ABSTRACT

This work traces the history of prevailing philosophical frameworks, theories, and resulting instructional implications in the field of reading comprehension from the late nineteenth century to the present day. It then provides a rationale for using reading comprehension strategies as a viable method of direct instruction in the contemporary literacy classroom. A set of guidelines for general strategy use is put forth, as well as a list of research-based criteria by which one can evaluate existing comprehension strategies. Finally, there is a discussion of specific strategies with reference to the evaluative criteria.

Reading Comprehension: Bridging the Gap Between Research and Practice

There is usually a reciprocal relationship between current research and what is happening in the classroom. Trends noticed by educators become issues for researchers, and the corroborated findings of the research community are very often integrated into the educational system. This cycle of information can be tediously slow. Each profession has a certain inertia that discourages rapid changes in direction, but change, though slow, does thankfully occur.

Nowhere is this reciprocity between research and the classroom more evident than in the area of reading comprehension. Through the years the accumulated body of knowledge on reading comprehension has had a profound impact on the way that children are taught to read and the way that teachers are taught to teach the subject. And school-aged readers are constantly providing "food for thought" for those that ponder the nature of reading comprehension.

This is certainly not to say that there has always been a complete consensus among reading professionals. In fact, a universally accepted definition and explanation of comprehension has eluded psychologists,

linguists, and educators since the late nineteenth century when it first became a widespread item of interest (Hall, 1989). The heated debate over the true nature of reading comprehension continues today, spurred on by available evidence that is inconclusive and sometimes contradictory.

Since the 1940s there have been several emergent theories on comprehension that, while not universally accepted, have become prominent and influential. These "philosophies," backed by the concurrent research of their respective time periods, have in large part shaped existing reading curriculums and teacher education programs. A brief look at the history of reading comprehension research and its instructional implications show that successive theories on comprehension have seemingly run the entire gamut in a relatively short period of time.

Prevailing Philosophies on Comprehension

From the 1940s to the mid-1960s, literature on reading issues was very much instruction-based. Researchers of this time were not particularly interested in investigating the somewhat nebulous idea of "reading comprehension," they merely wanted to find the best ways and means of improving reading skills.

Most professionals at this time deemed comprehension and decoding to be synonymous, and agreed with Chall (1967) that working on decoding at the early stages of reading instruction would lead to improved achievement and understanding in reading. This explains the heavy emphasis on phonics and fluency in the reading curriculum until near the end of the 1960s (Fries, 1963).

When it became apparent in the late 1960s that comprehension, whether taking place or not, occurs independently from decoding, reading programs across the country began to include a comprehension questioning approach. During and after reading students were asked to answer some carefully chosen comprehension questions, which ranged from the literal to the critical/evaluative level. This ubiquitous procedure has been practiced from the primary grades through secondary school since the "basalization" of reading comprehension (Nessel, 1987).

This questioning strategy for teaching comprehension has been challenged on several points. The strategy implies that there is only one right answer and that answer is in the text, which in turn implies that the basic nature of reading is passive and simplistic (Irwin, 1991). This concept of reading must be rejected in light of recent findings that reading

comprehension is quite complex and transactional between the author's text and the reader's mind (Harste, 1985; Tiballi & Drake, 1993).

While comprehension questions very well may assess a reader's understanding of a passage, it is not a teaching method in and of itself. Nessel (1987) calls these question-and-answer sessions nothing more than a "thinly disguised test" (p. 443), which is no substitute for direct instruction, nor is it a true exchange of ideas.

At this point educators hearkened back to their instructional objectives. They were beginning to embrace the tenets of outcomes-based educational planning, and they realized that a better working definition of comprehension must be found before one could expertly teach and assess it. This further induced researchers to try to answer the question, "What exactly is comprehension?"

Subskill Theory

During the early part of the twentieth century, several individuals began to investigate the possibility that comprehension was the aggregate result of several lesser subskills working in unison (Thorndike, 1917; Gates, 1927; Davis, 1944). The findings of each researcher were not completely decisive, and the

conclusions of the various studies were found to be somewhat contradictory upon comparison. The results of their work gave rise to speculation and a debate that has yet to be satisfactorily resolved.

Later experimental evidence seemed to support the existence of differentiated subskills, and this understanding of reading comprehension became widely accepted in the late 1960s and early 1970s. Davis (1968) reported that of his eight postulated subskills, at least five were experimentally distinguishable, and Miller (1973) concluded that "it would seem appropriate to support studies. . .which aim at calibrating and ranking these skills and building them into a comprehensive early reading program." (p. 39)

Soon after the popular acceptance and adoption of the comprehension subskill hypothesis, the quest for instructional taxonomies, methods, and materials began. Developmental psychologists explored the idea that if reading comprehension subskills existed then they could be augmented by appropriate and timely direct instruction (Tierney, Readence, & Dishner, 1990). In response to this possibility, many "comprehension strategies" were developed by prominent reading specialists in the 1960s, 1970s, and 1980s. Most strategies targeted a specific skill that, when practiced, would enable the reader to better understand

what he is reading. The PreReading Plan (Langer, 1981), ReQuest (Manzo, 1969) Question-Answer Relationships (Raphael, 1982b), Probable Passages (Wood, 1984), and Guided Reading Procedure (Manzo, 1975) are all examples of such strategies.

Not everyone accepted the subskill explanation of comprehension. While this philosophy was becoming entrenched in the most up-to-date reading programs across the country, the opposition put up an audible clamor.

In his review of the professional literature on this topic published in 1980, Rosenshine questioned the efficacy of continued research in this direction. He examined the various existing lists of so-called comprehension subskills and found that a single definitive list of discrete skills could not be advanced. He found that the skills were not hierarchical. Most importantly, he questioned the necessity of identifying and practicing such skills. In other words, he queried, "Do these individual skills contribute enough to a reader's total comprehension of text to justify a significant portion of classroom instructional time?"

A vast body of scholarly work has been compiled that indicates that a subskill hypothesis as an explanation of reading comprehension is much too

simplistic. It is now generally believed that the process of comprehension of text is much more elaborate than the sum total of lesser skills being used independently.

Reading Comprehension: Transactional and Complex

"Comprehension is not, then, linear or hierarchical, proceeding from literal toward higher levels. . . . [A]spects of comprehension interrelate and intertwine as people strive to make sense of what they hear and read and experience (Weaver, 1990, p. 171). This statement reflects a view of comprehension that is transactional, highly individualistic, and amazingly complex.

When an act of comprehension occurs, there is an important transaction between the comprehender and the stimulus (what is heard, read, or experienced). In the specific case of reading, the author communicates through the text using the graphophonic, semantic, and syntactic cueing systems; meaning resides in the mind of the reader. Comprehension, then, is the transaction that produces an understanding that is both true to the text and acceptable to the reader. It is obvious that comprehension could never occur if either of these necessary components were missing.

Not only is comprehension transactional, but it is highly individualized as well. It should be considered that not only must there be a reader and a text, but more specifically there is one particular reader who is striving to comprehend one particular text.

The reader brings to his task a unique combination of attitudes, interests, expectations, skills, and experiences. Each of these factors will have some measure of influence on comprehension. Research on schema theory has shown that a person's prior experiences and background knowledge on a given topic will greatly affect his comprehension of that topic, particularly when the information is implied (Pearson, Hansen, & Gordon, 1979).

The demands of the text are widely varied as well. The level of understanding needed when reading an expository piece will not be the same as when reading a narrative story or a poem. The readability level and word familiarity of the text will also affect comprehension.

In addition to these two very important factors, Irwin (1991) suggests that the setting and specific purpose for reading will also have an impact. A college student's comprehension of a chapter in a textbook that is the basis for a test the next day will obviously be different from his comprehension of a sports article in

the newspaper read for pleasure, which will in turn be different if he is reading a recipe while cooking dinner. Not only has the organization of the text changed, but also the purpose for trying to understand what was read.

Many of the same skills might be used in all of these cases, but it would seem that there are as many variations of the total comprehension process as there are readers, texts, and situations (and the innumerable permutations that occur when the three are combined). It also naturally follows that an individual's achievement on one type of comprehension assessment is not necessarily reflective of his ability, nor is it always predictive of his future success as a comprehender.

Recent research indicates that the complexity of the reading comprehension process is mind-boggling. Irwin (1991) cites five separate simultaneous subprocesses that she believes to occur during comprehension. First the reader must go through the **Microprocesses** of understanding individual words, chunking them into meaningful phrases, and selectively recalling details. Then he must relate the parts to the whole (e.g. sentence to other sentences, sentence to paragraph, idea to idea, cause to effect, idea to newly generalized situation,) through the **Integrative**

Processes. The reader also is constantly organizing all of these ideas into a general, overall pattern via **Macroprocesses**, while the **Elaborative Processes** enable the reader to enlarge the scope of his understanding through activities such as predicting, "mental picturing," relating/synthesizing, and inferencing. Finally, it has been found that all readers, including the very young and inexpert, show some awareness and control of their own comprehension as they use **Metacognitive Processes**. Recent inquiry into and investigation of the metacognitive processes has greatly advanced contemporary understanding of reading comprehension (Hall, 1989).

Although many questions about reading comprehension continue to remain unanswered, the combined efforts of behavioral psychologists, linguists, and educators in the last decade have uncovered a great deal of interesting data that was heretofore unknown. Although Chall's "Great Debate" rages on, it is known that comprehension is more than decoding, answering questions correctly, or any set of subskills. Reading comprehension is transactional, highly individualistic, and has a complexity that is most difficult to measure and model.

Moving Forward, Looking Back: Instructional Implications

While researchers continue to delve into the mysteries of comprehension, teachers must go on showing students how to become adept at comprehending written text. A carefully considered plan of attack is necessary if this objective is to be successfully met; and many argue that this objective is the only one of paramount importance to the reading curriculum. Tierney, Readence, & Dishner (1990) state, "Logically, comprehension should be considered the heart of reading instruction, and the major goal of that instruction should be the provision of learning activities that will enable students to think about and react to what they read--in short, to read for meaning" (p. 38).

It is all very well to say that reading comprehension is transactional, individualistic, and complex, but these assertions offer little direction to the pursuit of developing a mode of instruction that reflects this view of comprehension. In other words, what methods and materials should teachers use to teach comprehension that emphasize the transaction between reader and specific text, take the individual into account, and contradict an oversimplified model of the skill? Until some clear-cut answers to this question are forthcoming, it would seem that the educational

community must start with the techniques that it already possesses and develop modifications to meet its current needs.

A very strong case has been made for direct comprehension instruction (Tierney, Readence, & Dishner, 1990), although it has been found that in actual practice less than one percent of reading instruction is devoted to teaching how to comprehend (Durkin, 1978-79). A stalwart belief in direct comprehension instruction demands something more than the use of decoding lessons and comprehension questioning strategies to teach students how to read for meaning.

However, one should not be so hasty as to completely discard the subskill comprehension strategies. While rejecting the philosophical framework under which many of them were developed as being too simplistic to explain the total comprehension process, one might adopt the remaining ideas that can be tailored to fit the present body of knowledge on comprehension. This would involve analyzing how the strategies should be used, determining when the strategies should be used, and separating the tenable strategies from the indefensible ones.

A Rationale for the Use of Strategies

A student in a third grade classroom is consistently having problems answering comprehension questions. The teacher's interpretation of this student's difficulties will in some measure depend on his personal frame of reference for comprehension. If he ascribes to the subskill theory, the teacher will probably check his records and observations for a pattern to the missed questions. On finding that the student generally misses sequencing questions, the teacher will surmise that the individual's sequencing skills are substandard, and that using a strategy that targets sequencing will improve that skill. He will further believe that improvement of the sequencing skill will directly result in the improvement of the total comprehension process.

In light of the complexity of the aggregate comprehension process, that last assumption is asinine. A host of factors could conceivably be involved, and even if the student could demonstrate proficiency in every single isolated subskill it would serve as no guarantee that he is truly understanding what he is reading. So many factors must be taken into account.

But is this a reason to abandon the comprehension strategies altogether? Let us examine an analogy in the field of medicine. The doctor says, "Based on my

examination, there could be anywhere from one to ten different things that are conceivably wrong with you. Some would be easily cured with antibiotics, others would require extensive surgery. Since there is a chance that there is more than one thing wrong, which would make diagnosis and subsequent treatment quite a bit more difficult, I refuse to proceed." Such a physician would not last long in his profession.

Is it not the same with a reading teacher who is faced with a student who is having comprehension difficulties? There are no strategies that take into account every process, every influence, and every factor to "correct" comprehension in its totality. Yet knowing that one or two obvious deficiencies may not be the entire problem is no reason to not make an honest effort to enhance what genuinely appears to be lacking. In this sense, the strategies represent one option that the concerned teacher may try.

While some students will comprehend naturally without any formal instruction, others will need guidance in their attempts. The strategies also represent a willingness on the part of the teacher to try different instructional approaches with the understanding that some learners will respond more readily to a more individualized and direct approach than will others. For these reasons, choosing to use

comprehension strategies as a means of supplementary direct instruction does not necessarily reflect a belief in subskill theory.

Employing a Strategic Method

The overall effectiveness of strategy use as reading comprehension instruction can be maximized by following some very basic guidelines about when, where, and how the strategies are used.

No one (with the possible exception of overzealous first-time parents) would give formal walking instruction to an eleven-month old child who is in every way developmentally normal. This act in all likelihood will occur naturally, and while encouragement may be wanted, rigorous training would be considered superfluous. It just does not make sense to teach something that has a very high probability of being mastered singlehandedly. This is a most appropriate dictum to keep in mind when talking about reading comprehension instruction.

The classroom teacher's time is so severely limited, that there is much to be said for the old saw, "If it ain't broke, don't fix it." The majority of readers in an average classroom will comprehend readily. Therefore, comprehension strategy lessons should be geared toward individuals and small groups of students

who are both ready and in need of direct comprehension instruction (Rosenshine & Meister, 1992). The rest of the students will make better use of their time by actually using their comprehension skills with meaningful text rather than formally relearning something that they already do quite well.

It should be noted that when identifying students who need supplementary strategy instruction, most teachers rely more on their day-to-day informal observations than on formal test scores (Shavelson & Stern, 1981). Johnston (1987) calls this manner of evaluation "more efficient and more instructionally valid than current test driven procedures," since seasoned teachers are in the best position to be evaluation experts (p. 744).

The strategy chosen should harmonize with the individual or group of students and with the specific type of text that is to be used. As an instructor strives to make the selected strategy as authentic, relevant, and meaningful as possible, he may find that some adaptation of the original strategy may be prudent. Using professional judgement to make fitting changes in a comprehension strategy is highly encouraged. This is in keeping with the belief that comprehension is strongly affected by specific reader, text, and situational factors that very well may require

modifications of the instructional method. Mosenthal (1989) alleges yet another reason for adapting comprehension strategies:

The point is, we compromise the experience of making sense of text if we isolate the individual strategy. The rigor and understanding that a strategy promotes are limited. If the use of a strategy brings teacher and students to a level of expertise, then some adaptation or change in strategy use should follow, for the level of expertise attained is defined in terms of the strategy. The experience of the sense of text is much more multifaceted than what one strategy can reveal. Teacher and students must lead themselves in directions that build from the levels of expertise established in prior instruction (p. 257).

The strategy must take the reader beyond the present level at which he is understanding text or the benefit of instruction is lost.

Although research has provided evidence supporting comprehension strategy instruction for children who do not comprehend spontaneously, it does not point to a uniform body of strategies that should be employed (Maria, 1990). The following section suggests a list of criteria that a comprehension strategy should meet if it is to be instructionally sound and beneficial to the learner.

Selecting a Comprehension Strategy

Because reading comprehension is transactional between the author's text and the reader's mind, any legitimate comprehension strategy must take these two significant factors into account. The strategy should use an authentic text and engage the reader's schema for that topic.

If we wish to guide children's comprehension in a meaningful way, there can be nothing contrived about the learning experience. The excerpts chosen as vehicles to teach and practice the strategy must be "real," or similar to what the child is encountering elsewhere in his life. The type of writing chosen must fit the task, but should not be taken out of context, have a heavily controlled vocabulary, or be otherwise artificial.

On the other hand, even the most carefully selected text and methods cannot make a connection with the reader if there is nothing with which to connect. It is imperative that the strategy engages and, if necessary, develops schema for the subject of the reading material being used. As has been shown with the classic example of Carroll's "Jabberwocky," children can use only syntactical cues to parrot back correct answers to comprehension questions. The correct answers are not indicative of true understanding when the content has no meaning to them in a personal way. Therefore,

comprehension cannot be fostered unless the strategy insures that the student possesses the appropriate prior knowledge for the topic.

Once it is ascertained that the student has had some pertinent experiences with the topic, the strategy should go one step further. Mosenthal states, "It is not prior knowledge per se that is important in comprehending, but accessing prior knowledge relevant to the text read" (1989, p. 248). A seven-year-old may have in her possession all of the needed schemata for understanding a story about Dobermans. She knows what a dog is, and perhaps a Doberman lives in her neighborhood, but until she makes a connection between the name and her mental image she will not comprehend the author's intended meaning. The strategy, then, should help the student to select and actively engage any prior knowledge before reading.

Strategies should be developed with meaningful activities that use all four modes of the language arts: reading, writing, listening, and speaking. This is in accordance with the research-based trend toward a whole language experience in today's literacy classrooms.

Students should be writing in response to their reading, and these writing activities should be meaningful and true-to-life. Our reading curriculums should be teaching life-long reading skills. Since

"real people" do not fill in workbook pages after reading a selection, why should we have children practice this insidious skill?

Discussion is another crucial component that should be built into every comprehension strategy. This is because "it is through discussion that the teacher learns what is in the students' minds, and thereby can restructure the situation to aid the student in understanding" (Flood & Lapp, 1990, p. 493). Children also need practice at verbalizing their responses to text, and listening as others share their impressions, insights, and questions. Again, this cannot be a contrived situation where the students answer comprehension questions that have a single answer and that answer is in the text. They must be able to share what they understand and ask questions about what they do not yet understand but wish to learn.

The skills that the strategy develops should be modeled by an "expert," the teacher (Cooper, 1993). Unless a comprehension strategy makes a provision for modeling, the students are at a distinct disadvantage in trying to emulate what they can neither see nor hear. Educators may make use of excellent questions that guide students' thinking, but the main goal of comprehension instruction should be to provide a model in teaching children to ask their own comprehension questions.

This last statement leads to the next criterion that a reading comprehension strategy should meet if it is to be effectively utilized: the strategy should end on the note of self-regulation. Any strategy that does not leave responsibility and choice with the student is not worth teaching. In the initial stages, scaffolding may be necessary to help guide the student through the strategic process, but then the student should move toward self-regulation by independently and "consciously choosing a process to achieve a specific goal" [emphasis added] (Irwin, 1991, p. 9). Wong (1985) has found that teaching students to monitor comprehension by posing their own higher order questions effectively increases comprehension in those students. Unless this last criterion is met, we are not building a nation of readers, but rather a nation of reading puppets who will always be waiting for an off-stage cue.

Many strategies that have been developed to improve comprehension should be abandoned as they do not come close to meeting the aforementioned criteria. Some highly touted strategies, such as SQ3R (Robinson, 1946) and The Guided Reading Procedure (Manzo, 1975), do not meet any of the requirements. Thankfully, some comprehension strategies that use an authentic text, develop and engage appropriate prior knowledge, use all four modes of the language arts, provide modeling, and

lead the learner to self-regulation in meaning construction do exist. The most notable of these are K-W-L, Anticipation Guide, and Active Comprehension. Other strategies, such as ReQuest and GIST, are useful with a few modifications.

K-W-L

K-W-L (What I Know, What I Want to Know, What I Learned) is a strategy developed by D. Ogle (1986a) that helps the student to actively engage prior knowledge when reading expository text. The strategy enables the student to organize ideas, monitor learning, and guide further reading. Content area textbooks, trade books, and articles are all appropriate for use with this strategy.

The teacher models the three-step process, and then the strategy may be used individually or in small groups. In the first step, students brainstorm everything they know about a topic that is to be read and then categorize all of the information. While doing this, the learners are drawing on prior experiences and using their schema to organize the generated concepts. The results of the brainstorming are recorded.

There is a good possibility that some of the recorded information will be inaccurate. Any conflicting ideas or uncertain information produced

during the first step will be discussed in the second phase. Curiosity about the topic is enhanced and the students ask themselves, "What do I want to learn from my reading?" Each student will develop and record his own questions to be investigated and answered during reading.

After reading, students monitor comprehension by writing down what they have learned and which questions have still been left unanswered. The student carries out the final step of the strategy by using other sources to search out the answers to any remaining questions.

K-W-L is a simple strategy that students learn to use on their own. One of the advantages of K-W-L is that the very last step emphasizes the importance of the reader's knowledge, interests, and priorities in conjunction with but not limited to the text (Ogle, 1986a, p. 567). This strategy thereby reflects the transactional nature of reading comprehension.

Anticipation Guide

The Anticipation Guide (Readence, Bean, & Baldwin, 1981, 1985, 1989) was also developed to engage prior knowledge and guide reading. The ultimate goal is for students to generate their own statements about the topic. The type of synthesizing required for using the

Anticipation Guide is a high order skill, so students will need a good model and intensive practice before they are fully ready to use the strategy independently.

After previewing the text, the teacher will develop three to five statements that both relate to the students' experiential background and challenge their thinking. These statements are presented to the group in written form and then are read orally. The group then engages in a discussion about each statement, seeing who agrees with it, who disagrees, and who can support their opinion with data.

Students are then directed to read the text. Their purpose for reading is to find out what the author would say about each statement. The reader's, group members', and author's opinions are all considered during reading.

After reading, the students will either write or discuss the statements in light of what they have read. New information and modified opinions will certainly be shared during this time. The Anticipation Guide, with conscientious modeling, meets all of the criteria for being a worthy strategy.

Active Comprehension

Singer (1978) developed this strategy to help children to formulate their own questions before, during, and after reading narrative text. Students are

taught to respond to the teacher's question by asking questions of their own. Many of the questions asked will resemble predictions about the story.

Singer suggests that the strategy should progress naturally from teacher modeling, to student guided practice of the questioning technique, to group work where one child asks and the others respond. Paired question-answer sessions should follow, and the final goal is reached as the child works independently to ask and answer his own questions.

The group begins the strategy by examining the title and pictures of the selection, discussing the words, and engaging schema for the topic. The teacher then asks, "What questions do you have?" or "What do you want to find out?"

The students will then write their questions and read silently to check for answers. Finally, they will discuss their answers using data from the text, making sure that they are always prepared to answer the questions, "Why do you think that? Where did you get that idea?"

The questions act as motivational tools and guidelines for purposeful reading. The answers serve as concrete comprehension checks for the student after reading.

Other Strategies

Some strategies fit the prototype defined by the criteria with one or two minor modifications. Two such strategies are ReQuest and the GIST strategy.

The ReQuest (Reciprocal Questioning) strategy was developed in the late 1960s with the major objective of improving independent comprehension (Manzo, 1969). The strategy may be used with a variety of texts.

The procedure is a simple one and resembles Active Comprehension. After discussing relevant background information and key vocabulary, students and teacher silently read the selected passage. Without consulting the text, students will ask and answer questions about what they have read. The students will be encouraged to ask high level questions "like a teacher" while the instructor models good questioning technique and gives feedback on student questioning patterns. If a question is posed that cannot be answered fully and immediately, students are told to refer back to the passage for more information. After students are competent at asking high order questions, the strategy hones their predictive questioning and proving skills.

ReQuest is a valuable and versatile comprehension strategy, but it has a few shortcomings. It can never be used independently as at least two people are necessary to ask and answer questions. Also, there is

no writing-in-response-to-reading component of ReQuest, and children need practice putting down on paper thoughts as they relate to concepts provided by the author. The teacher will need to supplement the ReQuest strategy by providing meaningful writing exercises for students.

A strict question-answer session is never equivalent to a free-flowing discussion where all thoughtful responses are shared. Although students are listening and speaking in the ReQuest strategy, teacher must be adept at seizing each teachable moment and turning it into a true interchange of original ideas.

Another sound strategy for improving comprehension has been developed that does not involve student or teacher questioning. Cunningham (1982) asserts that teaching students to independently summarize the "gist" of a paragraph or short passage will augment their skills at comprehending. The GIST procedure is based upon this idea; it presents a series of steps that aid the student in effective summary writing. The learner views the first sentence of a paragraph (or the first paragraph of a selection) and summarizes it in twenty words or less. As additional portions of the passage are shown, the reader modifies his summary statement to include new information while keeping the summary under twenty words. This skill is practiced until GIST

statements are easily and efficiently produced. At this point the student can monitor and evaluate his own GIST statements and use the strategy autonomously.

This strategy has considerable potential to be used independently for self-regulation of reading comprehension. The teacher should modify the strategy by adding a discussion component where students share, support, and challenge and evaluate their GIST statements at every step. The instructor should also engage the students in a background/schema activating activity before reading.

There are many other reading comprehension strategies that are available and easily modified in like fashion. Note that all of the example strategies concentrate on general metacognitive skills rather than on isolated and specific comprehension subskills, such as sequencing or cause and effect.

Final Thoughts

The commendable reciprocity between reading comprehension research and classroom practice that has been historically witnessed shows no sign of being terminated in the near future. There exists, however, a sustained gap between the most recent developments in comprehension theory and their practical applications. While researchers delve deeper into the mystery of

comprehension, the nature of which has been shown to be transactional and complex, reading teachers continue to use out-dated instructional methods that do not reflect current cognition of comprehension.

Some appropriate direct instruction strategy models do exist, and still others are easily modified to fit contemporary teaching purposes. But researchers and educators must continue to work in tandem to devise more reading comprehension strategies and teaching methods that sustain rather than undermine and subvert the accumulated body of knowledge on reading comprehension.

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