

Literacy at the Crossroads, pp. 147-164.

10. Getting it Right: Scaffolding and Supporting Explicit and Mindful Comprehension Strategy Instruction

Ann M. Courtney¹

Frederick B. King

Joan Y. Pedro

Teaching comprehension strategies is an essential part of a comprehensive reading framework. Despite a quarter of a century of research on comprehension, researchers continue to document little comprehension instruction in classrooms. This paper examines comprehension strategy modelling, specific teacher explanations, and teacher scaffolding for students. Based on a three-year longitudinal research project in an elementary school, we focus on the instruction of explicit, multiple, mindful comprehension strategies within the routines of classroom activities. This research suggests that teachers need to use precise and exact language in their strategy modeling in order to enable readers to absorb this language, understand its intent and eventually use it independently.

INTRODUCTION

Teaching comprehension strategies is an essential part of a comprehensive reading framework. Our research suggests that teachers presently walk a tightrope blending and balancing explicit strategy instruction and mental

¹ Address for correspondence: University of Hartford, 200 Bloomfield Ave., West Hartford, CT 06117, USA. Email: Courtney@hartford.edu

processing modelling with meaning construction and understanding of content. Many readers are confused about strategy instruction and comprehension. They cannot simply observe a teacher who guides their reading, and then figure out what they are supposed to do on their own. Some teachers and readers think that comprehension happens magically. Some readers learn basic strategies but never learn to apply and manipulate them in order to improve their comprehension. This paper suggests that teachers modify their literacy instruction paradigm to include the explicit teaching of multiple, mindful comprehension strategies to all levels of learners. It examines comprehension strategy modelling, specific teacher explanations, and teacher scaffolding for students. While applying these strategies, learners improve their reading comprehension and develop critical life-long reading skills.

Based on a three year research project, this paper focuses on the instruction of explicit, multiple, mindful comprehension strategies within the routines of classroom activities. This research examined how teachers can plan deliberate literacy learning experiences which are designed to draw out the learners' conscious awareness of multiple comprehension strategies

BACKGROUND

Early studies of classroom practices note the lack of time and commitment to teaching comprehension strategies in the United States (Durkin, 1978/1979). Durkin's research discovered that teachers spent considerably more time evaluating comprehension rather than teaching it. Reading comprehension, for the purposes of this paper, is the process of generating, articulating, negotiating, and revising interpretations and understandings within a community of readers. This is accomplished by using a variety of perspectives, including an author's intentions, specific textual references, personal experiences, and socio-cultural influences to generate viable interpretations or meanings in transaction with a variety of texts (Serafini, 2006).

Despite a quarter of a century of research on comprehension, researchers continue to document little comprehension instruction in classrooms

(Pressley, Wharton-McDonald, Mistretta-Hampton, & Echevarria, 1998a). Other recent research (Dole, 2000; Pressley, 2000) suggests that teachers are not aware of the steps necessary to ensure rigorous, strategic reading in classrooms.

El-Dinary, Pressley, and Schuder (1992) argued that strategy instruction was too far removed from the teachers' classroom practices and beliefs about comprehension instruction and, therefore, had no impact on classroom instruction. Recent researchers have suggested that without a paradigm shift in teacher thinking about reading and comprehension, classroom teachers would remain unable to change their classroom practice (Pressley et al, 1998a; Courtney, King, & Pedro, 2006). Teachers have to shift their current way of thinking about comprehension to include more of a focus on the explicit instruction of multiple comprehension strategies.

Early research on comprehension identified individual strategies that would increase students' comprehension. Numerous researchers have demonstrated that individual comprehension strategies resulted in increased comprehension. These strategies included: developing vocabulary (Pearson & Johnson, 1978; Beck, Perfetti, & McKeown, 1982); developing visualization (Pressley, 1976); retelling and resynthesizing (Brown & Day, 1983); asking questions before, during, and after reading (Pearson, Roehler, Dole, & Duffy, 1992); asking questions of oneself, the authors, and the text (Andre & Anderson, 1979); and determining the most important ideas (Baumann, 1984; Tierney & Cunningham, 1984). This body of research identified a long list of isolated instructional strategies that proved to be effective in improving comprehension. However, a limitation of these studies was that they focused on teaching a single strategy as an end, in and of itself, and did not consider multiple strategy instruction.

A considerable body of research suggests that the explicit teaching of multiple strategies improves comprehension. Recent literature shows that learners need to understand how to orchestrate, coordinate, and apply multiple strategies in order to improve comprehension (Brown, Pressley, Van Meter, & Schuder 1996; Courtney, King, & Pedro, 2006;

150 Comprehension Strategy Instruction

Dole, 2000; Miller, 2002; National Reading Panel, 2000; Pressley, El-Dinary, Wharton-McDonald, & Brown, 1998b; Serafini, 2004, 2006). Effective instruction includes orchestrating strategies such as: using schema, visualizing, questioning, summarizing, determining what is important, inferencing, monitoring comprehension and meaning, synthesizing, and looking at text structures.

The use of multiple comprehension strategies by readers requires that each reader be metacognitively aware of individual strategy application. The fact is firmly established in theories of reading (Alvermann & Guthrie, 1993; Clay, 1991; Harvey, & Goudvis, 2000; Keene & Zimmerman, 1997; McCarthey, Hoffman & Galda, 1999). Metacognition can be simply defined as thinking about thinking, knowing ‘what we know’ and ‘what we don’t know.’ Thus, it entails both the conscious awareness, and the conscious control of one’s learning. This literacy research has deeply influenced current classroom practices, highlighting the important role metacognition plays in learning and comprehension.

For many researchers, Vygotsky’s (1978) socio-cultural theory of mediated learning has greatly influenced recent instructional practice research. Several researchers designed guided practice models where teachers scaffolded student learning (Brown et al., 1996; Courtney & Abodeeb, 2001; Fielding & Pearson, 1994; McLaughlin & Allen, 2002). In these models, teachers sensitively assisted students and gradually transferred responsibility from the teacher to the student (scaffolding). This scaffolding provided readers with effective instructional approaches to understand texts. All of these researchers focused on supporting readers through a metacognitive transaction that enabled the students to eventually take responsibility for their own learning. This paper details developed negotiated metacognitive events that led students to use multiple comprehension strategies.

METHODOLOGY

This research was a three-year longitudinal study using mixed methods. The three first grade classrooms used for this research are a part of a local elementary school. This school draws students from 6 municipal

school systems. Fifty percent of the children coming to this school are from a large urban setting, with the remaining children coming from 7 suburban towns. There are three classrooms for each grade (K-5) containing approximately 20 children per classroom. The children attend school for an extended day and school year. The school's philosophy is guided by Howard Gardner's educational theory of Multiple Intelligences. Twenty-two percent of the students qualify for special education. The school's population is extremely diverse, both racially and in terms of socio-economic status (SES). In fact, this school is more diverse than most other elementary schools in this northeast State.

For this study, traditional ethnographic data collection was used, including: field notes; audiotapes; teacher and student formal and informal interviews; and samples of reading materials and curriculum. The quantitative data included pre- and post-classroom and State assessments. Qualitative data collection and analysis were ongoing. Employing a constant comparative method of analysis, transcripts of teacher practice, where teachers taught comprehension strategies, were searched for prominent themes and emerging patterns. In this 'open coding' stage (Strauss, 1987), each data source was read at least twice to gain an overall impression and then reduced to meaningful units (phrases, terms). Once specific units emerged that were either explicitly stated or implied in the teaching transcripts, these units were listed. This preliminary data was then transferred to coding sheets. Each identified category or pattern was analyzed and confirmed or disconfirmed through close examination of all of transcripts. The initial data set was reread three different times to confirm or disconfirm the evidence of the preliminary identified patterns. The initial patterns were then enriched, expanded, contracted, or collapsed. Through this 'axial coding' process, (Strauss, 1987) the researchers were able to better refine the emerging patterns of teaching episodes and teacher/student interactions. Finally, the researchers looked across all teaching episode transcript data to identify the recurring patterns and themes (patterns were considered major if teachers demonstrated the instructional procedure in a consistent pattern over time). Triangulation of the data was established by cross checking transcripts from the audiotapes with field notes that were collected over a prolonged period of time and in some cases with

other cultural artifacts such as student work or assessment samples. The microanalysis was used to gain a more in-depth look at the language based interactions in the teaching episodes in order to specifically focus on the question of how teachers plan deliberate literacy learning experiences which are designed to draw out the learners' conscious awareness of multiple comprehension strategies.

Defining strategies through explicit strategy instruction

Comprehension strategies are the unobservable, in-the-head thought processes and reading behaviours that good readers use to understand text. Strategies are cognitive, invisible processes or operations that are learned through scaffolded teaching, enabling the learner to construct meaning. By skilful use of comprehension strategies to understand, remember, and communicate what is read, students are able to control their own reading and comprehension. They become purposeful, active, and proficient readers.

In order to make the invisible strategies visible, teachers must clearly and deliberately explain and model comprehension strategies. In so doing, the teacher engages in continuous scaffolding, supporting the learner by building upon prior knowledge and experiences. In explicit strategy instruction the teacher brings to conscious attention the awareness of what good readers do as they construct meaning.

Explicit strategy instruction

Strategy instruction is challenging work. Its focus is on making the abstract cognitive thinking processes explicit. Despite the world-wide focus on the need to teach comprehension, many teachers are unsure of how to teach it. Some teachers see comprehension as assigning reading and asking students to answer questions once they have finished their reading assignment (Durkin, 1978/1979) Others understand strategy instruction as making strategies visible by hanging posters, with directions, in their classrooms.

In the following learning episode a teacher demonstrates how she, as a first grade teacher, strove to make her strategy instruction concrete and

visible. This teacher preplanned the strategy that she was going to teach and then matched the most appropriate text to the strategy. The teacher had selected Dobeck's (2004) nonfiction Big Book, *Circling the Sun*, to teach the questioning strategy to first graders. It should be noted that this was not the first comprehension strategy that this first grade teacher had explicitly taught her students. Previous lessons had concentrated on non-fiction text features such as table of contents, index, picture inserts, and bold print. This first grade teacher deliberately set out to make these novice readers consciously aware of how proficient readers use questioning. Students witnessed how a proficient reader (the teacher) successfully applied the mental processing necessary to use the questioning strategy to further her comprehension. Furthermore, using a think-aloud technique (Pearson & Fielding, 1991; Kucan & Beck, 1997) students heard how skilful readers think and use a questioning strategy effectively and efficiently. The teacher introduced each strategy independently and created an anchor chart (Miller, 2002). Anchor charts detail each strategy using children's language. Anchor charts hang visibly in the classroom, becoming part of the classroom culture, and children can refer to them at any time. Once a new strategy has been introduced independently, the teacher moves back and forth with multiple strategy instruction and reference.

Teacher: "Today we are going to work on the questioning strategy. Good readers question as they read. Looking at the table of contents we see the title of this section is *Earth's Orbit* and we need to turn to page 6. Well, you know I want to question before I even turn to page 6. I am going to write my question down (writes on a Post It). Good readers question all of the time. I want to know what orbit means? What do you think orbit means? Let's put my question right here (placing the Post It right on the Big Book) so I know it's there. I am wondering about what orbit means."

The teacher has made the strategy concrete by first telling the students what strategy she will teach them and then modelling it using a Post It. The teacher quickly activates and builds on the students' prior knowledge of the tables of contents which had been taught earlier. She models that good readers question even before they begin reading a

154 Comprehension Strategy Instruction

book, for it is the title of the selection that the teacher is puzzling over. She invites the students to engage in problem solving with her.

Teacher: “So, what do you think the earth’s orbit could mean? Let’s make some guesses before we even begin to read. Orbit ...hmm. What do you think the word orbit could mean?”

Matt: “It could mean that the earth could fit into the sun.”

Teacher: “Oh, you think the earth could fit into the sun and that is what orbit could mean” (Teacher writes ‘fits in’ on a Post-it and places it under the question.)

Several students make educated guesses and the teacher repeats the students’ language to confirm what the students have said and continues to place their responses on Post Its. She also lines up all of the guesses directly under the question of “What does orbit mean?” Fellow students actually see how their peers think when problem solving to make educated guesses about an orbit. The teacher makes it quite concrete and visual by placing all of the guesses under the original question. The teacher keeps the focus on getting the meaning from the text, while also demonstrating the questioning strategy as a means to get at that meaning.

Teacher: “Let’s read to find out. We have all of these guesses as to what orbit could mean. ‘Earth does not stay still.’ Hmmm. ‘Earth constantly circles or revolves around the sun.’ Now wait a minute. I’m not sure that I know what the word revolves means? We have even another question.”

The teacher models again. Alex states that, “revolves means to circle.” The teacher is not quite ready to end this discussion. The other members of the class need to see how Alex figured things out. The teacher continues to model thinking aloud to make her thoughts visible for these first graders.

Teacher: “Let me read the next sentence and see if I can figure out what revolves means. ‘Earth constantly circles or revolves around the sun.’ So Alex, is your definition correct? How do you know? You

said ‘circles around.’ Come up here. Point to the words that show you what revolves means.”

Alex: points to ‘circles or revolves’ in the text.

Teacher: “Alex pointed to ‘circles’. The author in this sentence tells us that earth constantly circles or revolves around the sun. So right in this sentence (teacher pointing) the author told us that revolves means what?”

Class: “Circles.”

Teacher: “Right here in the text we learned that revolves means to circle.”

The teacher has modelled how a good reader would use the surrounding text and context clues to figure out the answers to questions. The teacher dramatically points to the words as Alex comes up and demonstrates how he figured out what the word revolves means. The teacher continues to model.

Teacher: “I’m not sure that I really know what orbit means yet. So let’s continue to read a little further. ‘The path that is travelled is called an orbit.’ So what is an orbit? The author just told us that the path that is travelled is called an orbit. So what does orbit mean?”

Jessica: “The way it travels.”

Teacher: “The way what travels?”

Jessica: “The way the earth travels.”

Teacher: “Perfect. The way the earth travels or circles the sun. So I don’t think that any of our guesses were right because we said: the earth could fit into the sun.” (The teacher reviews all of the guesses and the class decides that they did not answer the question and the teacher removes the Post Its from the Big Book.) “Those were good guesses, but what it really means is the way earth travels or circles around the sun. So you could think of an orbit as a roadway around the sun. What do you notice about the word orbit and the word revolves?”

156 Comprehension Strategy Instruction

John: "Those two words are darker".

Teacher: "Yes. Remember that is called 'Bold print.' Why do you think they are bold? Do you remember? Are they more important than other words?"

Class: "Yes."

Teacher: "So the author of this book wanted us to see these words and to know that they were very important words. The author made the print bold, darker than the rest, so the words would really stand out. These words are a little stronger than the rest. So now we know that the earth revolves around the sun."

The teacher has modelled the language that proficient, sophisticated readers would use as they apply the strategy to construct meaning. The teacher also drew the students' attention to the text feature of bold print, a strategy the class had learned earlier. Students already understood how authors used bold print to highlight very important words in text and the teacher reinforced their understanding. The teacher brings the students' focus back to the important content information from the text. Once she is sure that they know the necessary content information she has them debrief the strategy instruction.

Teacher: "How did we get this information?"

Alex: "We asked questions."

Teacher: "Yes, we asked questions in our head. The first question about orbit we did before we even began reading."

The teacher restates what the student has said to confirm and then she extends this response by pointing out that they asked the question even before they had begun to read.

Teacher: "What else did we do?"

Judy: "We made guesses."

Teacher: "Exactly. We made guesses based on what we already know about the sun, our very own knowledge, and what we thought could make sense. We just didn't make guesses out of the clear blue sky."

We thought about what we already knew and tried to make a question that could make sense. That is exactly what proficient readers do. They ask questions as they read.”

The teacher again repeats to confirm and extend. She wants the students to understand that they made educated guesses. The teacher uses very explicit language to make students metacognitively aware of what educated guessing is all about. She wants the students to understand that proficient readers question and ponder some educated guesses and then read some more to find out answers.

Teacher: “We read some more. Why did we do that?”

Alex: “To find the answer to the question.”

Teacher: “Yes, exactly. We read some more to find out if our guesses were correct. And were they?”

Class: “No.”

Teacher: “So when we read we found out some new information that answered our question. This is what proficient readers do all of the time. They ask questions as they read and then they read to see if they can figure out the answer. They also notice some of the features of the text like bold print. Our very first question came even before we began reading the text. We read the title *Earth’s Orbit* and immediately said, ‘What the heck is an orbit?’

The teacher debriefs further with the class helping them see that good readers question as they read. She is making the in-the-head strategy visible to these first graders. She does this by modelling using very specific, exact language, and also making the strategy concrete by using Post-its. In addition she keeps the first graders involved by keeping the lesson interactive. She gets them to participate in the problem solving to find the answer. She provided a great deal of collaborative talk in which she strove to make her thinking visible and scaffolded and assisted children as they constructed meaning. The focus was on meaning construction. The teacher then had students practise the strategy with a

buddy. But before she released them she set them up with a question in order to keep the lesson focused on getting at the meaning.

Teacher: “Now you are going to practice questioning as you read with a buddy. Put your questions on these Post Its. Then read to see if the answer to the question pops up. It doesn’t always pop up. Sometimes you have to read further and sometimes you have to look somewhere else for the answer to your question. I am going to start you off with a question. How many days does it take the earth to revolve or circle around the sun? We’ll return to meeting time at the end and see how this went for everyone.”

As can be seen in the above learning episode the intent of the teacher’s instruction was to make each individual student hyper-aware of the questioning strategy and its application in order to construct the meaning of texts. She deliberately and consciously spoke about a specific comprehension strategy. The teacher briefly mentioned the table of contents and bold print, both concepts already learned, in order to model how readers would swing back and forth in strategy use. However, the teacher has kept the main focus of the lesson on questioning as a strategy. The teacher explicitly described her thinking aloud to the children so that they could see and hear what the teacher was thinking and doing as she applied the strategy. It was important for these first graders to see how applying a strategy looked, felt, and sounded. The teacher scaffolded and guided learners until these young readers became consciously aware of how to use the questioning strategy as they constructed meaning in texts. Through this type of thoughtful literacy teaching, students were more actively and cognitively engaged in the reading process, and were more metacognitively aware.

Through exploring different teaching practices and observing how children were more successful with specific strategy instruction, the following process emerged from the research.

The Process

- Teacher explanation of the strategy using precise and exact language.

- ❑ Teacher modelling: demonstrating what the strategy application would look and sound like.
- ❑ Teacher making her/his thinking visible.
- ❑ Scaffolding by the teacher: raising individual strategy use to conscious awareness through engaging, questioning, prompting, modelling, explaining, telling, challenging, reflecting, clarifying, leading.
- ❑ Guided practice: practice and discussion with the whole group – collaborative talk.
- ❑ Practising the strategy with a buddy, small group and/or independently.
- ❑ Bringing the group together to discuss any bumps and how the strategy worked in order to further reinforce the strategy use – further raising strategy use to conscious awareness.
- ❑ Teacher constantly provides for independent practice and creates an atmosphere of self-reflection and self-regulation.

Comprehension teaching needs to be explicit, deliberate, preplanned, engaging, and interactive where readers are supported and challenged to make sense of what they read. Strategies must be useful, useable, and focused on meaning making. The language used in literacy and comprehension teaching, and how that language is used, is very important. Readers must be provided with a window into the teacher's thinking and strategy application. The teacher deliberately explains to the students what strategy she is going to teach and models using specific, precise language. This means that the teacher explains specifically what s/he would say to her/himself as s/he applied the strategy through a think-aloud. The teacher makes the in-the-head, invisible strategies visible through using the language that proficient, sophisticated readers use as they apply the strategy to construct meaning. Students need to hear how the teacher thinks through a strategy in order to use it effectively themselves. Explicit teaching is the most important characteristic of strategy instruction that teachers can adopt. It is the ability to bring to conscious awareness one's learning and reading

processes (Allington & Walmsley, 1995). Serafini (2004) defines it as instruction that focuses on a strategy, practice, or particular aspect of the reading process. Furthermore, this process not only calls to conscious attention what is being taught; it strives to clarify for students the expectations teachers have for their learning. There is constant and continual discussion using specific understandable language that focuses readers on what strategy is used and how it might be helpful. In this way students learn strategies that proficient and sophisticated readers use.

CONCLUSIONS

A considerable body of research on comprehension has demonstrated the effectiveness of teaching comprehension strategies (Brown et al., 1996; Courtney, King, & Pedro, 2006; Dole, 2000; National Reading Panel, 2000; Pressley et al., 1998b) Comprehension is a complex, multilayered process. It is not linear. This research examined what instructional attributes made the explicit teaching of strategies successful. This type of research makes an important contribution to our pedagogical understanding of strategy instruction in the teaching of comprehension.

Overall, this paper illustrates how teachers use precise and exact language in their strategy modelling in order to enable readers to absorb this language, understand its intent and eventually use it independently. The teacher, in the episode above, expected readers to practise and internalise strategies. In her classroom, the teacher created an atmosphere of self-reflection and self-regulation by asking: What strategy should I apply?, How will it help me understand what I am reading?, and Why should I apply it? The teacher also drew student attention to other strategies that had already been taught. The teacher modelled, collaboratively talked with the children, sensitively assisted and interacted while scaffolding and redirecting their strategy use. The teacher's scaffolding changed as the readers progressed. The teacher efficiently scaffolded with 'support at the edge of a child's competence' (Gaskins et al., 1997, p45). The teacher continued guiding student practice until they demonstrated that they had internalized the comprehension strategies through discussions and Post-it review, running records, oral miscue corrections, or interviews. Although in this

learning episode, questioning was initially introduced and taught in isolation, the teacher eventually discussed and demonstrated multiple and flexible strategy use. The intent was that students would learn to orchestrate multiple strategies, flexibly and appropriately. This type of strategy teaching and learning called for a dual simultaneous transaction by the teacher as well as the reader. The first transaction by the teacher takes place as s/he specifically teaches and models the strategy while simultaneously transacting with constructing meaning. For the students, the first transaction takes place as the reader understands how and why to use the strategy while simultaneously transacting with understanding the content specific text. The focus of instruction is on constructing meaning through the explicit process of strategy application in order to enable readers to control, monitor, and attain this meaning.

It is evident here that when teachers adopt a paradigm shift (Courtney, King, & Pedro, 2006) in which they deliberately and consciously model and specifically explain and scaffold the mental processing necessary to successfully use strategies for deeper comprehension, students become more proficient. Our research suggests that teachers learn to explicitly describe their thinking aloud to groups of children so that the children will see and hear what the teacher was thinking and doing as s/he applied a particular strategy. It is important for children to see how strategy use looks, feels, and sounds to become metacognitive about their reading. When a reader is metacognitive, s/he recognises, first and foremost, that there is confusion, and then flexibly, and then strategically selects the most appropriate strategy to use in order to construct meaning. The final result is a metacognitive reader.

REFERENCES

- Allington, R. L., & Walmsley, S. L. (Eds). (1995). *No Quick-fix: Rethinking literacy programs in America's elementary schools*. NY: Teachers College Press.
- Alvermann, D. E., & Guthrie, J. T. (1993). The National Reading Research Center. In A. P. Sweet & J. I. Anderson (Eds.), *Reading research into the year 2000* (pp. 129-150). Hillsdale, NJ: Erlbaum
- Andre, A., & Anderson, V. (1979). The development and evaluation of a self-questioning study technique. *Reading Research Quarterly*, 14(4), 605-623.

162 Comprehension Strategy Instruction

- Baumann, J. F. (1984). The effectiveness of a direct instruction paradigm for teaching main idea comprehension. *Reading Research Quarterly, 16*, 32-35.
- Beck, I. L., Perfetti, C. A., & McKeown, M. G. (1982). Effects of long-term vocabulary instruction on lexical access and reading comprehension. *Journal of Educational Psychology, 74* (4), 506-521
- Brown, A. L., & Day. J. D. (1983). *Macrorules for summarizing texts: The development of expertise*. Champaign, IL: University of Illinois, Center for the Study of Reading.
- Brown, R., Pressley, M., Van Meter, P., & Schuder, T. (1996). A quasi-experimental validation of transactional strategies instruction with low-achieving second grade readers. *Journal of Educational Psychology, 88*(1), 18-37.
- Clay, M. M. (1991). *Becoming literate: The construction of inner control*. Portsmouth, NH: Heinemann.
- Courtney, A. M., King, F. B., & Pedro, J. (2006). Paradigm shift: Teachers scaffolding student comprehension interactions. *Thinking Classrooms, 7*(1), 30-39.
- Courtney, A. M. & Abodeeb, T. (2001). *Journey of discovery: Building classroom community through diagnostic-reflective portfolios*. Newark, DE: International Reading Association.
- Dole, J. A. (2000). Explicit and implicit instruction in comprehension. In B. M. Taylor, M.F. Graves, & P. van de Brock (Eds.), *Reading for meaning: Fostering comprehension in the middle grades* (pp. 52-69). New York: Teacher's College Press.
- Dobeck, M. (2004). *Circling the sun*. Northborough, MA: Sundance Newbridge Educational Publishing, LLC
- Durkin, D. (1978/1979). What classroom observations reveal about reading comprehension instruction. *Reading Research Quarterly, 12*, 481-538.
- El-Dinary, P. B., Pressley, M., & Schuder, T. (1992). Becoming a strategic reader: An observational and interview study of three teachers learning transactional strategies instruction. In C. Kinzer & D. Leu (Eds.), *Forty-first yearbook of the National Reading Conference*, (pp. 453-462). Chicago: National Reading Conference.
- Fielding, L. G. & Pearson, P. D. (1994). Reading comprehension: What works. *Educational Leadership, 51*(5), 62-68.
- Gaskins, I. W., Rauch, S., Gensemer, E., Cunicelli, E., O'Hara, C., Six, L., & Scott, T. (1997). Scaffolding the development of intelligence among children who are delayed in learning to read. In K. Hogan & M. Pressley (Eds.), *Scaffolding student learning: Instructional approaches and issues* (pp. 43-73). Cambridge, MA: Brookline.

- Harvey, S. & Goudvis, A. (2000). *Strategies that work: Teaching comprehension to enhance understanding*. York, ME: Stenhouse.
- Keene, E. & Zimmermann, S. (1997). *Mosaic of thought: Teaching comprehension in a reader's workshop*. Portsmouth, NH: Heinemann.
- Kucan, L., & Beck, I. (1997). Thinking aloud and reading comprehension research: Inquiry, instruction, and social interaction. *Review of Educational Research*, 67, 271-299.
- McCarthy, S. J., Hoffman, J. V., & Galda, L. (1999). Researchers in elementary classrooms: Learning goals and instructional principles that can inform practice. In J. T. Guthrie & D. E. Alvermann (Eds.), *Engaged reading: Processes, practices, and policy implications* (pp. 46-80). New York: Teachers College Press.
- McLaughlin, M. & Allen, M. B. (2002). *Guided comprehension: A teaching model for grades 3-8*. Newark, DE: International Reading Association.
- Miller, D. (2002). *Reading with meaning: Teaching comprehension in the primary grades*. York, ME: Stenhouse Publishers.
- 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*. Washington, DC: National Institute of Health. Online: www.ni.chd.nih.gov/publications/nrp/smallbook.htm
- Pearson, P. D., & Fielding, L. (1991). Comprehension instruction. In R. Barr, M.L. Kamil, P. B. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research, Vol. II* (pp. 815-860). NY: Longman.
- Pearson, P. D. & Johnson, D. D. (1978). *Teaching reading comprehension*. New York: Holt, Rinehart and Winston.
- Pearson, P. D., Roehler, L. R., Dole, J. A., & Duffy, G. G. (1992). Developing expertise in reading comprehension. In S. J. Samuels & A. E. Farstrup (Eds.), *What reading has to say about reading instruction* (pp. 145-199). Newark, DE: International Reading Association.
- Pressley, G. M. (1976). Mental imagery helps eight-year-olds remember what they read. *Journal of Educational Psychology*, 68, 355-359.
- Pressley, M. (2000). Comprehension instruction in elementary school: A quarter century of research progress. In B. M. Taylor, M. F. Graves, & P. van de Brock (Eds.), *Reading for meaning: Fostering comprehension in the middle grades* (pp. 32-51). New York: Teacher's College Press.
- Pressley, M., Wharton-McDonald, R., Mistretta-Hampton, J., & Echevarria, M. (1998a). The nature of literacy instruction in 10 fourth and fifth grade classrooms in upstate New York. *Scientific Studies of Reading*, 2, 159-191.
- Pressley, M., El-Dinary, P. B., Wharton-McDonald, R. & Brown, R. (1998b). Transactional instruction of comprehension strategies in the elementary grades. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulated learning:*

164 Comprehension Strategy Instruction

- From teaching to self-reflective practice* (pp. 42-56). New York: The Guilford Press.
- Serafini, F. (2004). *Lessons in comprehension*. Portsmouth, NH: Heinemann.
- Serafini, F. (2006). *Around the reading workshop in 180 days*. Portsmouth, NH: Heinemann.
- Strauss, A. (1987). *Quantitative analysis for social scientists*. New York: Cambridge University Press.
- Tierney, R. J., & Cunningham, J. W. (1984). Research on teaching reading comprehension. In P.D. Pearson, R. Barr, M.L. Kamil, & P. Mosenthal (Eds.), *Handbook of reading research*. (pp. 609-655). New York: Longman
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. (M. Cole, V. John-Steiner, S. Scriber, & E. Souberman, Eds. and Trans.). Cambridge, MA: Harvard University Press.