An Investigation of Effective Instructional Methods to Train Preservice Teachers in Reading Comprehension Strategies

by

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Abstract

This qualitative study investigated effective instructional methods to train elementary education preservice teachers to apply reading comprehension strategies as readers and teachers. Four comprehension strategies and the components of two instructional models that have proven their efficacy were selected for the content and instructional methods. Preservice teachers enrolled in a literacy education course participated over one semester. Data were gathered through observation of students in strategy practice and performance and through document analysis of lesson plans and course assessments. A narrative account of teaching and learning emerged with instructor modeling and guided practice of the strategies in book clubs found to be the most effective instructional methods. The students' needs for modeling and practice, and the challenges of learning the strategies, were among the findings.

An Investigation of Effective Instructional Methods to Train Preservice Teachers in Reading

Comprehension Strategies

Since the passage of the No Child Left Behind Act (2002), the spotlight of the American educational agenda has been on the attainment of literacy. There is high demand to produce students who are proficient in reading. This is supported by an abundant supply of research-based knowledge to draw upon in literacy instruction (National Reading Panel, 2000). In spite of this wealth of research, there are areas needing additional research. One of these is teacher preparation in reading instruction. In a review of educational research, Anders, Hoffman, and Duffy (2000) reported that studies on preservice teacher education in reading represented "less that 1% of the total studies conducted in reading over the past 30 years" (p. 724). More recently, the National Commission on Excellence in Elementary Teacher Preparation in Reading Instruction (2003) called for colleges and universities "to examine seriously the content and structure of their reading teacher preparation programs" (p. 3). This research study was designed to answer that call, as well as to meet the needs of my students, future teachers of elementary reading.

Since I began teaching a field-based reading course several years ago, I found that the majority of my students did not see teachers "teaching" comprehension. My students' field notes reflected Durkin's (1978-1979) and Pressley, Wharton-McDonald, Hampston, & Echevarria's (1998) observational studies, which found that teachers regularly assigned and tested comprehension, but rarely taught their students the strategies needed to comprehend. Since Durkin's study, Pressley et al. (1998) found that many comprehension tasks had become more complex, but still were not taught. As Pressley (2002) later stated, "The teachers seemed to

expect that the behaviors would develop naturally if students were given enough independent assignments" (p. 241). Excerpts from my students' field notes illustrated this phenomenon.

During my field experience, my teacher did not use any comprehension skills at all. When the students have reading class, it is more like a chore. . . . When this teacher does teach reading, it is very fast-paced. The students copy the vocabulary words, and then, that is it for the day. The next day, they read the story by calling on each other. I have graded two reading tests, and the comprehension section is always the lowest scoring.

The strategy I mostly saw my cooperating teacher use to teach comprehension was to ask students questions. She would have them read a story aloud. She then would stop them at certain points to ask them questions. At the end of the story, there would be written questions that she would also ask them. The students seemed to get the answers right most of the time. I do not think that this is an effective way to teach comprehension. I realized this when the students were working on their own in workbooks. I would correct them and a lot of answers were wrong.

My teacher [cooperating teacher in an elementary classroom] basically evaluated comprehension with worksheets and questions. She would use questions from the book to check for student comprehension. I observed that this strategy did work, but not for all of the students. Many understood and could answer the questions, but there were some students who did not know where the answers came from.

Numerous entries similar to these excerpts appeared in my students' field notes. In class discussions, I listened to my students' concerns and tried to address their requests to show them how to teach their future students to not only become fluent readers, but also good comprehenders. My concerns about the quality of comprehension instruction in schools and my students' needs as future teachers of reading spured me to investigate and identify effective, evidence-based strategies for comprehension instruction.

I found clear evidence that reading comprehension strategies, when taught to students and used in combination with each other, created more active readers who could comprehend better (Anderson, 1992; Brown, Pressley, Van Meter, & Schuder, 1996; Duke & Pearson, 2002, Gambrell, Block, & Pressley, 2002); however, I also learned that teacher preparation in

comprehension strategy instruction was rare (National Reading Panel, 2000). A search of the research on comprehension strategy training in teacher preparation resulted in finding no existing research in this specific area; however, recent research reporting on exemplary teacher preparation programs in reading was found (Hoffman, Roller, Maloch, Sailors, Duffy, & Beretvas, 2005; National Commission, 2003; Williams, 2002).

I felt the evidence for the use of these strategies was so compelling that teacher training at the preservice level was critically needed. My goal became to uncover the instructional methods that would be most effective in training preservice teachers to use and apply comprehension strategies, both as readers and as future teachers.

The strategies that had proven their efficacy in research as improving students' achievement in reading comprehension were selected as the content for training my students. Background knowledge on each strategy was built into the training using information from the work of Harvey & Goudvas (2000), whose presentation of comprehension strategies was recommended by practicing teachers as practical and easy to apply. The specific strategies focused on in the training were: (a) making connections--a strategy which prompts readers to activate their prior knowledge and recall prior experiences by interacting with the text prior to and during reading (Levin & Pressley, 1981); (b) questioning--a strategy that involves readers in generating questions before and during reading and seek answers to their questions after reading (Rosenshine, Meister, & Chapman, 1996); (c) inferring--a form of drawing conclusions about text as it is read that ties into prior knowledge, predicting, and questioning (Anderson & Pearson, 1984); and (d) visualizing--constructing mental images based on text while reading (Gambrell & Jawitz, 1993).

The teaching methods I used mirrored the methods elementary teachers would use in strategy instruction with their students. These methods were grounded in the work of Duffy et al. (1987) and Pressley et al. (1992) and were chosen based on their evidence of increasing student achievement in comprehension. The decision to train my students as they would teach the strategies was made after consulting with M. Pressley [personal communication, 2003] who recommended this approach but cautioned me that learning to teach the strategies was not without challenge. His advice was well taken, and his caution evidenced itself in the findings of my study.

Modes of Inquiry

This study took place in the fall of 2003 within an undergraduate education course in literacy that focused on language arts and children's literature. The 13 students enrolled in the course gave their voluntary consent to participate; however, one dropped out of the course with no explanation at mid-semester, leaving 12 students in the study. Qualitative inquiry was employed in order to better understand the teaching and learning processes in comprehension strategy training at the teacher preparation level (Dick, 1999). Documentation of the teaching methods used, and my students' responses to these methods, was recorded in field notes. In addition, data from observations and documents were gathered from guided practice sessions, performance assessments, lesson plans, and a course assessment.

The training materials consisted of various handouts, visuals, and assigned readings to build background knowledge, as well as children's literature to model and practice the strategies. The training sequence began with direct explanation, a form of direct instruction (Duffy et al., 1987), to explain each strategy's purpose and application in reading. I then modeled the strategy using a think aloud; a process whereby I read an excerpt from a children's book or novel and

shared my connections, questions, inferences, or visualizations as a reader. Each strategy was modeled and practiced separately with the use of various graphic organizers and note taking techniques.

Guided practice sessions took place in small groups using a literature circle format (Daniels, 2002), which I called book clubs. After students selected an intermediate level novel, they were grouped by common genre or themes into the clubs. It was within the book clubs that the specific strategies were practiced and that discussions of the books and the strategies took place. The book club meetings took place once per week, seven times during the course.

Documents were also gathered and analyzed. The documents included: post-it notes and graphic organizers that the students used in practices when applying the strategies, a course assessment evaluating knowledge and application of the strategies, and two lessons plans developed to teach two different comprehension strategies of choice. A requirement of the lesson plans was to script their modeling of the selected strategies.

In addition to field notes, evidence from performance assessments included my students' performances on two book talks, or informal book presentations. During the book talks, students shared their books' contents, as well as instructional strategies they might use with the books. Comprehension strategy sharing was not a requirement in the book talk, but it was hoped that this would be a natural outgrowth during the training.

As the study unfolded, teaching methods had to sometimes be altered to meet the students' learning needs. These changes in teaching methods and the reasons for the changes were documented and analyzed to define the conditions under which the findings occurred (Glaser & Strauss, 1967). The effectiveness of the training was measured through the multiple

sources of data that were gathered, which revealed students' levels of understanding and degrees of success in performance.

Findings

A finding related to the challenge of learning the strategies was the students' initial difficulty in identifying and verbalizing the strategies they used as readers. The students automatically knew how to monitor, regulate, and adjust their reading to maximize comprehension but they were not keenly aware of the internal thinking or "talk" that went on in their heads as they read. During the training, a key factor for the successful performance of the strategies was the students' abilities to verbalize or model what they did as readers. I overheard several of the students voicing how hard it was to identify and express what they thought as they read because they "just do it." As they became more aware of these processes, several told me that they never realized how much thinking went on in their minds as they read.

These initial difficulties triggered a gradual increase in the amount of time I spent modeling the strategies for students. This increase, coupled with time spent in practice, facilitated the students' abilities to identify their use of the strategies as readers; however, feeling comfortable sharing their thoughts as readers was another matter and seemed to impede their application of the strategies. This was evident in the book talk presentations. Only two of the students applied strategies in their first book talk and only four students did in their second book talk. The majority of the students became more comfortable sharing their thinking as time went on, but most felt more comfortable doing this in book clubs versus a book talk in front of all their peers. Three students, who did not share much in book clubs, did not do as well as their peers on assignments and assessments related to the training.

A surprising finding of the study was the need students at this level had for repeated modeling. Initially, my teaching methods involved more direct explanation--explaining the strategy in theory with its benefits to readers--followed by one brief modeling session of the strategy with children's literature. Nine of the 12 students had difficulty transferring the strategy to practice with these teaching methods, so I altered my methods to significantly increase my modeling of each strategy as the training went on, using at least two different texts--a picture book and a novel. I also modeled the strategies at different times for small groups and individuals to reteach or to clarify questions, particularly at the lesson planning phase of the training. Later in the training, I modeled how the strategies worked in combination with each other when I realized my students needed to see this instead of just being told that this was the end result.

I also made more specific connections with the strategies to their appropriate use in instruction after I collected first drafts of the lesson plans and saw that transfer of the strategies to lesson planning also proved challenging. Of the 12 students, five turned in first drafts that evidenced the correct use of both chosen strategies with appropriate explanation, modeling, and guided practice. Four students primarily explained the strategies with very little or no modeling, as in the example that follows, and three incorrectly applied the strategies in instruction.

For this lesson, I will show the students how I placed post-its throughout my novel to show questioning techniques. There were questions I had while I was reading and also "What if...?" questions written on my post-its. [no examples given] The students will go into their book clubs and read a chapter of their book and place post-its with questions pertaining to the book.

After a review of the draft with the student, she later inserted one question she had as a reader, "What if April never sees her father again, being that someone is after him to kill him?" She did not add additional examples or detail to the modeling, even with prompting.

Making connections and visualizing were the easiest strategies for the students to perform and apply, while questioning and inferring, in particular, were difficult. Since the students had a choice of the two different strategies to "teach" in their lesson plans, and not one student selected inferring, this signaled that they did not understand how to teach this more complex strategy.

The questioning strategy proved difficult for some students to apply. Initially, these students wrote down questions they would ask their future students about the reading versus writing the questions they had as a reader. This seemed to almost be an entrenched response stemming from the students' training to ask good questions as teachers and to continually write instructional questions in their lesson plans. It also reflected what they were observing in the field and how they had been taught to comprehend, which made a powerful, and perhaps, lasting impression on some. As an example, one student "modeled" questioning by writing, "What is it like to be a spy and go into enemy territory? What would you do if you were a spy and had to get secret papers from the enemy?" She was constructing questions to ask the students versus expressing the questions she had as a reader.

Another student's questions, that follow, illustrate the correction application of the strategy. "How can it be that Nicole Burns, a present day teen, is now living back in time in France during the Nazi occupation as a girl names Nicole Bernhardt? Was this a dream or did it really happen?" These questions, about the plot of the book *Anne Frank and Me*, so puzzled this student as a reader that she recounted how she contacted the authors via e-mail and had an online discussion with one of them about the novel.

The guided practice portions of the lesson plan proved to be easier for most students since they essentially assigned the strategy to literature circle groups after modeling. Some students, though, got caught up in the mechanics of an "activity" related to a strategy and/or

bypassed discussion and therefore missed the main goal--comprehension. The student who was focused on "what if" questions in the lesson plan draft wrote the following in the guided practice portion of that plan,

The students will go into their book clubs and read a chapter of their book and place post-its with questions pertaining to their book. After a half hour of reading time, the students will share some of the questions they had written on their post-its. The students will then stay in their book clubs and each group will come up with one, "What if...?" question. From that question, they will write a story. . . . Tomorrow, everyone will bring in their finished story and the students will share what they have written.

This student forgot the goal—comprehension—and got lost in an activity unrelated to the novel forgetting that the purpose of asking questions while reading is to find the answers through further reading and discussion, thereby leading to comprehension. After an individual meeting with me, she revised the plan and modified the writing assignment to relate it to the novel, but the heart of this strategy and the book clubs—discussion of the questions to enhance comprehension—was still omitted in her final draft. While this represents an atypical example, it clearly illustrates the most common errors made by students in their first lesson plan drafts.

After receiving written feedback and conferencing with the students needing significant revisions, ten of the 12 students correctly wrote plans with varying degrees of ability in explanation, modeling, and guided practice. Two students just could not grasp instruction related to the strategies and one of the two never turned in final drafts of the lesson plans and failed the course.

The lesson plans proved crucial to assessing the students' understanding of applying the strategies to instruction. While all the students could use the strategies as readers and talk about the comprehension strategies in book clubs by the end of the training, lesson planning proved to be the true measure of understanding the strategies at a higher level—that of a teacher.

Conclusions

In 2004, Congress mandated the U.S. Department of Education to collect data on teacher preparation programs to ascertain how teachers are trained and what they are taught in coursework, particularly in the teaching of reading and mathematics (Blair, 2004). In response to this, research conducted by teacher educators on our own preparation methods needs to increase and has (Hoffman et al., 2005; National Commission, 2003; Williams, 2002).

While this qualitative study has limitations in size and scope, its findings have been consistent after replication in three other courses. The value of modeling and practicing the teaching behaviors that we want our preservice teachers to exhibit, with less reliance on lecture and theoretical discussions of teaching behaviors as the main modes of instruction, needs to be considered. The need of preservice teachers to be shown what we want them to do and how to do it correctly through modeling and practice is the most significant finding that emerged from this research. This study brought about the realization that when new methods of teaching and learning emerge, it is up to those of us working in teacher preparation programs to learn these methods and to study the most effective ways to teach them to our students. Examining how we teach teachers and holding ourselves accountable to teach them effectively, may result in more of our students and our society viewing teacher preparation as having enduring value and may allow the ownership of reinvigorating teacher education programs to remain in the hands of teacher educators.

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