Comprehension instruction must engage students in strategic behaviors over an extended period of time. These extended encounters are necessary to allow students to internalize the strategy and gain sufficient efficiency with the new procedure to justify its continued use. Unfortunately, teacher training programs often reinforce a notion of teaching that works against in-depth comprehension instruction. In the context of undergraduate reading methods courses, a program was designed to provide preservice teachers with the experience of learning a new strategy in an instructional setting and the experience of applying the strategy to aid comprehension. One particular form of comprehension instruction (reciprocal teaching) was adopted for sustained focus. The preservice classes were divided into groups of from four to six students. The groups practiced reciprocal teaching simultaneously. The class's experiences during instruction are reflected in a sample transcript of the group's discussion and journal entries describing the students' reaction to the procedure. The journal entries reflect a generally positive experience with the reciprocal teaching procedure, but laced with the difficulties and frustrations inherent in learning a new cognitive strategy. The transcript shows developing competence with the form of the interaction and the use of the component strategy. Designing and implementing this type of instruction require experience in learning and using strategies and are not enhanced by instruction in which such strategies are merely "mentioned." (RS)
Comprehension instruction and teacher training: more than mentioning

James H. Mosenthal
Michigan State University

Robert M. Schwartz
Oakland University

Douglas MacIsaac
Michigan State University

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Abstract

Comprehension instruction must engage students in strategic behaviors over an extended period of time. These extended encounters are necessary to allow students to internalize the strategy and gain sufficient efficiency with the new procedure to justify its continued use. Unfortunately, teacher training programs often reinforce a notion of teaching that works against in depth comprehension instruction. We describe our attempt to modify a reading methods course to help preservice teachers develop a better concept of comprehension instruction. We also describe the teachers' emerging ability to use a new strategy, their reactions to the experience of learning a new strategy and issues that affect the probability that they will implement this form of comprehension instruction.
Comprehension Instruction and Teacher Training: More than Mentioning

Durkin (1978-79) characterized the paucity of comprehension instruction she observed in elementary classrooms as “mentioning.” Mentioning, as opposed to teaching, implies a superficial presentation without sufficient development or sustained involvement to have an impact on student performance. In a series of studies Durkin (1978-79, 1981, 1986) traces the roots of this problem back through the instructional suggestions contained in basal curricula and methods textbooks. She finds frequent support for the abundance of comprehension assessment observed in classrooms, but only a weak foundation for any form of comprehension instruction. One of Durkin’s five critical conclusions is that “instructors of reading methods courses need to supplement the textbooks with their own specifics on how to teach comprehension” (Durkin, 1986, p. 412).

As teacher educators, we found this statement and our phobic reaction to the image of what Dr. Durkin’s critical eye might observe in our methods classes keenly motivating. In a semester or quarter based reading methods course, the need to familiarize students with a wide variety of concepts and procedures works against the in depth presentation of any particular strategy. But most teachers face similar constraints.

Attempts to help teachers develop or change their notions of comprehension instruction must go beyond the level of mentioning that Durkin found in classroom instruction. Preservice or inservice professional development activities need to provide a model of extended strategy instruction, rather than reinforce the notion of mentioning. The following sections describe our attempts to implement this form of instruction with preservice teachers in the context of undergraduate reading methods courses. We hope the model of strategy instruction we describe is as successful in helping other teachers and teacher educators refine their techniques as it was in reducing our performance anxiety.

The program was designed to provide preservice teachers with two types of experiences that we feel are critical in developing a notion of comprehension instruction. First, the experience of learning a new strategy in an instructional setting. Second, the experience of applying the strategy to aid
comprehension. The latter experience demonstrates the purpose of strategy instruction, while the former provides a model for strategy instruction that goes beyond mentioning. We describe our students' use of the strategy, their reactions to this form of instruction and issues that affect the probability that they will implement comprehension instruction.

We adopted one particular form of comprehension instruction for sustained focus -- reciprocal teaching (Palincsar & Brown, 1984, 1986). This technique was selected for several reasons. First, it has a well documented research base and impressive student outcomes. Second, it is designed to develop four comprehension strategies: question generation, prediction, summarization and clarifying. Third, it incorporates aspects of explicit instruction, modeling, scaffolding, and direct student/teacher interaction. Fourth, although the components of the technique are well elaborated, teacher training issues have not been addressed. Finally, anecdotal reports and one direct investigation (Mosenthal, 1987) suggests that replication of the treatment effects may be complicated by the teacher's proficiency with the strategy and conditions of classroom instruction.

Inservice and preservice education can not develop expertise in all or even some limited set of teaching strategies. Rather a reasonable goal is to help teachers develop sufficient conceptual knowledge and procedural techniques to allow them to continue to learn from classroom application (Schwartz, 1986). This type of knowledge does not insure that teachers will use a technique efficiently or effectively in the classroom, but it does increase the probability that they will attempt to incorporate the procedure in their reading program. Part of this knowledge should include the concept that strategy instruction requires long term, gradual implementation and development (Pearson, 1985; Schwartz & Cramer, 1988), not mentioning.

Learning Context

Case study information was obtained from the development of the reciprocal teaching procedure with two preservice reading methods course at two universities. One class was an initial reading methods course; the other class focused on methods for comprehension instruction as a follow up to an introductory survey course. For both groups the training included (1) a general introduction to the purpose and process of reciprocal teaching, (2) three
experiences, spread over the length of the semester, using the process to read and discuss articles in small groups, (3) independent practice of the procedure on the articles begun in class, (4) application of the summarization and question asking components of the strategy based on the entire article and (5) feedback and modeling of appropriate responses at both the paragraph and article level for each selection.

One of the initial decisions in designing the training procedure was the choice of of materials to be read. The procedure could be applied to elementary or middle school content materials. These are similar to the type of passages that the teachers would use if they decided to implement this strategy with children. We saw two disadvantages in these materials. First, they present relatively little challenge to adult readers, and second, there is no incentive for the preservice teachers to master the content of these passages.

An alternative choice was to use articles and technical reports related to the content of the reading methods course. These materials provide a better opportunity for the preservice teachers to evaluate the effect of the procedure on their own comprehension and to experience the gradual development of a new reading strategy. Working through the frustrations and difficulties inherent in acquiring a new strategy may help them to better understand strategy instruction in general, as well as students' reactions to this type of instruction.

Three additional factors influenced our decision to use content related instructional materials. First, the need to comprehend content while developing new strategic processes is a problem that often complicates strategy instruction. Second the use of content appropriate materials justified the allocation of extensive class time to the development of a single comprehension procedure. Finally, as reading teachers ourselves, we hoped to help our students develop their reading ability by guiding their application of this strategy with materials of appropriate difficulty.

In our class context the reciprocal teaching procedure was modified in the following ways. The preservice classes were divided into groups of from 4-6 students. The groups practiced reciprocal teaching simultaneously. As the group members took turns in the role of "teacher," the rest of the group provided feedback to refine the clarifications, questions, summary, and predictions generated by the "teacher." To promote this interaction, one member of the each group was asked to write down the consensus response for each
The course instructor circulated amongst groups during this time to provide further modeling, feedback and assistance.

Case Data

Two types of information will be described that reflect on the class's experience during instruction: (1) a sample transcript of a group's discussion using the reciprocal teaching procedure; and (2) journal entries reflecting students' reactions to the procedure across the semester. The analysis and commentary on this information highlights students attempts to use strategies to come to terms with the content of the articles they read or to come to terms with the with procedural components of reciprocal teaching.

Group Discussion

In the transcript (Appendix A), four students discuss a paragraph from Bonnie Armbruster's chapter, "The Problem of 'Inconsiderate Text'" (1984). The paragraph is the first in the opening section headed, "A Brief Introduction to a theory of Reading," and is shown below:

A popular theory of reading is schema theory. According to schema theory, a reader's schema, or organized knowledge of the world, provides much of the basis for comprehending, learning and remembering information in text. Comprehending occurs when the reader activates or constructs a schema that explains events and objects described in a text. As readers first begin to read, they search for a schema to account for the information in the text, and on the basis of the schema they construct a partial model of the meaning of the text. The model then provides a framework for continuing the search through the text. The model is progressively refined and constrained as the reader gathers more information from the text. Reading comprehension thus involves the progressive focusing and refinement of a complete, plausible, and coherent model of the meaning of the text.

In the transcript, each contribution by a student is preceded by a letter indicating his or her role in the group (T=teacher, S=secretary, P1= participant 1, P2= participant 2).

The Experience of Learning a Strategy. This transcript comes from the second practice article used in the class. It appears that the group is able to follow the
procedure of the reciprocal teaching dialogue. Throughout the discussion, the students reference the task demands of the strategy in structuring their discussion of the content of the paragraph.

The primary role of the teacher in the discussion is to initiate the component steps of the strategy - to clarify, question summarize, and predict. The student acting as teacher (T) readily carries out this role. At turn 2 she initiates the clarification and questioning steps, at turn 36 she initiates the summary step, and at turn 47 she initiates the prediction step.

The rest of the group also help to structure the discussion of the paragraph. The secretary (S) writes out the clarifications, questions, summaries, and predictions the group decides are most appropriate for the paragraph. He does this for each stage in the discussion except for the clarification stage where none were requested (see turn 10 for questions, turn 45 for the summary, and turn 57 for the prediction). P2 helps to structure the discussion by holding T, and the group, responsible for asking questions (3. P2: Ok. What is the question then?; 16. P2: ...Are you going to ask a question?; 30. P2: Ok. Well, what would that [question] be?).

The Experience of Using a Strategy to Promote Comprehension. As the groups become more familiar with the form and structure of the reciprocal teaching dialogue they struggle to apply the components to develop and monitor their comprehension of the new content. The teacher initiates discussion of paragraph two by stating what she thinks is important in the paragraph:

2. T: ...I think what's important ... is the reader faces what he's comprehending according to his organized knowledge of the world and ... that reading comprehension involves the progressive focusing and refinement...

Prompted by P2 to ask a question, T offers: 4. T: ...What is schema theory? The question is offered apologetically (4. T: ...I know we should develop a more complicated [one]). It is as if she formulated the question after looking at the first sentence of the paragraph ("A popular theory of reading is schema theory"), and realizes that the question does not reflect the level of understanding she felt when she stated what was important in the paragraph.
P1's picks up on T's comments at turn 4 and offers a question that is well received by T and, apparently, P2 and S: 5. P1: What does the reader use to account for information from the text?

P1's question helps T to get past her inability to generate an adequate question about "organized knowledge", a concept she identified as important in turn 2. She then points the group, at turn 12, to the task of formulating a question about "continually focusing and refining" a model. P2 doesn't let T off the hook (16. P2: ... Are you going to ask a question?...), and she eventually comes up with the question in turn 20 (20. T: ... How does a reader get through text?). Again, the question does not seem satisfactory, for P2 and S continue to struggle with the task of generating a question (turn 21-23):

21. P2: ... How does the model change as the reader ...
22. S: progresses
23. P2: progresses through the text?

Then P2 and P1 flesh out the meaning of "continually focusing and refining":

23. P2: ...refined and constrained so they must nail things down as they keep reading.
26. P1: It's like he stores that information someplace and when you need it you bring it out.

The discussion during the questioning stage shows the group coming to terms with what it means to comprehend the paragraph via the strategy. T adequately states what appears to be important in the paragraph, but cannot generate questions that adequately reflect this content. P2 forces the issue of generating a question. S tracks the generation of questions. P2, S, and P1 jointly generate questions and clarify what it means to 'refine and constrain'. In their discussion, T, S, P1 and P2 'nail down', their own comprehension of the paragraph by adhering to the rigor of the reciprocal teaching strategy - in this case by working to generate adequate questions about the content of the paragraph.
The analytic discussion over appropriate questions prepares the way for a synthesis of the content of the paragraph in the form of a summary - an endeavor T has been struggling with since she stated what she thought was important (line 2). At turn 36 she seems to have little difficulty generating an adequate summary. Given his role as secretary, S's concern for writing down T's summary forces a restatement of the summary (line 40) and a brief discussion of the terms "refines" and "constrains" (lines 41-44) until a more articulate, written version of T's summary is arrived at:

45. S: I'm going to read it to make sure. "The reader approaches the text with an organized knowledge of the world, establishes a model and as he or she progresses refines and constrains . . .
46. P2: "that model." Yeah.

At this point, T, S, and P2 have contributed to the written articulation of the summary in a way indicative of their shared, collaborative understanding of the paragraph. They have, again, through discussion based on the requirements of the reciprocal teaching strategy, nailed down their own comprehension of the paragraph.

During the prediction phase of the discussion T makes a prediction at turn 47. Asked to repeat it by S, T hesitates and questions whether she is doing the right thing, apparently as a result of the fact that P2 laughs. P2 explains (turn 53) that she was laughing because the prediction based on the previous paragraph wasn't addressed by the section they just finished. Though perceived humorously, is is an insight into how predictions are first of all confirmable, and, more importantly, how prediction is an activity that can be talked about and understood in terms other than those for correctness and content. These interactions provide models of comprehension processes that can potentially promote individual and group efficiency with the comprehension strategies and the instructional procedure.
Journal Entries

Experience of Using a Strategy to Promote Comprehension. The above dialogue gives a good picture of the group interaction. From their journal entries it is clear that many of our students did find the reciprocal teacher experiences helped them better comprehend the articles they read.

I think it would benefit children because it really helped me a lot. After being given the general process in class I went home that night and finished the article and did the homework. The following Monday without reviewing anything, I remembered all the main points from the article. I think it was because of asking questions about the article and summarizing it in my own words.

First of all, in class, I found it to be very useful because the articles we had to read and use it on were somewhat difficult. Without using reciprocal teaching on these articles I feel I would have had trouble understanding and just getting through these articles.

Experience of Learning a Strategy. The journal entries also reflect the types of difficulties and struggles inherent in developing a new strategy. Repeated experiences with the reciprocal teaching process enhance familiarity and automaticity with the procedure. Although the set of experiences provided in the course are probably insufficient to insure that the component strategies are internalized as an efficient aspect of the readers comprehension processes, they do provide an opportunity for substantial refinement of the process. This is a key aspect of strategy training:

When we first started using this technique I didn't like it. The procedure was foreign to me and the whole process was extremely time consuming. However, as I used this technique, both in class and at home, I became more familiar with it and consequently, more comfortable. When I was able to stop concentrating on what to do when, I was able to concentrate more on comprehension. And this is when I came to appreciate reciprocal teaching.
The training procedure allowed the preservice teachers to engage in the reciprocal teaching dialogues in a manner that might be similar to the experience of their future students. For many of them it was not pleasant. Aside from their lack of familiarity with the strategy, or perhaps because of it, they felt very anxious about their ability to comprehend in this context. Other students saw the dialogue structure as an opportunity to discuss ideas and develop their comprehension skills. Overcoming their own anxiety as well as that experienced by their future students will be important if they are to implement this instructional procedure.

I found that I had a hard time doing this in class because it is hard to concentrate when others around you are speaking out loud. I also found that I felt kind of pressured when it was my turn to read because I was worried that I would not be able to find a question or, I wouldn't be able to give a good summary. I feel that I can concentrate better and get more out of it when I do it by myself.

We worked on reciprocal teaching again in class today. I think that our group will eventually catch on with enough practice. We did better today than the first time. We went through the steps, but slowly. I think that the more we do it, the faster and more natural the procedure will be for us.

Apprehension about the use of the instructional strategy may be due to misinterpretations of the purpose of reciprocal teaching. Some students see the dialogues as a way to teach content and monitor children's content understanding. They realize that using reciprocal teaching for this purpose will create difficulties in covering any substantial amount of content. Perhaps because they lack automaticity with the strategies, or because of their need to master the content of the passages used to demonstrate the procedure, they fail to see that the dialogues are intended to provide a context in which comprehension strategies can be taught that will facilitate students' independent reading skill. This confusion about purpose and process was very resistant to change.

I'm not sure if children would enjoy reading if they had to use this process. I think once in a while will do them good, so they can get some ideas about the process, but not all the time. I know if I had to use this process whenever I read, I would never want to read.
In my opinion, the negative aspect of this process is the length of time it involves. It is too time-consuming to be used on all reading assignments and at times is probably too long to be used even on a daily basis.

Even highly positive reactions to the reciprocal teaching procedure are no guarantee that the process will be implemented. The context of actual classroom management and instruction will have a considerable impact on this decision. However, the probability that the strategy will be implemented is increased if students develop an in-depth understanding of the process and a positive attitude toward its role in instruction.

I like the idea behind this strategy. It is a tool that I can give to students to help them become independent learners. It is also something that I may fall back on whenever I struggle with a passage. I'm sure I will give it a try in my classroom.

As I consider how I have benefited from learning and practicing reciprocal teaching, I realize how eager I am to teach this strategy in my future classroom. I must admit that my initial reactions to this procedure were not quite as positive as my current feelings.

**Strategy Training**

The journal entries reflect a generally positive experience with the reciprocal teaching procedure, but laced with the difficulties and frustrations inherent in learning a new cognitive strategy. The transcript shows developing competence with the form of the interaction and use of the component strategies.

Between the various aspects of the training program (introduction, modeling, group discussions, feedback sessions, and instruction drawing relationships to general strategy training) this experience constituted part of well over half the class sessions. The training provided an opportunity for preservice teachers to develop the conceptual and procedural knowledge necessary to further refine their strategic skill and support classroom implementation. It also provided a model of extended strategy instruction to contrast with the model implicit in mentioning.
The aspect of the training that teachers found most frustrating may have the greatest value for learning about strategy training in general. Discussing these frustrations as they arise can clarify four facets of strategy instruction: 1). Teachers should be aware of the initial discomfort that learners experience when introduced to a new strategy. 2). They should be ready to discuss and help students to understand the conflict between the new procedure and their students' prior strategies. 3). Teachers need to continue to highlight the purpose of the strategy as well as its limitation. They should expect that students may lose track of the purpose or distort it as they gain experience with the strategy. 4). Finally, teachers need to concern themselves with issues of automaticity. They must plan and implement strategy instruction that is sufficiently elaborated so the that students begin to internalize the procedure and use it efficiently (Schwartz, 1988; Schwartz & Cramer, 1988). Designing and implementing this type of instruction requires experience learning and using strategies and is not enhanced by instruction in which such strategies are merely "mentioned."

References:


