

DOCUMENT RESUME

ED 203 279

CS 006 098

AUTHOR Crismore, Avon
TITLE An Interactive Model for Secondary Remedial Reading Classrooms: Turning Reading Labs into Learning Labs.

PUB DATE Mar 81
NOTE 39p.: Paper presented at the Annual Meeting of the Indiana State Council of the International Reading Association (Indianapolis, IN, March 26-28, 1981).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Class Activities; *Classroom Techniques; *Course Content; Course Descriptions; High Schools; Language Arts; Listening Skills; Reading Comprehension; *Reading Instruction; *Reading Skills; Remedial Instruction; *Remedial Reading; Speech Skills; Writing Skills

ABSTRACT

A secondary school remedial reading instructor developed activities in an effort to turn the reading lab into a learning-how-to-learn-from-the-text lab. The objectives of the two consecutive reading lab courses were to increase writing, listening, and speaking skills, as well as reading skills. The first activity was designed to help students shift from conversational language to formal speech by means of an oral book report. When the students reached the second course, they could compose with smoothness and self-confidence. The second activity was designed to help students "engage" with the text by analyzing a troublesome workbook page and then composing a letter to the publisher explaining the problems and suggesting improvements. The students became more critical readers and thinkers about their reading strategies. The third activity was designed to help students learn summary skills in reading. The students read articles from a reading journal, summarized the article from the persona of the author, then wrote expository letters to the author. Students became more knowledgeable about the skills needed for better comprehension, and about their specific reading problems.

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An Interactive Model for Secondary Remedial Reading Classrooms:

Turning Reading Labs into Learning Labs

Avon Crismore

University of Illinois

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Running head: Turning Reading Labs into Learning Labs

An Interactive Model for Secondary Remedial Reading Classrooms:

Turning Reading Labs into Learning Labs

Once upon a time (three years ago, in fact) at a far away high school, the principal, guidance counselor, and English Department Head had a meeting. The principal said worriedly, "We have a problem. Too many of our students can't read. They are dummies. The Department of Public Instruction won't like that. They will call us dummies. How can we turn our dumb readers into smart readers? What can we do? Think hard." "Well--why not offer two new classes," answered the guidance counselor thoughtfully. "We'll call them Remedial Reading I and II." "That's a good idea," cried the English Department Head excitedly. "Let's give the dummy readers to Mrs. Crismore. She can teach reading. She will turn them into smart readers." The guidance counselor said eagerly, "I'll look at the Iowa scores and grade cards today. I'll make a list of dummy readers. Tomorrow I'll tell the dummies to take Remedial Reading." "Good," sighed the principal with relief. "That problem is solved. Now the Department of Public Instruction will like us. Oh, by the way--don't forget to tell Mrs. Crismore about our new idea."

This is not a hypothetical story. Everything really happened more or less as the story indicated. And it is a typical story. Decisions are made without input from the people involved. Labels are used for students and classes. Unrealistic expectations of reading

teachers are the norm. School administrators and personnel and state agencies are concerned about large numbers of poor readers in high schools.

As the reading teacher faced with the challenge of "turning dumb readers into smart readers," I had some instructional decisions to make. I had to decide which model of a secondary reading classroom would be best for Remedial Reading I and II in order to accomplish the task. Decisions had to be made about reading and learning theories, instructional methods and strategies, materials, assignments, and evaluation. Essentially I decided to be an experimenter, trying out ideas I had used successfully in other classes at Norwell High School such as developmental reading, freshman and sophomore English classes, advanced composition and literature; at Indiana Vocational Technical College in developmental reading and writing and technical and business communication; and at Indiana-Purdue University, Fort Wayne in freshman composition. In addition to the ideas from other courses I had taught, I decided to experiment with ideas picked up from cognitive psychologists. At a College Composition and Communication Conference held in Minneapolis, 1979, I heard John Hayes, Allan Collins, Linda Flowers, and Bonnie Meyer discuss cognitive psychology and composition. I became aware of David Olson, Carl Bereiter, and Marlene Scardamalia, who were also interested in cognitive psychology and languages, through the Ontario Institute for Studies in Education,

wrote to them and received some of their papers. Technical Reports and Reading Education Reports from the Center for the Study of Reading at the University of Illinois, Champaign-Urbana also supplied me with many ideas.

My decisions were not made all at once--they evolved over a period of several years. One of my biggest decisions was to try to turn the Reading Lab into a Learning Lab. I felt it necessary to go beyond what was usually taught and learned in a secondary reading lab situation involving remedial readers. My general objectives were to attempt to make my students more literate: better readers, and writers (also better speakers and listeners); better thinkers; and better learners. I hoped to give them some tools to develop their cognitive skills, and I wanted them to develop a risk-taking attitude. I wanted an environment that was conducive to risk-taking for me and my students in order to try out new theories, strategies, tasks, and materials. Fortunately, using such an experimental risk-taking approach in my school was no problem. Once the decision was made that I would teach Remedial Reading I and II, I was left completely alone. No one bothered me, checked up on me, or offered suggestions. My "experiments" of course were not controlled experiments, and I consider myself an experimenter only in the broadest sense. But I did have an experimental attitude and some hypotheses I wanted to test. And I did have some underlying assumptions I wanted to test. And

I did have some underlying assumptions I was forced to make explicit to myself.

My purpose in this paper is to report on this experiment of trying to turn a reading lab into a learning-to-learn-from-text lab. I also intend to: (a) describe an interactive model of a secondary reading class that considers both the processing and the production of oral and written discourse, (b) describe some strategies teachers can use to help students transfer skills needed in oral communication to written communication and then to those needed in comprehending various discourse types, (c) describe the theoretical rationale behind teacher and student strategies. My plan is to first discuss the assumptions and hypotheses I had and the rationale for each; then give an overview of the classroom activities with an in-depth reporting of three selected "experiments" and finally end with an evaluative discussion.

Assumptions

Assumption 1. HIGH RISK STUDENTS, SUCH AS MY REMEDIAL READERS, HAVE MUCH MORE LEARNING POTENTIAL THAN USUALLY PREDICTED BY INTELLIGENCE TESTS, OTHER TESTS, AND TEACHER EVALUATIONS. Because of some former successes with academically poor students in other classes, I assumed that my remedial readers could learn to do things that neither they nor other teachers expected they could do. This might happen if I had high expectations for them and taught them to use specific strategies for specific tasks and some general thinking strategies.

Many training studies have been carried out that have attempted to develop cognitive skills. Many of these studies were successful up to a point but had problems because of lack of theory, transfer to new situations and process-orientation. Cognitive engineering studies by people like Brown, Campione, and Day (1980); Flower (1980) and Scardamalia (1979) show that students of all ages and abilities can be trained to think and perform better.

Assumption 2. A WHOLE LANGUAGE APPROACH TO READING IS VALID. This approach stipulates (a) that one can never examine the reading process in isolation from language processes in general, the context in which language processes (including reading) are acquired, and the functions that language and reading serve in a social context, (b) that one should not decompose the process of reading in order to study independent facts (Goodman, 1979; Harste, 1980). This means a reading classroom without a skills approach, with texts not written according to readability formulas, a risk-taking attitude in the classroom, with an emphasis on the social and pragmatic values of reading: a language-centered classroom where learning the code is a means to an end.

Assumption 3. READING AND WRITING ARE RELATED IN SIGNIFICANT WAYS. One of the fundamental principles of learning is notion of reinforcement of learning through the utilization of several senses. Montessori, Fernald, and Orton have used writing in their approaches to reading, working in the areas of dyslexia and remedial reading.

Writing is important in the Whole Language Approach to reading. Spadding's (1966) The Writing Road to Reading is a beginning reading approach that considerable data shows to be very successful. My own experience indicates that teaching students the conventions of writing in general and those for particular genre helps students form schemata for both producing and comprehending discourse. Schema theory predicts this also (Anderson, 1977). Authorities in reading such as H. Alan Robinson and Ellen Lamar Thomas also recognize the significance of writing and reading.

Assumption 4. STUDENTS LEARN BY WATCHING EXPERTS, DIRECT TEACHING, AND DECREASING GUIDANCE. Learning involves initiation of behavior or change in a learner which is relatively permanent and which occurs as a result of reacting to a situation and obtaining knowledge of results (Hilgard & Bower, 1975). Teaching is one way to produce such an initiation of behavior or change in the learner. The change is from dependent to independent learners. The teacher's goal is to guide learners toward independence (Herber, 1970). Teachers need to teach differently in September than they do in May or June. In September the teacher will initiate the student activity; in June students should be able to initiate and carry out similar activities. If this happens, the teacher will have trained students to become more independent learners (Rosenthal, et al., 1970). A three stage teaching plan will take students from dependence to independence as they learn how to use a particular strategy, phasing in the students

as the teacher phases out (Singer & Donlan, 1980). Such a plan is one where the teacher models a strategy for students, then guides the student in practicing the strategy and finally gives the student opportunity to independently practice the strategy. The plan would include the awareness component where the teacher explicitly makes the student aware of how and when to use the strategy and how it might be used in similar and novel situations (Brown, 1978).

Assumption 5. COGNITIVE PSYCHOLOGY HAS MUCH TO OFFER THE READING TEACHER IN TERMS OF THEORIES AND STRATEGIES. Recent work in areas such as schema theory (Anderson, 1977; Spiro, 1980), problem-solving (Flower, 1980, 1979; Simon, 1980), intelligence (Campione & Brown, 1978), memory (Brown, 1978), learning how to learn and becoming an expert (Brown, Bransford, & Chi, in press), metacognition (Baker & Brown, 1980), and the process of reading comprehension (Collins, in press) has significance for a model of a secondary reading/learning classroom. Not only cognitive psychology, but also linguistics and artificial intelligence have important concepts, theories, and developments that have importance for a reading teacher.

Schema theory. A schema-theory approach to language comprehension assumes that the meaning is not in the text. The text only provides a blueprint for the listener or reader as to how he uses his own prior knowledge to retrieve a meaning or construct a meaning. The reader's knowledge interacts and shapes the information on the page. Schema

theory explains how this happens and how the reader's knowledge must be organized to be able to interact with the text. A schema is a description of a particular class of concepts. More than one schema is referred to as schemata. A schema is composed of a hierarchy of schemata embedded within other schemata. The top of the hierarchy is very general in order to subsume the essential aspects of all members of this class. The schema for "reading expository prose" (the top level) would include such information as that expository prose is not fiction or poetry and is written to give information and explain something. The lower level specific schemata could be exemplified by reading complaint letters, personal essays, formal essays, an argumentative essay, or a science text. If a student does not have the necessary concepts or schemata for the information to-be-learned in a content area such as science, he cannot understand the text. Moreover, if he does not have prior knowledge or schemata for the conventions of an argumentative essay or a science textbook, he cannot understand it. Students need both subject matter schemata and discourse types and element schemata to read and write well (Adams & Collins, 1977).

Problem-solving. Reading and writing are similar in that both are intellectual activities in which growth is indicated by students pursuing more complex goals. It is not only desirable for students to reach the goal of decoding or writing a sentence but also to read

a more complex goal of interpretive reading or essay writing. Teachers can help students function in more complex problem spaces than they normally can by using procedural facilitation as an instructional method (Bereiter & Scardamalia, 1979). When students are given the same writing or reading task there are differences in how they represent the problem of the task to themselves. Cognitive development is reflected in students progressing toward representing more complexly the problem they must solve in doing the task. It is not enough to have just more complex solution strategies--to leave the goal the same and use more efficient strategies to reach it. "Close reading" of a literary text is a direct effort to teach students to construct more complex problem spaces when interacting with text. Both reading and writing, unlike mathematics, are cases of ill-structured problems (Simon, 1973). The structure of the problem space is left up to the student problem solver. The teacher's job is to help the ill-structured reading or writing problem become more well-structured through instruction which goes beyond prior knowledge and efficient strategies.

Procedural facilitation refers to the lessening of the executive demands of a task so that students can make fuller use of the knowledge and skills they already have. It is not teaching new knowledge and skills or spoon-feeding. In procedural facilitation the student does all the main processing of information tasks but does them under

conditions that lesson the overall processing burden. An example of procedural facilitation is having students choose a discourse element from a list before composing a sentence, paragraph or essay, resulting in the rise of a greater variety and number of discourse elements. There are seven principles for procedural facilitation and efficient strategies (Bereiter & Scardamalia, 1979).

1. Mimic Mature Processes
2. Bypass Immature Tendencies
3. Make Infinite Choices Finite
4. Make Covert Processes Overt
5. Provide Labels for Tacit Knowledge
6. Use Highly Patterned, Mechanical Procedures
7. Use Procedures that Can be Scaled Upward or Downward

Metacognition. Metacognitive aspects of reading involve knowledge about reading--i.e., knowledge about the process involved in reading comprehension and what influences comprehension. Metacognitive knowledge is long term knowledge about self, the task, or strategies known to influence performance and knowledge that can be called up from memory. Students' concepts about reading are important (what reading is: decoding or getting meaning and what it is used for, etc.). Students need to know what good comprehension requires and how to select appropriate strategies that are consistent with the reading goal. They also need to realize that oral communication, reading and writing utilize different skills and create different task demands.

Metacognition is not only concerned with a student's knowledge about himself as a thinker, reader, or composer--knowing his limitations as a learner and the complexities of the task facing him--but also with a student's active monitoring of his thinking, reading, or composing, as he is doing the task. Another concern is with remedial strategies to fix up whatever problems are detected during the monitoring activity (Baker & Brown, in press). Some of the metacognitive skills involved in reading are (a) understanding both explicit and implicit problems to be solved in the reading task--What are the purposes?; (b) determining the most important ideas in a text; (c) attending to the significant parts rather than the non-significant parts of a text; (d) determining whether comprehension is occurring during the reading through monitoring; (e) determining whether goals are being achieved through self-questioning; (f) doing something to remedy the problem of failing to comprehend if it occurs (Brown, 1980). Effective readers realize that they must be an active reader, use problem-solving methods, and debug any problems detected by monitoring. Composing acquires a similar set of metacognitive skills.

Hypotheses

With those basic assumptions I formulated some hypotheses that I attempted to test during the two years I taught the Remedial Reading classes. Although I had many hypotheses to test, I have chosen ten to discuss here. I predicted my students would become better learners, language users, and risk takers if I did the following:

1. Taught learning strategies by modeling, guided practice, and independent practice.
2. Taught students explicitly when and where to use strategies (including self-checking) and used them with different modes for transfer.
3. Taught the conventions of text structure for different genre and the coherence/cohesion devices.
4. Taught students about reading.
5. Gave well-defined problems initially and then increasingly less well-defined ones.
6. Gave functional as well as school type assignments requiring functional as well as school type materials.
7. Used bridging mechanisms to go from simple to complex tasks.
8. Used a procedural/heuristic approach to learning.
9. Used an interactive, involvement-with-author approach to reading.
10. Used students as collaborators.

Methods Section

Subjects

The subjects in this "experiment" were white, middle-class, rather typical teenagers living in a rural area of northeastern Indiana. None of them were special education students but all of them had learning or motivation problems or both. According to diagnostic tests, all of them read on at least a fourth grade level; subjectively, I judged

that most of them wrote on a fourth grade level, many of them listened on a fourth grade level, but all of them spoke above a fourth grade level. (They were quite loquacious except when asked to be for an assignment.) For the most part the students were sophomores and juniors but there were several freshmen and seniors. The course was an elective course, but students were usually advised to take it because of low Iowa scores or low grades in content area subjects. Students enrolled for the class for a whole year and could repeat the class. The class size was limited to 18 students, and I was allowed to teach two sections. The school enrollment was 800; hence many students who needed the class and wanted the class were denied the chance. Emotionally disturbed, hyperactive, unmotivated students were problems at times, but in general, the class was a happy, cooperative, close-knit group.

Because most of the students came from unstructured home environments, these classes were rather tightly structured, but not rigidly. Thursdays were devoted to sustained reading and students had to read for the whole period and were rewarded with points for part of their course grade. Most students who initially could handle only 10 minutes of sustained reading eventually learned to read for 50 minutes. Fridays were used for writing days. Students wrote or planned what to write using plan sheets on Fridays. Mondays, Tuesdays, and Wednesdays were used for other learning-comprehension activities. Every six weeks an oral book report was required, fiction and

nonfiction and every six weeks a magazine summary (three on the topic of reading) was required and along with it an opinion paragraph. Students also evaluated the assignments, materials, and the class experience in an essay each six weeks. Each week students read a self-selected article from a magazine and discussed it in a small group using a plan sheet as a guide. The writing on Friday involved practical writing such as letters (actually sent), expository essays, reports, and creative writing such as poetry, short stories, and plays. Plan sheets, either teacher-made or student-made, were used for each composition.

Experiment 1: The Oral Book Report

The problem. Remedial reading students use oral language quite well for personal and interpersonal functions but have problems using school language with its logical functions for school-like tasks. Students need help in shifting from conversational language to the language of literate explicit logical prose. They also have problems with sustaining or prolonging an oral response since they are used to the short exchanges, "the turns" in conversation, and thus could benefit from composing an oral presentation using discourse elements for structure, elaboration and coherence (Olson, 1979). Using oral composing as a bridge, teachers can help students move from oral competency to literate competency.

The task. Each six weeks an oral book report was given on a book chosen by the students, using either the fiction or non-fiction oral book report outline as a plan sheet. The outline or guide sheet consisted of questions to be answered and discussed with only enough room after each question for a partial answer. The question had to be transformed into a declarative sentence which was used as the topic sentence of the discourse segment answering the question. The elaborated had to be in sentences, be autonomous (students could not use pronouns without referents or definite articles without referents, etc.) and use evidence from the book to support: The questions forced students to deal with text structure, signaling devices, critical thinking, inference, syntax, oral interpretation, abstracting a theme or thesis, generalizing, specifying, and relating. Students were required to use 10 to 15 minutes for the oral presentation with only the partial answer on the guide sheet filled out ahead of time as prompts.

The method. At the beginning of the year the purposes for the assignment were given, an explanation of the difference between oral language and school language given, literary terms and the questions on the book report form clarified, and a demonstration given by me on how to give the oral report with a student role-playing the teacher. During the modeling of the oral book report, I used a think-aloud protocol method where I verbalized aloud all the problems I ran into

in trying to answer the questions or perform the task requirements. I explicitly mentioned the strategies that I as a good student would use, such as explaining the strategies for understanding the title by dividing it into topic (the aboutness) and comment (the comment or belief about the topic) and showing its connection to the theme or thesis. Students were made aware that they could be dividing titles and thesis or theme statements into topic and comment sections in other reading assignments such as magazine articles and newspapers and writing assignments where they would create the title and thesis. I gave the students rules for transforming questions into sentences and demonstrated how to do it and pick out key words in the questions as well as strategies for elaboration in the process of doing the think-aloud protocol.

After this step, I used a student with self-confidence and ability to model the report for the class. Whenever a problem arose because of an inappropriate answer, lack of elaboration, lack of school language, etc., I interrupted with, "This is what I was expecting here," and proceeded to model the expected response. The guided practice step using the teacher/student dyad and Socratic dialogue was used for all students with their first report. For their second report I expected fewer prompts by me and a self-evaluation at the conclusion of the report where the student pin-pointed problems he had--pointing to the exact question and explaining what strategies

he should have used. I also evaluated the report concurring with the student's evaluation or expanding on it. These same steps were followed for each of the six required reports. The goal was to present the report, meeting the task requirements with no prompts by the teacher. The assessment measures were time and number of prompts.

Results Section

There is no hard data to look at in order to confirm my hypotheses or evaluate the assignment. Subjectively, however, I would say that my students improved their learning skills in several areas:

1. Transforming questions into declarative sentences that served as sentence openers for an elaborated answer consisting of the discourse elements such as reasons, examples, statements of belief, restatement, general statement and concluding statement.

2. Segmenting title and thesis or theme statements into topic and comment and relating the title to the thesis or theme.

3. Using a more formal "school" style of language.

4. Using the outline sheet with their partial answers as prompts and giving the book report with either no prompts by me or fewer prompts. Most of the students learned to give the presentation within the 10-15 minute time constraint. I found that students doing the task during the second year performed almost like experts. They could orally compose with smoothness and self-confidence.

5. Using the format of the book report and using it successfully with modifications in other content area classes. They developed schemata for what is required in giving book reports or reports in general.

6. Using elements of narrative structure, autobiographies, biographies, and non-fiction structure. They used these schemata in comprehending other books with these structures and in writing their own narratives, autobiographies, and non-fiction writings.

7. Representing to themselves a more complex problem in reading a book.

8. Evaluating their appropriate and inappropriate use of strategies in reading the book and composing orally and monitoring themselves during the activities.

Discussion Section

Students in my Remedial I and II classes felt very strongly that they learned much from this assignment. Although they were terrified at the thought of giving their first several reports, they later became quite self-confident. If I were to give the assignment again, I would try to collect some hard data. This would probably require record keeping--an observation check list--where I would count the number of prompts I had to give for each book report and classify them according to the question asked on the form and the type of prompt needed. Measuring the total number of words produced in 15

minutes as well as number and types of prompts by teacher and remedial strategies applied because of self-monitoring would be useful information about their cognitive growth.

Experiment 2: Complaint Letter to the Tactics' Editor

The problem. Poor readers are often unaware of the distinct features that cause one discourse type to differ from another. Knowing these features should result in better reader expectations and comprehension. In addition, they are often unaware that authors of texts use certain standardized discourse elements when they write. By constructing their own texts such as a letter of complaint, remedial readers should become more knowledgeable about text types and rules needed to produce them, text organization, thesis statements and other discourse elements that aid in comprehension. They should also become more aware of author intentions, plans, goals and attitudes and the role these play in comprehension. Poor readers are often passive and unengaged with the text, resulting in a lack of comprehension. Reading a text for the purpose of reacting to it by means of letter to the editor or author creates reader engagement and a deeper processing of the text. Many reading tasks required of readers in reading workbooks are poorly done or left undone because the readers have not analyzed what the task involves and what they do not know. Giving readers the opportunity to analyze their errors in a reading workbook in order to decide if the errors are due to their lack of prior knowledge or

carelessness or due to poorly written instructions, inappropriate text selections or layout should develop critical reading and metacognitive skills.

The task. Students were asked to choose the page or section of the reading workbook, Tactics A (Scott Foresman) that up until then had given them the most difficulty when they did the workbook assignment. They then were told to study the page (or pages), looking at the directions, explanations, examples, layout, and their errors and determine why they had difficulties. In other words, "Is the problem with the student, the workbook or a combination or something else?" Students who needed help in trying to determine their analyzing, came to me for a discussion. This was actually a dyad or Socratic dialogue situation where I tried to help make them aware of strategies needed to do the task and some common problems with workbook directions, explanations, examples and layout. Next, the students were assigned a letter of complaint to the senior editor of Tactics A. In the letter, the student discussed the page or pages that has given them trouble, explaining why they felt they had had problems, specifying exact words, phrases, sentences or sets of sentences. They made suggestions to the editor about how to correct the problem giving examples of how this might be accomplished (i.e., rewriting unclear sentences, substituting a more familiar word, or redesigning the page layout). The letter was to be completed

within a six-week period; the final draft was to be written neatly, error-free, and in correct complaint letter format. Along with the final draft, students were to hand in a signed plan sheet and earlier drafts. The first draft was not to be written until after a plan sheet had been filled out and signed by me. At the end of the six-week period the letters were collected and sent to the Tactics A editor.

The method. The class hour each Friday was devoted to the letter writing project. The class was instructed in how to write complaint letters, given a set of rules to follow and an example letter. Students were given a plan sheet for the letter to be completed before writing the first draft. The plan sheet directed them to write down their thesis sentence, circling the topic and bracketing the comment; the controlling idea (the comment part); the purpose or intention statement; specific reader statement; rules for the discourse type; discourse elements needed; ways to customize the writing for the intended reader; ways to make the writing creative, interesting, and clear; problems the student predicts with the assignment; and ways to solve the predicted problems. When students needed help in filling out the plan sheet, they came to me for help. After completing the plan sheet, students wrote the first draft of the letter using the plan sheet and discourse facilitation sheet as guides. The discourse facilitation sheet was a facilitating procedure suggested by Bereiter

and Scardamalia (1979) where students are given a list of discourse elements and evaluative and directive phrases for revisions (see appendix). The first draft was shown to me during the composing process for comments and coaching. The emphasis at this point was on format, rule-following, content, clarity and coherence--the global concerns--not in mechanics and spelling. For the later drafts, students were told to revise for the local mechanical errors, using their own knowledge, peers, or any available person who would take time to detect the errors. As time permitted, I also, helped students find spelling and punctuation errors, explaining rules for them and helping them see the pattern of mistakes they made. The emphasis was always on comprehension--how omitted or incorrect punctuation marks affected text processing or how sentence arrangement, flow of information, given-new, etc., affected comprehension.

Results Section

The assignment was complex and difficult for the students to do and time-consuming for them and me. But we all felt it was worthwhile. Students had a sense of pride in the final product--an error-free, neat letter--a "first" for most of them. They were pleased with their workbook problem analysis and suggestions to the editor. I found them eager to discuss current problems in workbook tasks--they became critical workbook readers and critical thinkers about their own reading strategies. The task reinforced the oral book report work

with thesis sentences, discourse elements, and elaborations about other discourse types and distinctive features, conventions, and rules. The plan sheet made them actually plan ahead--a new experience for most of them when composing. The composing process for them was non-linear, however; much of the planning was done as they composed, so it became a recursive process. Self-checking was accomplished by using the plan sheet.

They gained new insights into the relationship of spelling, punctuation, arrangement, and cohesive devices to comprehension and the importance of having goals and tailoring the composition of the intended reader. They began to see the interrelationship between the process of composing and reading and the strategies needed by the writer and reader for communication. The task gave them an opportunity to practice using language on a more formal level, reinforcing the skills acquired in the oral book report task. One of the most important results of the experiment was an answer to their letters from the Senior Editor of Tactics A. He complimented them on their letter-writing ability and informed them that their suggestions and comments would be forwarded to the appropriate editor to be used in the forthcoming revision of the workbook. The editor's response boosted their ego and motivated them to try more composing.

Discussion Section

The students were evaluated on the plan sheet by noting the number of items completed and the appropriateness of their statements. The first draft was evaluated as to whether or not it was an application of the plan sheet and discourse facilitation sheet. The later drafts were evaluated to see if the earlier drafts were revised for both global and local problems. No hard data were collected but if I were to use the assignment again, I would keep a record of plan sheet items uncompleted or completed with teacher help. The data on the first and later drafts would include a sheet of errors with an error analysis for each student and for the class. The number of trips to the teacher's desk would be recorded and the types of problems discussed. Comparisons would be made with later plan sheets, early and late drafts and final drafts. I would also collect taped think-aloud protocols of the students analyzing the workbook problems, filling out the plan sheet and composing the letter to the editor.

Experiment 3: Magazine Summary and Letter to the Author

The problem. Students are often asked to summarize expository material read in content-area courses as a check on their comprehension of the material. In addition their teachers often recommend summarizing as a useful way to study content area material. However, poor readers have problems summarizing because they do not understand the summarizing task--they do not understand the purpose for summarizing, what should

be included, and the rules to follow in producing a good summary. Many teachers also assign readings in magazines and journals to supplement textbooks. Students read magazines and journals for their own purposes, technical as well as popular ones. These periodicals are often difficult for remedial readers to comprehend or summarize because the students have no schemata for the subject matter or the typical magazine article. Difficulty also arises because magazine articles are often poorly written or are "creatively" written, resulting in an ill-structured problem for the students. Many popular magazine articles do not follow conventions or a particular format, resulting in a lack of predictability for students. Another problem remedial students have in reading and learning from textbooks and periodicals is lack of engagement with the text because of anonymity of the author or non-interest in the author. An assignment that focuses on teaching students strategies to comprehend, and summarize, periodicals more efficiently and to monitor themselves should make them better able to learn from text, whether the text is a typical school text or a real world periodical. This might be accomplished by the use of the following techniques: teacher modeling, a procedural approach, plan sheet, use of a peer-review journal, reading about reading, peer models, learning dyads and Socratic dialogue, opinion letter to the author of a periodical article, and discourse element and directives sheet.

The task. Every six weeks the students read a periodical article, wrote a summary using a plan sheet, and wrote an opinion letter to the

author of the article. The first three summaries were on the topic of reading. Summaries one and two were from The Reading Teacher, a peer-reviewed journal; summary three could be done on an article taken from any periodical. The fourth and fifth summary were on a topic chosen by the student for a research project for our class. The readings were to come from a peer-reviewed journal if possible. The last summary was a topic and a periodical of the student's choice. The assignment required students to choose an article on the topic assigned, one they were interested in and could read. They read the article, filled out the plan sheet, wrote a page and a half summary attached to a cover page with their name, date, and bibliographic information in correct form, and wrote an opinion letter to the author of the article based on a completed plan sheet and discourse element-directive sheet. A copy of the article was handed in along with the summary and opinion letter. The letter to the author was sent and when an answer to the letter was received by a student, it was usually shared with the class and discussed.

The method. During the second week of school, I chose an article from The Reading Teacher that I believed would be interesting to the class and readable. Over the years, I had found that remedial students are quite interested in the subject of reading and reading problems and have strong feelings about materials, methods, programs, testing, dyslexia, parent-involvement, cross-cultural programs and similar

topics. Each student receives a copy of the teacher-chosen article and follows along as I model for them how I would process the article using the think-aloud method to make the problem-solving and meta-cognitive strategies needed for good comprehension explicit. I focus on the relationship of title to thesis, breaking down the title and thesis to topic and comment, looking in conventional places to find the thesis statement (the introduction and conclusion), topic sentences, primary and secondary support sentences, using context clues to understand technical terms and other unfamiliar words, and using relevance cues (van Dijk, 1979): graphical, syntactical, lexical, semantic, schematic/superstructural, and rhetorical.

Next I model the summarizing using the five rules of van Dijk and Kintsch (1978): delete redundancy, delete irrelevancies, subordinate subtopics, select topic sentences, create topic sentences. The rules and strategies are putting in writing and given to the students to use when reading and writing the summary. In order to better internalize the rules, students write an essay in conventional expository form--the process essay--on how to read a magazine article and how to write a magazine summary. Students are given summary models to study and use--some written by me, some by good students from my other English classes and later in the year, some by remedial students.

When students have chosen their periodical on reading and begin reading and summarizing it, they do it during class time in order to

have access to me for discussion and aid when problems arise. In the learning dyads and Socratic dialogues during class and other times (before and after school, home-room, and study hall) I try to reinforce previously learned strategies and make them aware of additional strategies. If I am busy, other students who have acquired some reading and summarizing skills are also used. Teacher and student magazine summary models can be taken home with the student to be used and later returned. Students usually make a copy of the article they read and summarize and on the copy they divide the title into topic and comment, section of the article into introduction, body, conclusion, underlining the thesis sentence or sentences, segment it into topic and comment, and check the topic sentences and important primary support sentences. These are transferred to their plan sheet and any "created" topic sentences added. Using the plan sheet, the students write their page and a half summary (approximately) in the form of a long paragraph. They lead off with the thesis statement paraphrased. This serves as a topic sentence for their paragraph. The rest of the sentence consist of the topic and primary sentences-- all paraphrased and all written in the same order and style of the original. To insure a summary that gives the gist of what the author said rather than one that summarizes what the author did, students are told to role play the author. "Pretend you are the author and your publisher told you to cut your article to one and a half pages

and to keep your original important ideas but find another way to say them."

After the summary is written, students use a plan sheet (teacher-made at first and student-made at the end of the year) and the discourse element-directive sheet to write an opinion letter to the author. The opinion letter is actually an expository essay with a thesis (a statement expressing the students' beliefs) in the introduction, supported with reasons and examples for the article in the body and restated in the conclusion. All generalizations are explained, and supported with evidence from the article. Students are asked to look at both sides, giving statements of belief and evidence they had a functional reason for reading the articles, expressing their opinions about them in letters to the authors, resulting in a more active reading on the students' part. They seemed to process it more deeply and remember it better.

By the end of the year most students needed little or no help in reading and summarizing an article from a peer-reviewed journal. Many still had problems with articles not written conventionally, but were using more strategies than they had previously. Students were using a wide variety of periodicals all year with other assignments. Whether or not the skills acquired for reading periodicals transferred to other school-like texts and tasks is hard to determine. Many students told me in informal conversations and in written evaluations

that they thought the skills transferred over and mentioned higher grades in content area sources as evidence.

Students were definitely more knowledgeable about the process of reading and the metacognitive skills needed for good comprehension from the articles on reading, class discussions, and the teacher-student dyads. They also were better composers of letters and expository essays. It is difficult to show without hard data that learning how to compose an expository essay had an effect on reading expository essays and writing summaries, but I feel that it did. Using the peer-reviewed journal articles as a transition between the familiar narrative and the unfamiliar, ill-structured texts found in schools and in non-school situations seemed to be a good way to help students learn from texts.

Discussion

One of the most interesting aspects of this experiment was the six weeks I asked the students to find an article from The Reading Teacher about reading comprehension. Naturally they asked me to explain just exactly what was meant by comprehension. Trying to define comprehension was a difficult task as others have discovered, but I did my best. Students perfected their scanning and skimming skills as they searched the tables of contents and articles that seemed likely candidates for the word comprehension or its synonym and information.

about it. I was amazed that students knew so little about the topic; students were amazed they knew so little, also, and pleased that they became more knowledgeable. It was also surprising to find that many of them liked reading research reports and were interested in interpreting the tables.

The authors of The Reading Teacher articles seemed quite pleased and surprised to receive letters from my remedial readers expressing their often perceptive comments and interesting opinions based on their own reading experiences. Receiving complimentary letters from leading reading educators like Harry Singer made this a rewarding assignment for both the students and me.

The experiment could have been improved by including a pre- and posttest using articles from The Reading Teacher for students to summarize and to use as a basis for a letter to the author. The summaries could be measured by looking at the time required to finish the task, the number of rules applied correctly, the number of words used, and an analysis giving a measure on cohesive devices used or some other measure of cohesion, a measure of the thesis sentence. A comprehension pre- and posttest measure could be obtained by looking at the summaries doing a discourse analysis for idea units or else using the summary data as the measure. The letter could also be measured with a pre- posttest looking at number of discourse elements used, types of elements, time needed to do the task, number of rules

for opinion essay letter format used, amount of words used, and amount of cohesive devices. The plan sheets could be measured also and perhaps metacognition by requiring student protocols immediately after the task or by using self-check lists or both.

Conclusion

I am convinced that I did not "turn dumb readers into smart readers" but I am fairly certain that I did "turn dumb readers into smarter readers." I also turned a dumb teacher into a smarter teacher. The whole experiment was a learning situation for me as well as the students. I learned that a reading lab can indeed become a learning-to-learn-from text lab if both students and teachers are willing to try new ideas, to take risks.

In general I was pleased with the results of the experimental learning lab. I would definitely use the three experimental assignments again given the opportunity to teach remedial readers, but with modifications. One modification would be to include hard data measurements. Another would be an analysis of training and transfer tasks to find out where problems occur. A larger variety of materials and discourse types, more self-checking procedures would be used. In order to carry out the modifications I need to learn more about training, transfer, and metacognition. To better justify the oral composition → written composition → reading comprehension → learning approach, I need to investigate the interface between

composition and reading in depth. But as a tentative model for a secondary remedial reading class, this interactive model is worth considering.

References

- Adams, M., & Collins, A. A schema-theoretic view of reading (Tech. Rep. No. 32). Urbana: University of Illinois, Center for the Study of Reading, April 1977.
- Anderson, R. C. The notion of schemata and the educational enterprise: General discussion of the conference. In R. C. Anderson, et al. (Eds.), Schooling and the acquisition of knowledge. Hillsdale, N.J.: Erlbaum, 1977.
- Anderson, R. C., et al. Frameworks for comprehending discourse. American Educational Research Journal, 1977, 14, 367-381.
- Baker, L., & Brown, A. Metacognitive skills of reading. To appear in D. Pearson (Ed.), Handbook of reading research, in press.
- Belmont, J., et al. To secure transfer of training, instruct self-management skills. Intelligence, in press.
- Bereiter, C. Development in writing. In L. Gregg & E. Sternberg (Eds.), Cognitive process in writing. Hillsdale, N.J.: Erlbaum, 1980, 73-94.
- Bereiter, C., & Scardamalia, M. From conversation to composition: The role of instruction in a developmental process. To appear in R. Glaser (Ed.), Advances in instructional psychology, Vol. 2. Hillsdale, N.J.: Erlbaum, in press.
- Bransford, J., et al. Cognition and adaption: The importance of learning to learn. To appear in J. Harvey (Ed.), Cognition, social behavior and the environment, 1980.

- Brown, A. L. Knowing when, where, and how to remember: A problem of cognition. In R. Glaser (Ed.), Advances in instructional psychology, Vol. 2. Hillsdale, N.J.: Erlbaum, 1978, 77-165.
- Brown, A. L. Development and reading. In R. J. Spiro, B. Bruce, & W. F. Brewer (Eds.), Theoretical issues in reading comprehension. Hillsdale, N.J.: Erlbaum, 1980.
- Brown, A. L., et al. The development of expertise. Brown's section, in press.
- Brown, A. L., Campione, J. L., & Day, J. Learning to learn: On training students to learn from texts. Unpublished paper. Urbana: University of Illinois, Center for the Study of Reading, 1980.
- Campione, J. C., Brown, A. L. Toward a theory of intelligence: Contributions from research with retarded children. Intelligence, 1978, , 279-304.
- Collins, A., & Smith, E. Teaching the process of reading comprehension (Tech. Rep. No. 182). Urbana: University of Illinois, Center for the Study of Reading, September 1980.
- Flower, L. Writer-based prose: A cognitive basis for problems in writing. College English, 1979, 41, 19-37.
- Flower, L., & Hays, J. A cognitive process theory of writing. Paper presented at the Conference on College Composition and Communication, March 1980.
- Flower, L., & Hayes, J. The cognition of discovery: Defining a rhetorical problem. College Composition and Communication, February 1980; 20-32.

- Glaser, R. Trends and research questions in psychological research on learning and schooling. Educational Researcher, 1979, 8, 6-13.
- Godman, K. Psycholinguistics and reading. Paper presented at IRA Regional Convention, Detroit, October 1979.
- Harste, J. Semantic mapping. Paper presented at Midwestern Educational Research Association, Toledo, Ohio, October 1980.
- Hayes, J., & Flower, L. Identifying the organization of writing processes. In L. Gregg & E. Sternberg (Eds.), Cognitive process in writing. Hillsdale, N.J.: Erlbaum, 1980, 3-30.
- Herber, H. L. Teaching reading in content areas, 2nd edition. Englewood Cliffs, N.J.: Prentice-Hall, 1978.
- Hilgard, E., & Bower, G. Theories of learning, 4th edition. New York: Appleton-Century Crofts, 1975.
- Kintsch, W., & van Dijk, T. Toward a model of text comprehension and production. Psychological Review, 1978, 85, 363-394.
- Olson, D. R. From utterance to text: The bias of language in speech and writing. Harvard Educational Review, 1977, 47(3), 257-281.
- Olson, D. R. The language of instruction: On the literate basis of schooling. In R. Spiro, et al. (Eds.), Schooling and the acquisition of knowledge. Hillsdale, N.J.: Erlbaum, 1977, 65-90.
- Olson, R., & Nickerson, N. Learning to meet the requirements of written text: Language development in the school years. In C. Frederiksen & J. Dominic (Eds.), Writing: The nature, development and teaching of written communication. Hillsdale, N.J.: Erlbaum, in press.

- Scardamalia, M., & Bereiter, C. The development of evaluative, diagnostic, and remedial capabilities. In Children's composing. Unpublished paper, The Ontario Institute for Studies in Education, 1980.
- Simon, H. A. Problem solving and education. In D. T. Tuma & F. Reif (Eds.), Problem solving and education: Issues in teaching and research. Hillsdale, N.J.: Erlbaum, 1980.
- Simon, H. A. The structure of ill-structured problems. Artificial Intelligence, 1973, 4, 181-202.
- Spaulding, R. B. The writing road to reading. New York: Wenkart William Morrow, 1966.
- Spiro, R. J. Schema theory and reading comprehension: New directions (Tech. Rep. No. 191). Urbana: University of Illinois, Center for the Study of Reading, December 1980.
- van Dijk, T. Relevance assignment in discourse comprehension. Discourse Processes, 1979, 2, 113-136.
- Winograd, P. An examination of the summaries produced by good and poor readers. Unpublished paper, University of Illinois, Center for the Study of Reading, December 1980.
- Yussen, S., et al. Metacognitive aspects of reading. Paper presented at Expository Prose Conference, University of Wisconsin at Madison, November 1980.