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P-R-E-V TEACHING PREDICTIONS AND CONCEPTS SIMULTANEOUSLY

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Students are expected throughout elementary and secondary grades to read and comprehend content materials. However, too often content area teachers expect students to be able to comprehend material read without being taught the skills necessary to process information with understanding and retention.

Researchers have shown that students can be taught learning strategies which will result in improved comprehension (Raphael, 1982). If content area teachers implement learning strategies in addition to important concepts, improved comprehension should be the end result.

A Dictionary of Reading (1981) defines prediction as the act, or result, of making a forecast or prophecy; specifically, in scientific method, a statement of what is expected from observation or experiment. Predicting is not and should not be thought of as "guessing". Guessing is an important strategy that people use constantly throughout their lives. It negatively implies a random, unstructured, and wild attempt to hit upon the correct answer. Predicting is not wild guessing. It is systematically evaluating alternatives and selecting those that match the reader's expectations of the author's meaning (Hittleman, 1978). Smith (1975) simply explains that making predictions is the act of eliminating any unlikely alternatives.

Prediction as a strategy is defined as a person's use of knowledge about language and the context in which it occurs to anticipate what is coming in writing or speech (A Dictionary of Reading, 1981). Prediction strategies can be implemented during the teaching process by encouraging students to predict. Some students predict intuitively, while others have learned not to predict. Instruction has instilled within them the idea that only the "right" answer is valued, therefore, the students usually withholds any attempt to predict for fear of giving the "wrong" answer (Hittleman, 1978).

Several good reasons are evidenced as to why making predictions prior to reading seems to be effective. One important aspect of the prediction strategy is that it establishes a purpose for reading which is reader-centered rather than teacher or text-centered (Hittleman, 1978; Shanahan, 1983). Prediction requires the reader to make use of prior knowledge relevant to material read (Hittleman, 1978). This is supported by Daines' (1982) views:

Prediction requires the use of prior knowledge relevant to daily events. The knowledge and experience a student brings to what he reads will determine in part how well he can make accurate predictions and comprehend the material (Daines, 1982, p. 3).

Prediction making allows the teacher to informally diagnose what the reader knows or does not know about the textual material to be read and allows the teacher to prepare accordingly. Prediction strategy not only alerts the teacher to the reader's existing prior knowledge of the text, but also makes the student become attentive to his own metacognitive insights.

The term metacognition refers to what and how a person knows about learning strategies (Raphael, 1982). Simply stated, metacognition refers to a person's knowledge about what he knows and/ or does not know about the text and what he will do about it. Metacognitive insights bring the reader to the level where he is self-motivated to read in order to confirm his prediction or acquire new information.

Roehler (1974) identifies three prerequisites which must exist for a student to comprehend what he reads. These variables are: (1) his ability to decode, (2) his background experience, and (3) his interest in the content. The teacher should be able to control these variables by making sure the reading material is on his instructional level and by teaching prediction strategies prior to and/or during text reading. A question of concern among content area teachers is − Will making predictions prior to text reading increase a student's comprehension of material read?

CLASSROOM DATA

Subjects

The subjects consisted of seventeen rural second-semester fourth grade students. Each subject was reading at a third grade level or above according to the Harper-Row basal placement test administered at the beginning of the school year. None of the subjects were labeled as remedial readers.

Regions and Social Needs (Laidlaw Brothers, 74) was the social studies textbook used by the subjects. No special text nor changes in the textual material occurred.

The text unit was entitled, Living on the Plains, and was subdivided into four chapters. The second chapter, "The Pampa" was chosen for implementation of PREV, the prediction strategy.

PROCEDURE

Prediction Strategy

P—R—E—V

DAY 1   Pre-Test

DAY 2   Predict/Silent Read

DAY 3   Eliminate False Predictions

DAY 4   Verify Predictions

DAY 5   Post-Test

Implementation of Strategy

On Day 1 of the investigation prior to reading the chapter, The Pampa, a cloze pretest was administered. A random passage was selected from the chapter and a cloze test was constructed. (The subjects were familiar with completing cloze exercises since they had practiced several exercises of this sort in their reading class.) They were given the entire forty-five minute class period to complete the cloze pretest.

On Day 2 the teacher, using a transparency and overhead projector, wrote the word "pampa" and encouraged subjects to predict what they thought the word meant. Since their previous knowledge with this term was limited, the teacher had to guide the students' thinking and encourage predictions to be made. This was done by pointing out that this was the chapter following the North American Plains and the word pampa means plain. The subjects were then able to relate to the information gained from the previous study. Now with some background knowledge, the students were able to make predictions.

The teacher's role was to record all predictions made by the subjects, stay completely neutral as predictions were being made, guide the students to predict about information they would be reading, and bring the students to the point where they were not sure what they knew or what they did not know, but they could not wait to read to find out. Students were then instructed to read silently to prove or disprove their predictions.

On Day 3 the teacher, using the transparency with the recorded predictions, reviewed with the subjects. They shared the information acquired through their silent reading. Together, the teacher and subjects went through their list of predictions and used the text to either support or eliminate their predictions. During this class discussion, the subjects recorded in their notebook predictions made that were not stated in the text.

Day 4 was devoted to verification day. Several sets of encyclopedias and ten current almanacs were made available in the classroom. Arranging the subjects in small groups, the teacher asked them to utilize the reference materials to verify predictions made on Day 2 that were not located in the text. False predictions were then eliminated during a culminating discussion.

INTERPRETATION

The average score from the cloze pretest was 38% which shows the class as a whole functioning at the instructional level according to the reading levels suggested by Barrett. The average score on the cloze posttest shows a positive increase to 41%. Twelve out of seventeen subjects scored higher on the posttest than on the pretest.

Figure 1 indicates how the subjects scored with respect to Barrett's reading levels on the cloze pre- and posttest. Figure 2 reveals the subjects' individual pretest and posttest scores.

	Frustrational Level Below 36%	Instructional Level 36% to 56%	Independent Level Above 56%
Pretest	6	9	2
Posttest	5	9	3

Figure 1. The chart above shows how the subjects
ranged with respect to Barrett's reading levels.

Even though five subjects scored within the frustration level on their posttest, it seems that the end results from this study were favorable. One less subject fell in the frustration range while one more subject moved up to the independent level.

Several factors could have negatively affected the subjects' posttest scores. Since the posttest was compiled from a passage at the end of the text (even though randomly selected), the subjects may not have finished reading the assigned material, though ample reading time was allotted. Knowing the subjects and their previous class performance leads the writer to conclude that this was probably the case for three of the five subjects. Other unknown variables could also have affected test scores, i.e., environmental factors, fatigue, peer distraction, etc.

What should not be overlooked after studying the test scores are the positive implications of this study. The fact that the average score increased three percent is an achievement by itself. Another interesting and exciting observation which should be emphasized is that twelve out of seventeen subjects' scores improved on the posttest and out of these twelve scores, five increased ten percent or more.

Some positive results which were difficult to support through testing, but were quite evident in the classroom should not be ignored. The subjects' motivation and interest in their predictions being made were extraordinary. The most reluctant readers (usually because of poor reading skills) seemed to be the most active participants in the predicting, as well as the reading processes. Two of these students in particular went from frustration level to instructional level and made from a fourteen to a nineteen percent gain. Results like these are exciting for any classroom teacher to observe.

CONCLUSION

Prediction making should not be used solely as a teaching strategy, but instead should be taught as a learning strategy. This is the key to its success. Students need to be informed and taught the purpose for making predictions. They need to be

Figure 2 – Pretest & Posttest Scores
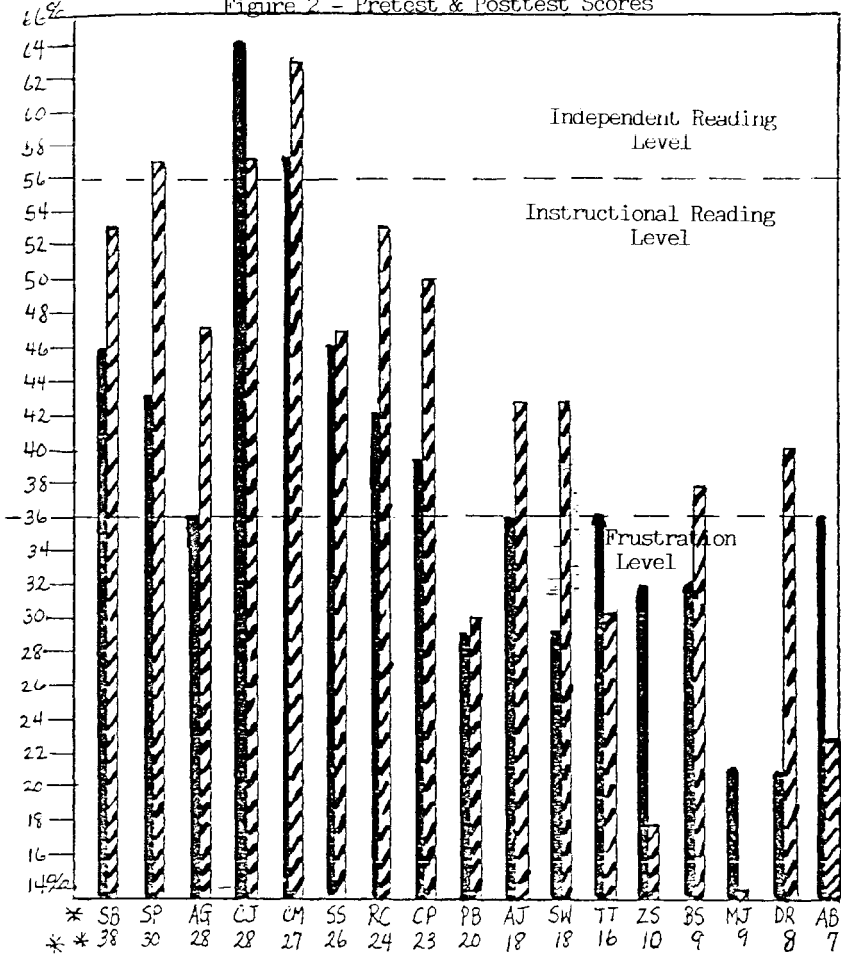
Solid line = Pretest Scores   Striped lines = Posttest Scores
     * = Students' Initials   ** = Harper Row 4th Grade Placement
Test Results

shown its usefulness as a learning strategy. The ultimate goal of the prediction strategy is to bring the students to a level where they can predict and read for verification independently. This goal cannot be achieved if the teacher uses prediction making as a secret teaching strategy.

Classroom teaching experience and application using the prediction strategy as a learning strategy has consistently provided the classroom teacher with a positive feedback and is strongly recommended in classroom application.

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